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**Understanding stress and health through  
the use of visual metaphor**

**Volume I**

by

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## **ABSTRACT**

Psychological stress has become a topical issue, however, research on public understanding of stress is scarce. Metaphors are useful in translating science to the public. This research programme aimed to (1) explore lay and scientific understanding of stress, (2) identify the possible discrepancies between these perspectives, (3) develop a set of visual metaphors to help reduce those discrepancies, and (4) evaluate the metaphors. Three related studies were conducted using a mixed-methods approach.

Study 1 involved individual interviews with the lay public ( $N=26$ ) and stress experts ( $N=7$ ) to explore their understanding of stress. Thematic analysis showed three main differences between the two perspectives. Lay people were less aware of the direct path between stress and health, emphasised individual responsibility for stress and coping, and were less familiar with the notion of eustress.

Study 2 further explored lay conceptualisation of stress and its links to health. Twenty-four workshop participants built metaphorical LEGO models of stress. Analysis of the models and their verbal descriptions revealed a set of interlinked metaphors.

Study 3, an on-line framing experiment, determined whether metaphors can be a useful tool for communicating scientific knowledge of stress. Metaphors identified in study 2 were used to create metaphorical descriptions of stress that provided information to help address the discrepancies between public and scientific perspectives identified in study 1. To test the metaphors, 603 participants assigned to one of six groups (four experimental and two control) answered the same pre and post questions. The results confirmed that metaphors can improve lay understanding of stress.

This research programme showed that stress is a broad and complex concept. The findings have the potential to improve public access to scientific knowledge, enhance public understanding of stress, promote well-designed policies regarding stress management, and facilitate early diagnosis and treatment of stress-related health problems.

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## Thesis overview

'Stress' is an extremely popular term in both scientific and public discourse. However, there is an ongoing debate on the definition and utility of the term (Kagan, 2016; Slavich, 2019). Previous research showed that stress can have deleterious effects on health (e.g. Cohen et al., 2019; O'Connor et al., 2020). Importantly, the lay perspective of stress may play a vital role in how people perceive and deal with the experience of stress (Lazarus & Folkman, 1984), which in turn may influence their well-being. However, there is a paucity of research on public understanding of stress and the lay perspective on stress may involve misconceptions (Souza-Talarico et al., 2016; Stanley & Burrows, 2006). What is more, media representation of stress appears to involve somewhat contradictory messages (Kranz & Long, 2002; Lewig & Dollard, 2001) and may contribute to confusion and misunderstanding.

Given the continuing discussion around the definition of stress (Cohen et al., 2019; Slavich, 2019) and the call for developing both professional and public understanding of stress, the current research programme is designed help in clarification of the concept (Stanley & Burrows, 2006). One of the possible tools that can be used in science communication are metaphors. However, the metaphors used deliberately for educational purposes are rarely tested empirically (e.g. Kendall-Taylor et al., 2013). The same applies to metaphors of stress. The concept of stress, its causes and consequences have been examined by numerous researchers (e.g. Fink, 2016b). There have also been some studies on stress discourse (e.g. Meyerson, 1994; Kranz & Long, 2002; Harkness et al., 2006) but only a few studies that shed light on the metaphors of stress (Brown, 1999; Helman, 2007; Verbytska, 2017). Furthermore, some metaphors have been introduced to convey information about stress to researchers (e.g. Korte et al., 2005; Nelson & Simmons, 2003a), however, they were based on theoretical reasoning and their usability has not been verified. This project aims to examine the possible differences between the scientific and lay perspective on stress. It will enhance understanding of what lay people think about stress and what incongruities between public and scientific knowledge exist. Explanatory metaphors will then be created and evaluated in terms of their effectiveness with the potential to help to reduce these discrepancies and improve education and policy-making processes with the view to enhancing general population health.

The first three chapters of this thesis provide theoretical background for the research programme. Chapter 1 reviews the existing literature representing the scientific perspective on stress. It shows how the definition of stress has changed over time and explains the relationships between stress and well-being. Furthermore, it presents some recent developments in stress science regarding the positive side of stress. While there have been numerous research projects uncovering the nature of stress, its causes and effects, only a small number of studies have looked specifically at the lay perspective on stress. Findings from these studies, which are discussed in chapter 2, showed that stress is accepted as an inevitable part of life but considered predominantly negative. It has been also found that lay people are aware of various sources of

stress. They may see stress as a personal weakness and whilst they are able to discuss different ways of coping with it, they often highlight individual responsibility for stress management. Chapter 3 introduces Conceptual Metaphor Theory which explains the conceptual nature of metaphors and serves as a basis for metaphorical intervention in order to enhance lay understanding of stress. It also discusses the use of metaphor as a communication tool which can be applied in educational and healthcare contexts. Moreover, it provides a brief review of the metaphors used in the lay and scientific discourse of stress.

The current research programme set out to answer two main research questions: 1) How does the lay perspective on stress and its links with health differ from the scientific perspective? and 2) Can metaphors improve lay understanding of stress? Because of the exploratory nature and the specific aims, mixed-methods approach was employed and three studies, two qualitative and one quantitative, were designed. The research process is outlined in Chapter 4 along with the description of the methods of data collection and analysis.

Chapter 5 presents the results of the first qualitative, interview-based study which aimed to identify the discrepancies between the lay and scientific understanding of stress. It showed that the two perspectives overlap to an extent, however, three specific differences were found. Lay people acknowledged that stress may contribute to ill-health but focused on stress-related unhealthy behaviour, while experts explained how stress affects health through physiological processes. Also, lay interviewees discussed various demands and resources focusing primarily on the individual. Experts presented a more balanced view recognising both individual and collective responsibility for stress and coping. Finally, lay participants emphasised negativity of stress and were less familiar with the idea of eustress (positive stress).

The results of the second qualitative study are presented in chapter 6. A novel method of collecting multimodal data through LEGO® workshops allowed for identifying conceptual metaphors which lay people apply to think and talk about stress. Participants often described stress in terms of restriction and entrapment, imbalance, and cluttered space. Three themes based on conceptual and linguistic metaphors in the data were created. All these created a sense of lack of control and powerlessness and contributed to the negative picture of stress which was further emphasised through the use of particular LEGO® bricks.

Chapter 7 reports the results of the quantitative online framing experiment designed to test the effectiveness of metaphors as a tool for improving lay understanding of stress. Materials for study 3 were developed on the basis of the findings from study 1 and 2. These included four metaphorical descriptions of stress and a set of statements referring to the three discrepancies between lay and scientific perspective to assess understanding of stress. Six hundred and three participants were allocated to six different conditions: four experimental (metaphors) and two control (a non-metaphorical description of stress and a non-metaphorical text on a topic unrelated to stress). Understanding of stress was measured pre and post exposure to either metaphorical or non-metaphorical text. The study showed that metaphors can change lay perspective on stress to be more consistent with the scientific perspective.

Finally, in Chapter 8, the results of the three studies are discussed along with their theoretical and practical implications for conceptualisation of stress, the use of metaphors as a conceptual and communication tool, and the use of LEGO® as a source of data in research projects. Limitations and suggestions for further research are also provided.

# 1. Stress – scientific perspective

The concept of stress has a long history (Cooper & Dewe, 2004; Hinkle Jr, 1973; Robinson, 2018). The word has been used in English since the 13<sup>th</sup> century to describe a situation of hardship or adversity (Online Etymology Dictionary, n.d.). As a scientific term, it was first used in physics and engineering (Cox & Griffiths, 2010; Hinkle Jr, 1973) where it denotes “a force per unit area within materials that arises from externally applied forces, uneven heating, or permanent deformation” (Encyclopaedia Britannica, n.d.). It was borrowed from engineering into the fields of social and medical sciences at the beginning of 20<sup>th</sup> century (Hinkle Jr, 1973) and since then has become an extremely popular term in both academic and everyday discourse. It has been conceptualised in varying ways and acquired a somewhat notorious reputation as a vague and misleading concept (e.g. Kagan, 2016; Paradies, 2011; Young, 1980). Nonetheless, stress has been acknowledged as an important issue in psychology, medicine, physiology and other disciplines (e.g. Cohen et al., 2016; O'Connor et al., 2020; Robinson, 2018). In 1998, Hobfoll and colleagues noted that “stress and coping is the most widely studied phenomenon in psychology today” and due to the abundance of publications, “it is no longer possible to conduct a comprehensive review of this literature” (Hobfoll et al., 1998, p. 181). A quick search in PubMed revealed that since then more than 650,000 papers have been published with the word “stress” in the title or abstract, confirming that stress is a very common research topic. Accumulating evidence links stress to health in line with the biopsychosocial model (Engel, 1977) which highlights the importance of the interaction between biological, psychological, and social factors in the development and management of disease (Epel et al., 2018; Lutgendorf & Sood, 2011; Slavich, 2020).

## 1.1. Three approaches to stress

Initially, the conceptualisation of stress in medical and social sciences was greatly influenced by Hooke's Law of Elasticity, a model developed in the 17<sup>th</sup> century explaining how man-made structures withstand external forces (Cooper & Dewe, 2004; Hinkle Jr, 1973; Lazarus, 2006). Hooke introduced three terms: load, stress, and strain. These described respectively: a demand (force) exerted on the structure, a force per unit of area on which it is exerted, and the degree of deformation which results from stress (Cooper & Dewe, 2004; Hinkle Jr, 1973; Lazarus, 2006). This analogy fits well with the Western philosophy of a reductionist and mechanistic view of the human body dating back to Descartes (1596-1650) (Lovallo, 2016) and engineering-related terms are still abundant within the discourse on biological and psychosocial stress. Drawing from this engineering conceptualisation, stress in social and life sciences was originally defined as a stimulus (engineering approach) or a response (medico-physiological approach). Contemporary theories of stress focus on the interaction between the individual and the environment and incorporate psychological processes (perception, cognition, emotion) to explain how a person responds to a situation and how stress may influence well-being (Abraham et al., 2016; Cox & Griffiths, 2010).

### 1.1.1. Stress as a stimulus

In the lay language ‘stress’ denotes a demanding situation. This idea has also been applied in scientific research. This approach looks at stress as an independent variable located in the environment, an external stimulus which is stressful and thus results in a response of psychological or physical stress (Cox & Griffiths, 2010; Segerstrom & O'Connor, 2012). At first, research focused on physical stressors such as heat, noise, toxins, injury, or physical exertion, however, psychological stressors (e.g. unexpected events, time pressure, interpersonal conflicts) have gained more attention over the years (McEwen, 2016; Slavich, 2020).

Various typologies of stressors have been developed. Some suggested that stressors can be described in terms of severity (mild-severe), the point in the life course when they occur (childhood-adulthood), chronicity (acute-chronic), expectedness (anticipated-unexpected), type of threat they represent (emotional-physical), and the likelihood of causing mental health issues (Roche et al., 2017). Others focused mainly on the timescale and life period in which the person was exposed to the stressor (Epel et al., 2018; Rohleder, 2019). Characteristics of a stressor e.g. timing, duration, or controllability or the nature of threat may lead to specific physiological changes (increased or reduced cortisol secretion) and thus have different effects on health (Lupien et al., 2009; Miller et al., 2007). There is a broad agreement that certain events are normatively stressful, i.e. will elicit a stress response in most people (Cohen et al., 2019; Hobfoll et al., 1998). However, it is much less clear what qualities make a situation stressful and what characteristics of a stressor are most detrimental (Cohen et al., 2019; Monroe & Slavich, 2016; Slavich, 2016, 2020). Recent theoretical advancements emphasise the high potential of threats to social safety, such as social conflict, devaluation rejection, exclusion, and isolation, to cause stress and impact well-being (Slavich, 2020).

Probably the most well-known classification of stressors comprises three main types: life events, chronic stressors, and daily hassles and uplifts (Paradies, 2011). Sometimes acute stressors are included as a separate category (Epel et al., 2018). The first group involves specific, time-limited events which can be positive or negative but nonetheless require major readjustment (e.g. marriage, job loss). There is a special class of life events i.e. traumatic events – sudden, extremely severe situations which pose a threat to the physical or psychological safety of an individual or their loved ones (Epel et al., 2018; Paradies, 2011). Chronic stressors include longer-term, recurrent demands, threats, and problems (e.g. financial issues, living in an unsafe area, caregiving), which can be related to different spheres of life and be initiated by a specific life event (Epel et al., 2018; Miller et al., 2007). However, the distinction between life events and chronic stressors is not clear-cut, as chronic stressors can be seen as a series of separate events, and life events may tend to re-occur in certain environments and social structures (Avison, 2016; Aneshensel, 1992 as cited in Paradies, 2011; Pearlin, 1989). Finally, daily events or hassles and uplifts are everyday minor issues, irritating and frustrating or pleasing and satisfying, respectively (Paradies, 2011). Importantly, these different types of stressors interact with each other. Chronic stressors and more specific events provide context and meaning for each other (Pearlin, 1989),

and major events can have a cascading effect on everyday hassles (Cohen et al., 2019; Segerstrom & O'Connor, 2012). Therefore, it is recommended that research on stress and particularly on stress effects should incorporate a life-span approach (i.e. acknowledge the changes in stressors and resources and the interactions between the two over the life course) and apply state-of-the-art measures of exposure to stress (Segerstrom & O'Connor, 2012; Slavich, 2016, 2019).

### 1.1.2. Stress as a response

Another conceptualisation of stress equates it with a response to threatening stimuli. While this approach looks at stress as a dependent variable, and located in a person (as opposed to the environment), it refers to the same conceptual system as the stimuli-based definition (Cox & Griffiths, 2010). This approach derives from biological and medical sciences, particularly from the works of Walter Cannon (1871-1945) and Hans Selye (1907-1982) who investigated physiological responses to external and internal stimuli (Hinkle Jr, 1973; Mason, 1975; Robinson, 2018). Particularly, Cannon suggested that a human exposed to a threat would feel anger or fear which were linked to the instinct to fight or flee respectively. He emphasised the role of the sympathetic nervous system and adrenal medulla (SAM axis) which triggers physiological changes preparing the body to fight or flight (Lovallo, 2016; McCarty, 2016; Robinson, 2018). SAM activation leads to the release of catecholamines: adrenaline and noradrenaline (Lovallo, 2016). It results in increased myocardial contractions, dilation of coronary vessels as well as those serving skeletal muscles, constriction of vessels serving the skin and digestive system, contraction of the spleen, dilation of bronchi, and increased conversion of glycogen into glucose (McCarty, 2016). That is why people who feel stressed experience such symptoms as heart racing and quicker breath, their blood pressure rises, and they sweat and have cold hands.

While Cannon studied the responses to acute stress, Selye focused on chronic stress. Selye (1978) noted that rats after being exposed to challenging conditions such as intoxication, high and low temperatures, infections, exercise etc. ended up with gastrointestinal ulcers and enlarged adrenal glands, as well as decreased thymus size and other parts of the immune system, irrespective of the type of stressor. This led him to formulate a theory of non-specific reaction to stressful conditions, known as the General Adaptation Syndrome (GAS). Importantly, Selye highlighted the role of the hypothalamic-pituitary-adrenocortical (HPA) axis and glucocorticoids in the stress response (Thiel & Dretsch, 2011). Now, glucocorticoids, particularly cortisol, are seen as one of the main stress indicators (e.g. Lupien et al., 2009; Miller et al., 2007; O'Connor et al., 2020). Cortisol seems to have somewhat bad press as a stress hormone responsible for stress-related illness, however it is involved in the regulation of metabolic and immune processes, and plays an important role in everyday functioning (Lovallo, 2016; O'Connor et al., 2020).

Selye's (1978) idea of a non-specific response was criticised as research showed that different situations elicit specific responses (Blascovich, 2013; Pacak & Palkovits, 2001 as cited in Fink, 2016a; Hinkle Jr, 1973; Robinson, 2018). Furthermore, more recently it was found that fight and flight are not the only options when it comes to biobehavioural responses to stress.

Taylor and colleagues (Taylor, 2006; Taylor et al., 2000) described another pattern i.e. tend-or-befriend which was observed particularly among females and related to social stress. Physiologically, it is underpinned by oxytocin, opioids, and dopaminergic pathways which seem to modulate the activation of the sympathetic nervous system and HPA axis.

### 1.1.3. Stress as a process

A more recent perspective on psychological stress acknowledges that a person interacts with their environment. In contemporary psychology, the most popular view holds that stress is a process or “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman, 1984, p. 19).

According to the transactional theory of stress (Lazarus & Folkman, 1984) which describes a two-stage cognitive appraisal of an event, whether an individual experiences stress is dependent on their specific evaluation of the situation. First, primary appraisal allows an individual to recognise if an event is relevant to them and whether it influences their well-being. According to Lazarus and Folkman (1984), this process results in classification of the situation as irrelevant (the situation does not affect their wellbeing), benign/positive (the situation maintains/improves their wellbeing), or stressful. Irrelevant situations are likely to be ignored, benign/positive situations lead to positive emotions and any possible negative impact on one's well-being results in appraisal of the event as ‘stressful’. Depending on whether the damage has already taken place or is anticipated, an event is classified either as a loss/harm or a threat, respectively. If a situation involves a risk of negative impact, but simultaneously an individual acknowledges that there is a chance of benefit or growth then it might be regarded as a challenge. The first two types of stress appraisals, threat and loss, are accompanied by negative emotions, such as sadness, grief, anxiety, fear, or anger. Challenge is likely to elicit positive emotional states including eagerness, excitement, or exhilaration (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) highlighted that the three ‘stressful’ appraisals are not mutually exclusive and frequently co-occur, e.g. after a loss concerns about future usually are induced (threat); similarly, in a challenging situation an element of risk and threat to the individual's well-being may appear.

As the situation progresses, requiring mobilisation and some action, secondary appraisal takes place. This allows for analysing resources and possible behavioural responses, i.e. coping behaviour (Lazarus & Folkman, 1984). Primary appraisal is crucial to determine if an event has any negative implications for an individual (i.e. classified as stressful) and thus requires secondary appraisal to be applied. However, both appraisals are of equal importance when the situation is considered stressful. Furthermore, the appraisal process can be considered perpetual, i.e. every time the situation changes (either because of external factors/forces or any action undertaken by the individual), it is re-appraised (Lazarus, 2006). The appraisal of an event as a loss/harm, a threat, or a challenge may in fact be an outcome of the combinations of (constantly re-applied) two appraisals, not stemming solely from the primary appraisal (C.A. Smith & Kirby, 2011).

Given that stress arises from a transaction between the person and the environment (situation), both situational and personal factors affect the appraisal process. Specific aspects such as novelty, predictability, uncertainty, imminence, duration, and ambiguity belong to the former category. The latter comprises at least three groups of individual characteristics: beliefs about one's abilities and self-efficacy; existential beliefs that play a vital role in ascribing meaning to an event; and motivational commitments (goal, priorities, important values) (Lazarus and Folkman, 1984). More recently, Blascovich and colleagues (see e.g. Blascovich, 2013) developed a biopsychosocial model of challenge and threat where they described how an individual engaged in a motivated performance situation evaluates and re-evaluates various factors interacting with each other, including safety/danger, certainty/uncertainty, familiarity/novelty, required effort, skills, knowledge and abilities, presence of others, attitudes, and beliefs (Blascovich (2013)). These factors are seen as possibly influencing both demands and resources, and the evaluations determine whether the situation in any given moment will be appraised as a threat or a challenge.

Coping is defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). While Lazarus and Folkman (1984) focused on conscious processes, others suggested that coping comprises an interplay between unconscious, semi-conscious and conscious strategies (Aldwin, 2011). Research showed that there are hundreds of different ways of coping (Skinner et al., 2003) and various typologies and taxonomies have been developed over the years. Originally, Lazarus and Folkman (1984) distinguished two types of coping: problem-focused and emotion-focused. The former category involves direct efforts to solve the problem, usually by changing the situation (e.g. looking for a potential solution, creating a plan of action and implementing it) but also by changing oneself (e.g. developing resources such as skills or knowledge which would help to solve the problem) (Stephenson et al., 2016). Emotion-focused coping aims to reduce emotional distress. This can be achieved through avoidance, selective attention, positive comparisons etc. (Lazarus & Folkman, 1984). Effectiveness of these strategies depends on their fit with the appraisal and circumstances. Problem-focused coping works well if a situation is controllable. However, emotion-focused strategies may be more appropriate in uncontrollable situations, especially in the short term (Biggs et al. 2017; Stephenson et al., 2016). People often combine both strategies to deal with a situation (Lazarus & Folkman, 1984). Furthermore, certain strategies may be used in different ways to promote problem solving or emotion regulation. Engaging in social interactions is a good example, as an individual may talk to others to reduce negative emotions (emotion-focused coping) or receive advice (problem-focused coping) (Carver & Vargas, 2011).

Later, the two-type model was revised, and meaning-focused coping introduced (Folkman, 1997). Functionally, it helps sustain coping efforts through remembering one's values, goals, beliefs, and commitments and eliciting positive emotions (Folkman, 1997, 2008, 2011). Another type of coping is relationship-focused coping which involves efforts to maintain important relationships in times of stress (Stephenson et al., 2016). Affiliation and social support play an

important role in regulating the stress response and mediating the effects of stress on health (Cohen & Wills, 1985; Slavich, 2020; Taylor, 2006, 2011).

## 1.2. Stress and well-being

One of the acknowledged reasons for studying stress is the fact that it has been linked to ill-health and as such generates costs to individuals, organisations, and societies (Cooper & Dewe, 2004). Walter Cannon in the 1930s was probably the first to use 'stress' as a scientific term in the context of health and medicine (Lovallo, 2016). However, in its colloquial meaning it was linked to ill-health before this e.g. Osler (1897) in his lectures talked about stress and strain resulting from hard work and contributing to angina pectoris. Hayward (2005) noted that stress as a cause of premature death was mentioned in Mason's Statistical Account of Ireland (1814–1819). There is considerable evidence that stress can affect well-being through direct and indirect pathways. Commonly studied health issues related to stress include but are not limited to: cardiovascular disease, metabolic disease, allergies and skin conditions, pains and aches, infections, aging, and depression (e.g. Chrousos, 2009; Cohen et al., 2019; Lovallo, 2016; O'Connor et al., 2020; Sapolsky, 2004). The following subsection provides a brief review of the studies linking stress with different health issues. Then, the mechanisms explaining how stress affects health are described.

### 1.2.1. Stress-related health issues

The link between stress and cardiovascular diseases (CVD) has been well-documented (Cohen et al., 2007; Gafarov et al., 2019; Johnson & Hall, 1988; Kivimäki & Kawachi, 2015; Kivimäki & Steptoe, 2018; Nabi et al., 2013). A review of mega-studies and meta-analyses (Kivimäki & Steptoe, 2018) showed that the risk of incident coronary heart disease and stroke is 10% to 60% higher among adults who experience work-related or personal stress such as adverse childhood experiences as well as chronic stress, including social isolation and loneliness, long-working hours, natural disasters and major life events. However, it seems that experiencing stress in adulthood plays a lesser role in the aetiology of CVD relative to severe stress in childhood or risk factors such as hypertension, obesity, or smoking. It is more important as a trigger of CVD in people who are susceptible and a determinant of prognosis and outcome in people with pre-existing conditions.

There is also evidence linking stress to diabetes. For instance, a review by Nyberg et al. (2014) showed that people who experienced job strain were at 15% higher risk of having type 2 diabetes than those with no job strain. Similarly, job insecurity (Ferrie et al., 2016) and exposure to multiple adverse events in childhood (Hughes et al., 2017) were associated with a higher risk of diabetes. Other studies found that stress can exacerbate skin conditions (Hassan et al., 2019; Podeljak & Lugović-Mihic, 2020; Theoharides, 2020) and that both acute and chronic stress at different levels (individual, family, community) may contribute to asthma and worse asthma outcomes (Landeo-Gutierrez & Celedón, 2020). Moreover, a review of prospective studies showed that people who experience stress are more likely to develop upper respiratory tract

infections (Pedersen et al., 2010). Exposure to stressful life events, and traumatic events in particular, was also associated with poorer outcomes in HIV and AIDS such as decreases in CD4 T lymphocytes, increases in viral load, and greater risk for clinical decline and mortality (Cohen et al., 2007; Leserman, 2008; Weinstein & Li, 2016)

Musculoskeletal pains and injuries are also related to stress. Different types of stressors such as job-related stressors (e.g. poor work conditions, workplace aggression), catastrophic and traumatic events, as well as private-life stressors (e.g. familial problems, domestic abuse) have been linked with musculoskeletal injuries (Hartzell et al., 2017). A recent review found some evidence for the role of perceived psychosocial stress in the development of chronic spinal pain and arthritis (Buscemi et al., 2019). Furthermore, studies revealed that psychosocial stress may affect muscle activity and lead to spinal compression which leads to back pains (Finestone et al., 2008).

Sustained physiological stress response may impact telomeres (non-coding segments of chromosomes involved in DNA transcription). Research showed that increased psychosocial stress over the previous month (see Mathur et al., 2016 for review), chronic stress (Oliveira et al., 2016) as well as exposure to stressful life events up to five years before (Verhoeven et al., 2015) were associated with shorter telomeres which suggests that stress may accelerate aging. Shorter telomeres were also linked to higher susceptibility of infection (Cohen et al., 2013) and cancer (Günes & Rudolph, 2013). Previous research provided mixed evidence regarding the contribution of psychosocial stress to the risk of cancer development, progression, or recurrence (Cohen et al., 2019; Heikkila et al., 2013; Johansen et al., 2017; Todd et al., 2014). However, a recent study showed a greater prevalence of gastrointestinal cancer, in people with PTSD than those not exposed to traumatic stressors (Kaster et al., 2019). Also, a meta-analysis showed that experiencing multiple adverse events in childhood is associated with a higher risk of cancer (Hughes et al., 2017). Others suggested that while exposure to stress might not be associated with incidence of cancer, it may be related to lower rates of survival (Chida et al., 2008). Furthermore, there is evidence that while stress as such may not cause cancer, it can affect cellular and molecular processes which in turn may promote tumour growth (Antoni et al., 2006; Lutgendorf & Sood, 2011).

Stress by definition affects mental well-being. The transactional theory of posits that stress occurs when one's resources and well-being are appraised as being taxed and endangered (Lazarus & Folkman, 1984) which most likely is an unpleasant situation evoking negative emotions such as anxiety or frustration. Research studies showed that stress has adverse effects on mental health. For instance, experiencing multiple adverse events during childhood increased risk of mental health issues such as anxiety, depression, and suicide attempts (Hughes et al., 2017). Furthermore, stress at work was found to increase the risk of clinical depression by up to 77% (Madsen et al., 2017), and experiencing a major life event was linked to the onset of major depressive disorder (Cohen et al., 2007). Furthermore, stress may alter emotion regulation processes and thus is potentially implicated in the development and course of mental health

problems underpinned by affect regulation such as depression (Cohen et al., 2007; Cohen et al., 2019).

### 1.2.2. Two pathways linking stress and health

Over the years, a huge amount of data has been accumulated showing that stress is indeed associated with physical and mental health issues. Two main pathways have been suggested that explain how stress can affect health: direct (through autonomic and endocrine responses) and indirect (through changes in health behaviour) (Carver & Vargas, 2011; Cohen et al., 2007; O'Connor et al., 2020).

#### 1.2.2.1. *Direct pathway*

The direct pathway between stress and health describes the specific effects of the stress response on the functioning of body systems. These physiological alterations interact with the existing risks as well as genetic predispositions which may lead to development or exacerbation of physical and mental health conditions

To survive in a constantly changing environment, living organisms have to maintain internal stability. In 1980s Sterling and Eyer (1988) introduced the concept of allostasis, which describes the constant adjustment to internal and external demands based on predictive regulation. The brain tracks innumerable physiological parameters, regulates them through various effectors and mediators (McEwen, 2016) and governs anticipatory behaviour which helps maintain internal stability (Sterling, 2012). As described in section 1.1.2, being exposed to a stressful event evokes a neuroendocrine response: activation of the SAM and HPA axes. SAM-mediated release of catecholamines prepares the body to fight or flee from the threat and triggers inflammation to protect the body against extracellular pathogens. HPA axis activation results in the release of glucocorticoids (including cortisol) increasing metabolic activity to supply the body with energy (Lovallo, 2016; O'Connor et al., 2020). Numerous studies have focused on the deleterious effects of stress, whether defined as a response, stimulus, or transaction (Cohen et al., 2016; Lovallo, 2016; McEwen & Sapolsky, 1995; Sapolsky, 2004). However, from the evolutionary perspective the physiological stress response has played an important role in adaptation and survival, as it enables allostasis. It is speculated that since nowadays most stressors are psychological rather than physical threats and often of a chronic nature, the physiological response might be elicited too often or for too long (McEwen, 1998). Allostasis requires energy and comes with a cost. Allostatic state, i.e. the altered level and activity of the allostasis mediators in response to external or internal stimuli is adaptive for a limited time but produces wear and tear on the regulatory systems, eventually leading to allostatic load and overload (McEwen, 2005, 2016; Sterling, 2012). McEwen (1998) described four conditions that lead to allostatic load: frequent exposure to stressors and thus frequent mounting stress response; a lack of adaptation to repeated stressors, resulting in prolonged exposure to stress hormones (e.g. cortisol); an organism's inability to shut off allostatic response when the stressor is no longer present; and inadequate response by some allostatic systems leading to an unregulated increase in other systems. Allostatic load and

overload may result in or aggravate health problems (Cohen et al., 2007; Karatsoreos & McEwen, 2011; Lovallo, 2016; Slavich & Irwin, 2014; Willenberg et al., 2010).

Allostatic load and overload may occur in any of the body systems. For instance, the stress response involves decreased heart rate variability, a higher level of catecholamines and cortisol in the circulation, increased heart rate and blood pressure. It activates coagulation and the immune response. All this if repeated or in excess can lead to pathophysiological effects (cardiac electrical instability, myocardial ischaemia, atherosclerotic plaque disruption, and thrombus formation) which may result in clinical events: arrhythmia (tachycardia, fibrillation), acute coronary syndrome e.g. myocardial infarction, and stroke (Kivimäki & Steptoe, 2018; McEwen, 1998). Allostatic load due to chronic stress can contribute to diabetes as cortisol stimulates glycogenolysis in the liver and interferes with insulin action in the peripheral tissues. This, in turn, may cause hyperglycaemia (Lovallo, 2016; McEwen, 1998). Stress response may also lead to structural changes in the prefrontal cortex and hippocampus which are involved in important cognitive processes (Lupien et al., 2009; Shields & Slavich, 2017). Stress-related hormones were e.g. linked to the atrophy of dendrites in the hippocampus and hippocampal atrophy was found in patients with mental health problems such as recurrent depression and PTSD (McEwen, 1998). Endocrine mediators such as corticotropin, noradrenaline and cortisol affect the fear system, reward system and sleep system, which are related to such issues as anxiety, depression, insomnia and daytime sleepiness (Chrousos, 2009; Cohen et al., 2019).

The stress response influences the immune system. Specifically, the autonomic nervous system response affects the functioning of the thymus, spleen, and lymph nodes altering the development and activity of lymphocytes. Furthermore, as lymphocytes have adrenoreceptors and glucocorticoid receptors, the endocrine stress response can modify their functioning through catecholamines and cortisol. Some of these changes may impair the immune system, while others enhance its functioning (Chrousos, 2009; Lovallo, 2016; McEwen, 1998). Empirical studies (see Segerstrom & Miller, 2004 for review) showed that exposure to acute laboratory stressors (e.g. public speaking, mental arithmetic tasks) downregulated specific immunity and increased certain parameters of natural immunity, particularly the number of natural killer cells, large granular lymphocytes, and neutrophils in peripheral blood, as well as the production of proinflammatory cytokines. Experiencing brief naturalistic stressors (e.g. exams) led to suppression of cellular immunity and enhanced humoral immunity which increased the production of antibodies to latent viruses such as the Epstein-Barr virus. Whilst the relationship between exposure to traumatic events and immunity was non-significant, there was some evidence that it might differ depending on the type of the stressor: loss (death of a spouse) or threat (natural disaster). The former seemed to lead to a decline in natural immunity, while the latter was associated with increased natural and specific immunity. Experiencing chronic stressors (e.g. unemployment, caregiving) was linked to suppression in both natural and specific immunity (including cellular and humoral immunity) (Segerstrom & Miller, 2004). Thus, it seems the short-term stress response enhances natural immunity, which is consistent with the evolutionary perspective on stress. The fight-or-flight type response evolved to prepare the body to deal with potential infection or injury resulting

from an encounter with a threat. Major stressors and chronic stress, on the other hand, may lead to immunosuppression and increase risk of infectious and neoplastic disease (McEwen, 1998; Sapolsky, 2004; Segerstrom & Miller, 2004).

Stress-related malfunction of the immune system is not limited to immunosuppression but may also involve upregulation of the immune system. Slavich and colleagues (Slavich, 2020; Slavich & Irwin, 2014; Slavich et al., 2010; Slavich & Sacher, 2019) suggested that contemporary psychological stressors such as social rejection, isolation, conflict, or evaluation may evoke the same neuro-immunological reaction as physical threat which leads to emotional and behavioural responses involving anhedonia, sad mood, psychomotor retardation, and social withdrawal. While this could be critical for survival as an adaptive response to a physical danger, it is not necessarily so in the case of social threat. Frequent activation of the stress response in reaction to social threats may contribute to systemic inflammation (Slavich, 2020; Slavich & Irwin, 2014). Also, exposure to adversities in childhood has been linked with pro-inflammatory tendencies (Miller, Chen, & Parker, 2011). While inflammation is a part of the immune response and e.g. enhances wound healing, too much inflammation is detrimental. It is associated with physical health problems such as allergies, asthma, rheumatoid arthritis, diabetes, cardiovascular issues, chronic pain and osteoporosis (Lovallo, 2016; Miller & Blackwell, 2006; Sawicki et al., 2020; Segerstrom & Miller, 2004; Theoharides, 2020). Furthermore, endogenous glucocorticoids released during the stress response may result in resistance to synthetic glucocorticoids used in treatment of asthma (Palumbo, Prochnik, Wald, & Genaro, 2020). Systemic inflammation was suggested to be involved in mental health conditions e.g. depression, schizophrenia, post-traumatic stress disorder (Miller & Blackwell, 2006; Slavich, 2015; Slavich & Irwin, 2014; Slavich & Sacher, 2019) and autistic spectrum disorder (Theoharides, 2020).

#### *1.2.2.2. Indirect pathway*

The indirect pathway linking stress and health refers to the idea that stress leads to unhealthy behaviour (such as smoking, use and abuse of alcohol and drugs, not seeking help and non-compliance, unhealthy eating, physical inactivity and insufficient sleep) which in turn may interact with an individual's biological characteristics and contribute to development and exacerbation of health issues (Lutgendorf & Costanzo, 2003; McEwen, 1998). Unhealthy habits have clear implications for health e.g. smoking may lead to lung cancer, and poor diet and lack of exercise may result in overweight and obesity which are also risk factors for cardiovascular and metabolic diseases. The stress response may affect executive functions and cognitive processes such as decision-making. As a consequence people may make wrong decisions and act on them e.g. in terms of food choice, and not be able to plan or perform as well as they could which potentially translates into being unable to meet demands or having less time to rest and recover (Chrousos, 2009; Shields & Slavich, 2017).

Innumerable studies demonstrated that stress increases risk of unhealthy behaviours. For instance, stress at work (job stress and long working hours) was associated with smoking and physical inactivity which contributes to cardiovascular problems (Kivimäki & Steptoe, 2018).

Furthermore, stress can indirectly increase the risk of diabetes through lifestyle factors such as physical inactivity and obesity which were shown to be linked with job strain (Heikkilä et al., 2013; Kivimäki & Steptoe, 2018). However, the risk of diabetes remained higher in those experiencing job strain after controlling for lifestyle risk factors which suggests that this indirect pathway explained only part of the relationship between stress and diabetes (Nyberg et al., 2014).

Meta-analyses showed that smokers under stress smoked on average three more cigarettes per week than those not experiencing stress (Heikkilä et al., 2012), and that employees working long hours (over 48 hours/week) were more likely to develop risky alcohol use than those who work 35-40 hours per week (Virtanen et al., 2015). Stress at work (high demands and low control) was also linked to physical inactivity (Fransson et al., 2012; Heikkilä et al., 2013) as well as an unhealthy diet (Chandola et al., 2008). Another meta-analysis showed that psychosocial stress at work and in private life (e.g. caregiver stress) was related to increasing adiposity (Wardle et al., 2011). However, a review by Kivimäki et al. (2015) showed no relationship between stress at work and weight and a previous study provided evidence that under stress weight changes in different ways for different people (Kivimäki et al., 2006). Furthermore, exposure to multiple adverse events in childhood and adolescence (such as maltreatment, domestic violence) has serious negative effects on healthy lifestyle in adulthood which may contribute to ill-health. A meta-analysis showed that participants with experience of at least four adverse childhood experiences were at higher risk of physical inactivity, overweight or obesity, smoking, problematic alcohol use, risky sexual behaviour, illicit drug use, and interpersonal violence (Hughes et al., 2017). Importantly, unhealthy behaviour seems to be related to the stress response and allostatic load. For instance, the stress response involves secretion of glucocorticoids which are engaged in the regulation of energy intake behaviour i.e. they increase appetite for food and food-seeking behaviour (McEwen, 2005) leading to possibly unhealthy eating. Furthermore, there is some evidence that diet can contribute to systemic low-grade inflammation (Minihane et al., 2015) and thus to allostatic overload.

Recent research also provided evidence of the links between stress and non-compliance to medical treatment and advice. For instance, patients who tried to control their stress were more likely to adhere to antihypertensive treatment (Abbas et al., 2020). PTSD symptoms were associated with non-adherence to medication in stroke survivors (Edmondson et al., 2013). Perceived stress has also been associated with non-adherence to healthcare provider recommendations in patients with Crohn's disease and ulcerative colitis (Tabibian et al., 2015). Furthermore, depressive symptoms, which are often studied as indicators of stress, were associated with reduced self-care behaviour in patients with chronic heart failure (Kessing et al., 2016) and with non-adherence in patients after acute coronary syndrome (Rieckmann et al., 2006). It was also suggested that stress can hinder an individual's or their carers' ability to manage a disease e.g. asthma (Klinnert et al., 2018). All this can lead to deterioration of physical health.

### 1.2.3. Vulnerability to stress and stress-related health problems

Whilst there is evidence to suggest that stress can contribute to physical and mental health problems, it cannot be seen as a single cause of any specific health issue (Hinkle Jr, 1973). People who experience stress are at risk of developing chronic diseases, but many do not actually fall ill (Chrousos, 2009; Cohen et al., 2019). Importantly, social and cultural context influences the way people understand stress in general, their beliefs and attitudes, the meaning they assign to a situation, and what coping strategies are acceptable or adequate. All this determines how a person will respond to a situation (Astvik & Melin, 2013; Blascovich, 2013; Epel et al., 2018; Kirkegaard & Brinkmann, 2015, 2016; Länsisalmi, Peiró, & Kivimäki, 2000; Lazarus & Folkman, 1984).

An interplay of multiple factors affects the individual's health and determines the development and severity of stress-related diseases (Chrousos, 2009; Epel et al., 2018). As suggested by the biopsychosocial framework, health and illness are influenced by biological, psychological, and social variables and processes (Abraham et al., 2016; Engel, 1977; Lutgendorf & Costanzo, 2003; Schwartz, 1982). Consequently, stress researchers acknowledge these three categories of factors at the theoretical level and in their studies. For instance, a recently developed model of stress suggests that stress is not a single, unitary concept but rather "a set of interactive and emerging processes" (Epel et al., 2018, p. 147) and describes aging and disease as the outcomes of the interactions between the context and stress processes in the course of life. Context in this case includes contextual individual (genetic and developmental) and environmental (socioeconomic, cultural) factors, cumulative stress (past and current exposure to stressors and chronic stress), as well as social, psychological and behavioural protective factors (e.g. social support, healthy habits). These all affect habitual processes i.e. allostatic states and mental filters which shape the acute psychological and physiological stress response to daily stressors. That in turn may lead to allostatic load which feeds back to the habitual processes and may result in biological aging and disease (Epel et al., 2018).

People differ in their genetic, epigenetic and psychological make-up and this makes some more vulnerable to stress and stress-related health issues (Chrousos, 2009; Cohen et al., 2019; Epel et al., 2018; Miller et al., 2007; Slavich, 2020). There is some evidence that individuals with exaggerated cardiovascular or endocrine reactivity to psychosocial stressors are at increased risk of cardiovascular problems (Lovallo, 2016; Seldenrijk et al., 2012), dysregulation of the immune system (Lovallo, 2016) and unhealthy eating (Newman et al., 2007). So-called blunted reactivity was suggested to be implicated in addictions and lower ability to control impulses (Lovallo, 2016), impaired cognition in men (Johar et al., 2015), risky driving (Couture et al., 2020), and suicide (O'Connor et al., 2018).

Regarding individual differences, personality may play a role both in exposure to stress and as a resource in coping with it, protecting against stress-related health issues. For instance, neuroticism was found to be related to negative events later in life, while extroversion and impulsivity were associated with a tendency to engage in high-risk behaviour (Vollrath, 2001).

Individuals scoring highly on socially-oriented perfectionism were more likely to experience psychological distress and depressive symptoms, however, this relationship was mediated by the tendency to ruminate (O'Connor et al., 2007). Conscientiousness was linked positively to beneficial health-related behaviours (physical activity), and negatively to risky health-related behaviours (e.g. unhealthy eating, excessive alcohol use, smoking, drug use, risky driving) (Bogg & Roberts, 2004). Other psychological factors such as perceived control, self-efficacy, and lower negative affectivity are also linked with higher resilience (Cohen et al., 2019).

Socio-economic conditions may also affect vulnerability to stress and stress-related diseases. Position in a social hierarchy is an important resource and a possible source of stress. Social evaluation and threats to social safety have been shown to elicit stress response and have negative effects on health (Miller et al., 2007; Slavich, 2020). Interestingly, stable status evokes neurophysiological changes in those with low rank, while unstable status elicits stress response in those with high rank (Scheepers & Knight, 2020). Money has been reported as a common source of stress (American Psychological Association, 2017; Mental Health Foundation, 2018). Financial strain negatively impacts health (Holmgren et al., 2019; Kahn & Pearlin, 2006) while improvement of financial situation is associated with reduced cardiovascular and neuroendocrine activation in everyday life (Steptoe et al., 2005). Two hypotheses have been formulated to explain the links between socio-economic issues and stress-related health problems. The differential exposure hypothesis holds that certain social roles or statuses make a person more likely to encounter stressors. The differential vulnerability hypothesis posits that people with specific roles or statuses have fewer resources (money, social network, personal competences) to cope with stress (Abraham et al., 2016; Avison, 2016).

There is evidence that stressors are not experienced randomly, but are socially distributed (Avison, 2016; Cohen et al., 2019; Pearlin, 1989). For instance, research revealed that women, younger people, unmarried people, and those of lower occupational prestige were exposed to more stressful life events or more chronic stress (Turner, Wheaton, & Lloyd, 1995). Socio-economic status (SES - financial situation/income level, years of education, occupational status, home ownership, etc.) differentiates both exposure to stressors and health issues possibly related to stress. For example, prevalence of divorce is higher among people with lower SES. They are also more likely to experience violence, and death of a child (Cohen et al., 2019). Low-SES environments are largely characterised by uncontrollability, instability and uncertainty, poor housing, high level of conflict, poor family relationships, and violence (Chen & Miller, 2012; Cohen et al., 2019), all of which can be appraised as threatening and stressful.

A recent review showed that low SES was linked with increased risk for eighteen different health issues including self-harm, poisoning, psychotic disorders, arteriosclerosis, chronic obstructive bronchitis, lung cancer, dementia, obesity, disorders of substance abuse, pancreatitis, heart failure, anaemia, mood disorders, renal failure, diabetes, cerebral infarction, ischaemic heart disease, and liver disease (Kivimäki et al., 2020). Low childhood SES is an established risk factor for cardiovascular disease, and all-cause mortality (Galobardes et al., 2004; Galobardes et

al., 2006). Adults who were low SES as children were found to have shorter telomeres and be more likely to fall ill when exposed to a common cold virus (Cohen et al., 2013). Furthermore, lower SES in childhood was related to higher cumulative allostatic load in adulthood but this effect was reduced to none with educational attainment (Friedman et al., 2015) suggesting that access to education is an important protective factor. People with lower educational background have also demonstrated a greater neuroendocrine stress response to a Trier Social Stress Test than those with a higher educational level; supposedly they perceived the task more stressful as they had lower verbal capacity (Fiocco et al., 2007).

Employment status, work environment and work-related roles are also potential sources of stress. Job loss is considered a major life event and unemployment has been studied as a chronic stressor (Avison, 2016). Certain occupations and job roles are likely to be more stressful than others due to their content, associated responsibility, and other job characteristics. Social relationships at work can be both a source of positive and negative experiences, demands and resources (O'Driscoll & Cooper, 2002). There are various models explaining how work stress can affect health (Cox & Griffiths, 2010). For example, work-related stress has been associated with cardiovascular issues (Backé et al., 2012; Chandola et al., 2008; Gafarov et al., 2019; Johnson & Hall, 1988; Kivimäki & Kawachi, 2015), diabetes (Ferrie et al., 2016; Nyberg et al., 2014), and depression (Madsen et al., 2017). A recent review estimated that total costs of work-related stress to society can range from \$221 million to \$187 billion depending on the country, with up to 30% of this due to healthcare and medical costs (Hassard et al., 2018).

Social support can be an important asset in the coping process and serve as a protective factor against the negative effects of stress on health. It can either have a direct positive effect as it provides an individual with positive experiences, or work as a buffer (either by preventing stressful appraisal or aiding in the coping process by leading to re-appraisal of the situation) in the relation between stress and health (Cohen & Wills, 1985). A review by Uchino et al. (1996) provided evidence that social support was beneficial to the function of the cardiovascular, endocrine, and immune systems. A more recent study showed that regular interaction with supportive individuals reduced neurocognitive and neuroendocrine response to social stressors (Eisenberger et al., 2007). A meta-analysis also confirmed the positive effects of social support on immune response (Uchino et al., 2020)

As excessive or chronic stress is clearly linked with ill-health, there is a need to prevent and reduce stress as well as mitigate the negative effects of stress. Given that stress and health are influenced by both cultural and socio-economic context, the context cannot be disregarded. At least five categories of factors affecting health can be distinguished: fixed (e.g. genes, sex, aging), social and economic (e.g. poverty, unemployment), environmental (e.g. housing, air and water quality), lifestyle factors (e.g. diet, smoking) and access to services (e.g. health care, education, leisure, transport) (Department of Health, 1998 as cited in Levi, 2017). Many of these factors are modifiable at both the individual and systemic (organisation, community) level. Individual responsibility plays an important role in alleviating stress since healthy and unhealthy

behaviour may respectively protect an individual from stress and its negative effects or exacerbate them. However, certain factors are beyond an individual's influence and control. Too much emphasis on personal responsibility for health has been criticised as reinforcing victim-blaming ideology (Minkler, 1999). Recently, American research suggested that cultural narratives about personal responsibility may lead to blaming and stigmatizing unhealthy people and prevent implementation of policies that could improve health (Hook & Markus, 2020). Furthermore, stress at work is often seen as a personal matter and attributed to the employee's personality and lifestyle (Kasperezyk, 2010). This is reflected in the fact that many organisational stress management interventions involve secondary and tertiary prevention (e.g. offering employees stress management training or counselling) rather than primary prevention aiming to reduce exposure to stress through job design (Le Fevre et al., 2006; Murphy & Sauter, 2003; Tetric & Winslow, 2015). Considering a public health perspective, primary interventions aiming to reduce exposure to environmental stressors can be more cost-effective than treating the effects of stress (Cohen et al., 2019). Taken together, the existing literature suggests applying a more balanced approach, one that combines both individual and social responsibility and involves changes at the individual, community, institutional, and policy levels (Kasperezyk, 2010; Levi, 2017; Minkler, 1999; Slavich, 2020). There is evidence that multilevel interventions with multidisciplinary teams can be effective and beneficial e.g. for patients with allergic disease. Oland et al. (2018), in a review, found support for the effectiveness of behavioural health interventions (e.g. teaching relaxation and stress management techniques), school/workplace interventions (accommodating for specific needs), and public health interventions (e.g. food labelling). A review by Tetric and Winslow (2015) suggested that combining individual-level and organisational-level interventions can help create healthy work environments.

### 1.3. Positivity of stress

Stress research has focused mainly on negative emotions and the negative consequences for health (Folkman, 2008; Nelson & Simmons, 2003b). Given that the costs of negative effects of stress are extremely high, understanding and reducing the negative effects of stress is justified. Some authors suggest that stress is negative by definition because it involves a threat (Abraham et al., 2016). In fact, the definition by Lazarus and Folkman (1984) describes stress in negative terms. However, there is a growing body of literature pointing to the positive aspects of stress (see e.g. Branson et al., 2019; Crum et al., 2020; Crum et al., 2013; Hanin, 2000; Hargrove et al., 2015; Kozusznik et al., 2015; Nelson & Simmons, 2003a; Päivi et al., 2018).

The concept of the positive side of stress is not new. From an evolutionary perspective the acute stress response is a positive, adaptive mechanism promoting survival (McEwen, 2016; Sapolsky, 2004). As mentioned before, the acute stress response has positive effects on health in that it enhances natural immunity to protect against infection and injury but downregulates non-essential specific immunity thus saving energy which can be then used to deal with the stressor (Segerstrom & Miller, 2004). Selye (1978) suggested that stress comprises both pleasant and

unpleasant experiences (stimuli) and introduced a distinction between distress and eustress (positive stress) to describe negative and positive effects of the non-specific response to a stressor. The contemporary idea of positive stress derives from Selye's work as well as the so-called Yerkes-Dodson laws which say that performance increases with arousal to a certain point, after which it decreases. The latter has been rejected by some as lacking empirical evidence and leading to a misconception of the necessity of some stress to ensure high performance in the workplace (Corbett, 2015). However, it might be a problem of definition and clarity. Yerkes and Dodson (1908) did not talk about stress but looked at the relationship between the strength of stimulus and task acquisition and found that medium strength (and thus medium arousal) was associated with best performance. What is more, experience of stress is often equalled with distress. Exposing people to distress is most likely unhelpful and unethical. However, animal studies showed that exposition to early-life stressors may lead to better functioning under future threat (Chaby et al., 2015). The stress response involves increased arousal and there is evidence that arousal regulation may affect performance in sensory-motor tasks in line with Yerkes-Dodson laws (Faller et al., 2019). Another study showed that stress resulting from being observed affected performance in relatively difficult face recognition tasks but not in easy ones, which again is consistent with the Yerkes-Dodson laws (Hills et al., 2019).

The transactional theory of stress distinguishes between three types of stressful appraisals: harm/loss, threat and challenge. While the first two are definitely negative, challenge assumes some positivity, i.e. it applies to a situation where an individual sees a potential for some gain, growth or development, and it involves positive emotions such as exhilaration or excitement (Lazarus, 2006; Lazarus & Folkman, 1984). Another conceptualisation, the Challenge-Hindrance Framework, posits that there are two types of stressors: (1) positive, challenge-related, promoting accomplishment of tasks and personal development, and (2) negative, hindrance-related, obstacles and barriers which impede task accomplishment and individual development (Cavanaugh et al., 2000; Podsakoff, 2007). Furthermore, in stressful situations negative and positive emotions co-occur and, importantly, positive emotions can help downregulate distress and sustain coping efforts (Folkman, 2008, 2011).

Following on the idea of appraisal and accompanying emotions, as well the Yerkes-Dodson laws, Nelson and Simmons developed a Holistic Model of Stress (HMS) (Nelson & Simmons, 2003a, 2003b, 2005, 2011) which holds that a person appraises a demand (stressor) and reacts with a positive (eustress) or negative (distress) psychological response. This model has been mainly developed and applied to occupational stress, but its ideas could be used in other contexts. Nelson and Simmons (2003b) suggested several indicators of both types of responses. Distress may involve anger, hostility, anxiety, frustration, negative affective state, and burnout. However, eustress is characterised by meaningfulness, hope, manageability, sense of control, and positive affective state. A study on 450 nurses confirmed a two-factor model with one factor, eustress, including hope, meaningfulness, manageability, and positive affect, and the other, distress, comprising anger/hostility, anxiety, and negative affect (Nelson & Simmons, 2003a). Importantly, people in stressful situations may experience both positive and negative states. Furthermore,

HMS posits an idea of savouring, a process equivalent to coping with distress which involves identifying positive states and enjoying them (Nelson & Simmons, 2003a, 2003b, 2011). Individual characteristics such as optimism, self-reliance, locus of control, hardiness, or sense of coherence may promote both eustress and savouring (Nelson & Simmons, 2003b). It was also suggested that the outcomes of eustress i.e. well-being, commitment and high performance may make a person more likely to appraise future demands as challenges rather than hindrances, and lead to more savouring and the state of flow (i.e. engagement in an intrinsically rewarding task, enjoyment derived from being creative and productive (Csikszentmihalyi, 1990)), Negative outcomes associated with distress, on the other hand, may generate more stressors (Hargrove et al., 2015; Hargrove et al., 2013; Nelson & Simmons, 2011).

Both eustress and distress have implications for health, performance and other areas of life. Research testing the Holistic Model of Stress showed that eustress was positively correlated with subjectively perceived health and negatively with role ambiguity (Nelson & Simmons, 2003a). In another study, participants were asked to evaluate several aspects of work in terms of being a source of pressure (distress) or challenge and opportunity (eustress). Higher distress scores were associated with burnout, lower satisfaction, and poorer general psychological health. Eustress scores were positively related with work engagement, and negatively with burnout (Kozusznik et al., 2015). Another study showed that eustress, operationalised as effective coping and a sense that stress contributes positively to one's ability to handle academic problems, was a predictor of life satisfaction among undergraduate students (O'Sullivan, 2011). Moreover, indicators of distress at work (stress and pain) predicted increased fatigue in the morning and during the day, while indicators of eustress (happiness and meaningfulness) predicted reduced fatigue (K. N. Parker & Ragsdale, 2015).

There is also evidence that eustress and distress differ in terms of physiological response in reaction to a stressor which may have implications for health. Research by Frankenhauser (1979, 1983, 1986 as cited in Nelson & Simmons, 2003a) revealed that activity combined with positive affect, which can be seen as eustress, was associated with increase in adrenaline and suppression of cortisol. Activity combined with negative affect, i.e. distress, involved increased levels of both adrenaline and cortisol, and passivity combined with negative affect (hopelessness and lack of control) was related to increased levels of adrenaline, and even higher levels of cortisol. Lovallo and his colleagues conducted two studies which also showed differences in cardiovascular and endocrine responses to aversive and non-aversive demanding situations (Lovallo et al., 1985, Lovallo et al., 1986 as cited in Lovallo, 2016). Doing an activating (requiring concentration and effort) and distressing task activated both SAM and HPA axes and resulted in increased diastolic and systolic blood pressure, as well as noradrenaline and cortisol levels. Doing an activating and rewarding task led to SAM activation i.e. increased blood pressure and noradrenaline level, but no changes to baseline cortisol levels. Balters et al. (2020) demonstrated that in critical incident training with high-stress emergency scenarios, participants' cortisol levels increased in times of distress and decreased in times of eustress defined as subjective improved performance.

Furthermore, research found that challenge and threat appraisal were associated with different patterns of cardiovascular responses. Both involve increased heart rate and ventricular contractility but challenge is also underpinned by increased cardiac output and decrease in total peripheral vascular resistance, while threat appraisals are associated with little change in cardiac output or total peripheral resistance (Tomaka et al., 1993). These patterns are consistent with a model of physiological toughness and weakness described by Dienstbier (1989 as cited in Blascovich, 2013) which suggests that physiologically tough individuals thrive in potentially threatening situations.

Another area of research on stress positivity involves exploring the ideas of negative and positive mindset and re-appraisal as tools for optimising stress responses (Jamieson et al., 2018). Stress can have positive effects on health and performance, since physiological response to stress leads to alertness, narrowed focus, and increased level of energy which enables an individual to deal with the stressor. Stress hormones may also promote physical recovery and improve immunity (Crum & Lyddy, 2014; Crum et al., 2013). Furthermore, coping with traumatic experiences may result in a sense of development, competence, and resilience, meaningfulness, appreciation for life, finding new perspectives and possibilities (Tedeschi & Calhoun, 2004). Interestingly, research demonstrated that changing people's thinking about stress from more negative to more positive can be easily achieved through a re-appraisal or a mindset intervention (Crum et al., 2020; Jamieson et al., 2018). Anxiety can be effectively re-appraised as excitement by self-talk or short, simple instruction (Brooks, 2014). Crum et al. (2013) showed that a 3-minute video may change people's mindset from stress-is-debilitating to stress-is-enhancing. However, not everyone is equally responsive to this kind of intervention; this may partially depend on genetic variation in catechol-O-methyltransferase, one of the enzymes involved in catecholamine metabolism (Crum et al., 2019).

Beliefs about arousal and stress play an important role in the appraisal process. Park et al. (2018) showed that adolescents who believed that stress can be enhancing were less likely to feel distressed when they experienced adverse life events. Keller et al. (2012), based on data from a nationally representative US sample, found that thinking about stress as negatively influencing health was linked to poorer mental and physical health eight years later. Those who declared that they experienced a lot of stress and believed that stress affected their health were at higher risk of premature death. UK-based research on civil servants showed that workers who believed that stress affected their health were at higher risk of coronary death or a non-fatal myocardial infarction (Nabi et al., 2013). Other studies found that negative beliefs about stress were associated with higher exam stress (Laferton et al., 2018) and predicted experiencing somatic symptoms (e.g. tension, pains and aches, diarrhoea, hair loss) in a stressful situation (Fischer et al., 2016). Moreover, people who endorsed a more positive, "stress-is-enhancing" mindset reported higher levels of energy and fewer symptoms of depression and anxiety. Those who took part in an intervention that changed their mindset to more positive also reported better health and higher performance after the intervention. The "Stress-is-enhancing" mindset was also associated with greater desire for feedback and moderate cortisol reactivity in the face of a social

stressor (Crum et al., 2013). Interestingly, lay beliefs about stress outcomes influence people's perception of others' performance and well-being. Westman and Eden (1991) showed that people rated an employee's performance as lower when they believed the person was stressed. Furthermore, if an employee was regarded as working under stressful conditions (heavy workload and responsibility for people and budget), their level of burnout and commitment were judged to be higher in comparison to an employee in a low-stress job (Perrewe et al., 1993). In a recent study, Ben-Avi et al. (2018) asked participants to provide some judgments about a hard-working employee experiencing high workload. Participants with a 'stress-is-enhancing' (as opposed to those with 'stress-is-debilitating' mindset) were less likely to regard the employee's as suffering from burnout, somatic symptoms or presenteeism. They also rated the employee's promotability higher and were less likely to help the person. This suggests that both uniformly positive and uniformly negative conceptualisation of stress may have negative effects and calls for developing a more balanced perspective. In fact, a recent study showed that framing stress in a balanced way (i.e. raising awareness about both negative and positive aspects of stress) might produce the most adaptive stress response (Liu et al., 2017). It has also been suggested that creating a more balanced mindset and understanding of stress can optimise the stress response and promote health and well-being (Crum et al., 2020; Jamieson et al., 2018).

In summary, stress was introduced to social and health sciences in the beginning of the 20<sup>th</sup> century (Hinkle Jr, 1973). Since then it has been defined in different ways. Currently the most common approach describes it as a transaction between an individual and their environment (e.g. Cox & Griffiths, 2010; Lazarus & Folkman, 1984). There is mounting evidence of the relationship between stress and health. Exposure to physical and social stressors triggers a neuroendocrine response which is adaptive in the short term but may lead to allostatic load and dysregulation of body systems and ill-health over time. Furthermore, stress may lead to changes in health behaviour which then contributes to development or exacerbation of disease (e.g. Lovallo, 2016; O'Connor et al., 2020). However, the links between stress and health are complex. A range of biological, psychological and social factors may influence the response to a potentially stressful situation and increase the risk of or protect against negative effects of stress (e.g. Cohen et al., 2019; Lupien et al., 2009; Lutgendorf & Costanzo, 2003). Thus, stress management interventions may need to involve both individual and collective actions (e.g. Slavich, 2020; Tetrick & Winslow, 2015). Furthermore, although stress science has focused on understanding and preventing the negative effects of stress, there is growing evidence that stress can be positive (Nelson & Simmons, 2003a, 2003b). Particularly, acknowledging both positive and negative aspects of stress may lead to optimisation of the stress response (Crum et al., 2020; Jamieson et al., 2018).

## 2. Lay understanding of stress

As highlighted in chapter 1, ‘stress’ is a broad and vague concept in science, where it can be conceptualised in at least three different ways. While in contemporary psychology, the definition based on transactional theory of stress (Lazarus & Folkman, 1984) is commonly accepted, in practice researchers have studied a range of variables which they define as ‘stress’. Similarly, in public discourse the term ‘stress’ is used as a label for various concerns and problems e.g. work-related issues (Brown, 1999), and as Helman (2007, p. 288) put it “stress’ has become one of the most pervasive metaphors for personal and collective suffering and for all the difficulties that people encounter in everyday life.” Some researchers have suggested that the vagueness and breadth of the concept, its ability to comprise so many different issues and explain various misfortunes is what makes it so commonly used in public discourse (Helman, 2007; Mulhall, 1996; Pollock, 1988; Whittaker & Connor, 1998).

The transactional theory of stress (Lazarus & Folkman, 1984) highlights the idea of individual appraisal, a cognitive process that determines whether a person will experience stress in a given situation. Lazarus and Folkman (1984) theorised that people’s beliefs about personal control and existential beliefs may affect appraisal. Lay theories and beliefs e.g. about malleability of one’s own and others’ attributes such as intelligence influence self-regulation in the face of demands, and social perception (Molden & Dweck, 2006). Furthermore, recent studies showed that the way people think about stress has implications for their health and performance (Crum et al., 2017; Crum et al., 2013; Keller et al., 2012; Nabi et al., 2013; Park et al., 2018; E.N. Smith et al., 2020) as well as the perception of and behaviour towards those experiencing stress (Ben-Avi et al., 2018). However, very few studies have explored lay conceptualisation of stress, even though individual beliefs about stress play an important role in the appraisal process and thus, stress-related outcomes. Most studies on the lay perspective of stress have analysed conceptualisation of stress in a specific group, e.g. people suffering from ill-health (Clark, 2003; Schoenberg et al., 2005), native female Pacific Islanders from a rural community (Okihiro et al., 2017), medical students (Farquhar et al., 2018), or narrowed the concept to workplace-related stress (e.g. Furnham, 1997; Harkness et al., 2005; Kinman & Jones, 2005; Lewig & Dollard, 2001), or traumatic stress (Houston et al., 2016).

This chapter aims to provide a brief review of findings from studies exploring public understanding of stress and its links to health. By ‘public’ or ‘lay’, a non-expert, non-academic perspective is meant (Furnham, 2017). Two of the studies reviewed below directly asked lay participants about their definition of stress (see section 2.1). Others provide some insight into lay understanding of stress through inquiring about everyday life, health, experiences of stress or different stress-related issues (e.g. causes and consequences of stress). The ideas about stress held by the lay people as reported by these studies can be organised around six different topics: stress being a part of life (section 2.2), multiple causes of stress (section 2.3), negativity of stress

(section 2.4), stress being a weakness (section 2.5), various ways of coping (section 2.6), and individual responsibility for managing stress (section 2.7).

## 2.1. General conceptualisation of stress

Relatively little is known about how lay people define stress in general, or what they mean by ‘stress’. Only two studies were identified in which participants were specifically asked about their definition of stress; both explored lay understanding of job-related stress. Kinman and Jones (2005) asked 45 working adults from the UK representing a range of occupations what they thought the term occupational stress meant. Some participants defined stress as a stimulus (e.g. workplace conditions) or as a response (emotional, physical, cognitive symptoms or a combination of these). Almost half of the sample, however, referred to a stimulus-response relationship and included both causes and effects in their definitions of stress. Idris et al. (2010) used Kinman and Jones (2005) methodology in a study on 48 employees in Malaysia and reported slightly different findings. Again, three different definitions were present but stress as a stimulus and stress as an interaction between stimulus as response were equally common, with stress as a response being least frequent (Idris et al., 2010).

A very recent study explored Australian undergraduate psychology students’ beliefs about stress (Kilby et al., 2020). While no specific question on the definition of stress was used, the authors concluded that “people conceptualise stress as a change in the way their body functions in terms of mental, emotional and physical capacities” (Kilby et al., 2020, p. 9). These lay beliefs reflect a scientific approach to stress as a response to events.

## 2.2. Stress is a part of life

In general, lay people seem to believe that stress, particularly stress at work, is normal and unavoidable. Several studies showed that people perceive stress as a part of life, imminent and inevitable due to the fast pace which is an acknowledged characteristic of modern life (Brown, 1996; Pollock, 1988; Whittaker & Connor, 1998). Kranz and Long (2002), in an analysis of texts from two American women’s magazines, demonstrated that stress was presented as pervasive and unavoidable due to many different, sometimes contradicting causes (e.g. too many or too few roles to fulfil). Another study on the conceptualisation of work stress in media found that it was often described as a contemporary epidemic (Lewig & Dollard, 2001) pointing to a high prevalence of stress in everyday life.

Studies also revealed that lay people perceive stress as a normal part of work life. For example, an interview study with 22 Canadian female clerical workers showed that employees believed experiencing stress at work is normal and those who were not experiencing stress were regarded as not working hard enough or unimportant (Harkness et al., 2005). A similar interpretation of stress was shared by social workers in a chronic-care institution (Meyerson, 1994), and among UK doctors who discussed stress as inherent in their job, a natural response to problems at work, and a sign of them being ‘good doctors’ who care about their patients (Thompson et al., 2013). Moreover, both UK (Kinman & Jones, 2005) and Malaysian (Idris et al.,

2010) employees from different occupations claimed that some stress at work was inevitable. Importantly, in both these groups most participants declared that job-related stress had increased in previous years because of changes in social life and the nature of work. A more recent study showed that healthcare workers also perceived some level of stress at work as unavoidable and acceptable. Furthermore, because their job was inherently demanding, participants believed they had to be strong to handle job-related stressors (Selamu et al., 2017). Medical students believed stress was a part of their training and future career and thus individual coping resources needed to be developed as early as possible (Farquhar et al., 2018). This also points to individual responsibility for stress management as described below (section 2.7).

### 2.3. Stress can have various causes

People's ideas regarding what can cause stress in both general and, more specifically, in the workplace, have been explored. According to the lay perspective, stress can be experienced due to major life events and everyday events. However, one study (Clark, 2003) showed that some people subscribe to a specific conceptualisation of stress as something that occurs only in relation to life-threatening situations. Interestingly, in the past people seemed to be more aware of the fact that boredom can also be a source of psychological stress (Wong, 1990). More recent research revealed that people tend to relate stress to different threats, demands and pressures within various life spheres as outlined below.

Research showed that the lay public associated stress with environmental factors which they had no control over and could not do much to ameliorate, such as the fast pace of life, socio-cultural pressures, and social changes (Pollock, 1988), or ambient stressors characteristic to city life such as the constant need to hurry, noise, crowds, and crime (Brown, 1996). In another study, people living in 'poor' neighbourhoods discussed various factors affecting residents' health and well-being. Low income and unemployment were often linked to negative psychological reactions of stress and depression, diminished self-esteem and motivation, and heightened susceptibility to risky levels of alcohol and drug use (Warr et al., 2007). Sources of stress identified by women from a rural Hawaii community included intimate relationships, family and home life, childrearing, lack of time for oneself, neighbourhood, work-related issues and finances (Okihiro et al., 2017). Importantly, the same issues were seen as stressors and resources. For example, relationships were stressful for some participants but a source of support for others (Okihiro et al., 2017). Social relationships and lack of time, as well as change and uncertainty were also discussed as common stressors by undergraduate psychology students in Australia (Kilby et al., 2020).

Whittaker and Connor (1998) saw stress as a cultural and gendered concept, i.e. different people and groups used the term 'stress' in different ways because what it denoted for them depended on characteristics such as gender or social position. Their study on Australian adults demonstrated that men located their stress primarily in the context of work and personal goals and that for them home was not a stressor but a refuge. For women, on the other hand, the main source of stress was their inability to fulfil multiple social roles (wife, mother, worker), and stressors applied to both work and home spheres. Another study revealed cultural differences in

what people believe to be stressful. Canadians more often pointed to childcare duties, novelty, unpredictability, unbalance and expectations, while Brazilians more frequently endorsed work overload, time pressure, conflicts, and low sense of control (Souza-Talarico et al., 2016).

Work-related factors that people consider likely to cause stress have been explored widely. Workers in the UK most often endorse job insecurity, fast pace of work and time pressure, as well as physical danger, as work-related stressors (Furnham, 1997; Rydstedt et al., 2004). Furthermore, Kinman and Jones (2005) found that British employees deemed jobs involving physical danger, responsibility for the welfare of others, and interactions with people who were experiencing stress as particularly stressful. The most frequently reported stressors included job insecurity, lack of autonomy, and mundane or unchallenging work. In general, participants reported more environmental than personal factors. Bhui et al. (2016) interviewed 51 employees from 12 different British organisations. Participants described a range of stressors in five different categories, all external factors: working conditions (e.g. workload), nature of the job (e.g. dealing with clients), management practices (e.g. unrealistic goals), life events (e.g. work-life balance issues), and finances (e.g. salary). On the other hand, Malaysian employees although they frequently mentioned environmental issues such as time pressure or work overload, more often discussed personal issues e.g. being pessimistic or highly motivated as sources of stress (Idris et al., 2010).

Kirkcaldy et al. (2000) found that across medical professions people associated stress with different job-specific factors. However, they also discussed issues similar to other jobs, such as high workload, physical danger, social relationships, and work-family interface. Overall, evidence suggests there are certain factors that workers across different sectors perceive to cause stress: work overload, time pressure, problematic relationships with colleagues, managers, and customers or patients (Gudjonsson & Adlam, 1982; Guillet et al., 2010; Le Fevre & Kolt, 2010; Selamu et al., 2017; Styhre et al., 2002; Tuckey et al., 2017). However, specific occupational groups can also include specific stressors in their conceptualisation of stress e.g. a shortage of medical supplies in healthcare (Selamu et al., 2017), meeting sales goals in retail (Tuckey et al., 2017), and having to deal with crimes against children, sexual or violent crimes in the judiciary (Flores et al., 2009) and police (Dabney et al., 2013).

Studies looking specifically at how students (particularly medical students) conceptualise stress report similar findings to occupational settings. The most commonly discussed stressors involved workload (study load), lack of time, examinations and social relationships (Lee & Graham, 2001; Radcliffe & Lester, 2003; Wu, Farquhar et al., 2018). Chun and Poole (2009) found that Korean students in the US also talked about financial difficulties, family concerns, psychological problems, and cultural barriers in relation to stress.

## 2.4. Stress is (predominantly) unpleasant and detrimental

According to the Online Etymological Dictionary, stress is a shortened version of the word 'distress' (Online Etymology Dictionary, n.d.). Thus, unsurprisingly, negativity of stress seems to

be deeply ingrained in lay conceptualisation. This is further reinforced by the metaphors people tend to use when talking about stress (see section 3.3) and negative discourse in the media (Crum et al., 2020; Kranz & Long, 2002; Lewig & Dollard, 2001). As discussed above, lay people associate stress with difficult, demanding or undesirable situations (Bhui et al., 2016; Kilby et al., 2020; Okihiro et al., 2017; Rydstedt et al., 2004). What is more, they believe that stress manifests mostly in a negative way at different levels: emotional, cognitive, physical, and behavioural (Furnham, 1997; Kilby et al., 2020; Le Fevre & Kolt, 2010).

The public view stress as involving negative emotions such as anxiety, worry, anger, sadness, unhappiness, irritation, and discomfort (Flores et al., 2009; Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005). It is often associated with tiredness and fatigue (Furnham, 1997; Idris et al., 2010; Kinman & Jones, 2005; Le Fevre & Kolt, 2010; Styhre et al., 2002). According to the lay perspective, stress may negatively affect social relationships in both personal and work life because stressed people tend to be irritable and argumentative (Furnham, 1997; Idris et al., 2010; Kinman & Jones, 2005) but may also isolate themselves or become more selfish, unable to attend to others' needs (Kilby et al., 2020). Research showed that people believed stress led to problems with concentration and thinking clearly, which may translate into lower productivity and poorer performance (Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010). A New Zealand study revealed that managers described stress at work as causing low morale, motivation and performance (Dewe & O'Driscoll, 2002). An interview study with 36 Australian managers revealed they perceived stress, which for them involved loss of control and was detrimental to employees' health and productivity, as a big problem in their organisations due to its implications for the organisation's efficiency (Sharpley & Gardner, 2001). In other studies people associated stress with a poor standard of work, absenteeism and higher risk of accidents at work (Furnham, 1997; Idris et al., 2010; Kinman & Jones, 2005).

Notably, the lay public believe stress to be a cause of or a factor exacerbating various health problems, both mental and physical. However, it seems that in the past (as shown by the studies conducted in the 1980s and 1990s) people were more likely to associate stress with more serious health issues, e.g. cardiovascular problems, while more recent research revealed that lay people link stress with tiredness, musculoskeletal pains, and general poor health. At the same time, relatively little is known about lay understanding of the mechanisms linking stress and health, or how stress could possibly contribute to ill-health. Pollock (1988) found that stress was seen as a cause of such health issues as nervous breakdown and heart attack. Particularly, stress resulting from disrupted relationships or unfortunate life events was considered the main or even the sole cause of a nervous breakdown. Interestingly, people thought of themselves as relatively immune to breakdowns which were seen as something that affect weak people only, even though they admitted that a nervous breakdown could happen to anyone under bad enough circumstances. Stress in the form of job-related overexertion (a case of pressurised businessmen or executives) was also frequently mentioned as the cause of a heart attack although not necessarily the main one. When asked about physiological processes involved in the stress-illness relationship, people discussed speeding up of the physiological processes (sometimes

associated with adrenaline) to the point where it becomes too much for the body to cope. In general participants thought stress wears out body defences and reduces mental and physical resistance, making a person prone to illness. Individual differences as to what illness would develop in the aftermath of stress were explained with the idea of the idiosyncratic weakest point in the system, which for some could be their heart and for others, nerves. Remarkably, respondents did not believe cancer to be stress related. Furthermore, specific incidents of stress and worry were linked with experiencing ill-health, headaches and stomach aches.

J. D. Parker et al. (1993) asked undergraduates, adults, and healthcare professionals (i.e. nurses and physiotherapists) to evaluate the potential causal relationship between "stress" and 26 different health issues. In all three groups stress was perceived as a cause of common health issues such as cardiovascular and gastrointestinal conditions, as well as skin problems and asthma. On the other hand, severe but infrequent (as the authors labelled them), illnesses such as multiple sclerosis, muscular dystrophy, polio, cerebral palsy, epilepsy, and diabetes were seen as unaffected by stress. Australian adults linked stress to such health issues as cardiovascular problems (heart attack, stroke, angina pectoris, high blood pressure), nervous breakdowns, headaches, stomach ulcers, asthma, muscle pain, and skin problems. Participants were also aware of stress influencing the immune system and attributed colds to it. Interestingly, they saw stress as the primary catalyst of heart disease, more important than other risk factors such as unhealthy habits (Whittaker & Connor, 1998).

Clark (2003) found that patients with myocardial infarction believe stress to be a more influential cause of their ill-health than other, lifestyle-related factors such as smoking, lack of exercise or poor diet. Furthermore, studies involving patients with hypoglycaemia (Hunt et al., 1990), diabetes (Schoenberg et al., 2005), asthma (Pohlman & Becker, 2006), and irritable bowel syndrome (Stenner et al., 2000) revealed that at least some patients perceived stress as a cause or a trigger of their illness. However, others refuted this idea and thought that ascribing their illness to stress meant that it was not treated seriously (Pohlman & Becker, 2006; Stenner et al., 2000). This suggests that the concept of stress is broad and vague, and different people understand it in different ways: some see it as more detrimental to health, others as a minor issue, perhaps unpleasant, but negligible as a cause of ill-health.

Research on lay conceptualisation of occupational stress also showed that people believe this type of stress to influence health negatively. Furnham (1997) demonstrated that people believed that job-related stress had negative effects. Many of them thought that a stressed person would become depressed, be more likely to commit suicide, sleep less, drink or smoke more. At the same time, most respondents disagreed that a stressed person would seem energetic or full of life. In Kinman and Jones (2005), participants associated job stress with poor general health. Those who provided more specific examples mentioned mainly tiredness, aches and pains, and less often blood pressure, heart disease and digestive problems.

Although lay conceptualisation portrays stress as mainly negative, a slight shift in perspective has occurred over the last few decades. In the past people seemed to have more

difficulty in considering any positive aspects of stress (Wong, 1990), while more recent studies show that people are able to discuss both negative and positive stress experiences (e.g. Branson, Turnbull, Dry, & Palmer, 2019; Kozusznik et al., 2015; O'Sullivan, 2011; K. N. Parker & Ragsdale, 2015).

Kinman and Jones (2005) reported that many of their participants described stress in negative terms. However, some believed that stress could have some positive outcomes, e.g. make work less mundane and be motivating, or serve as a warning that something requires changing. Importantly, the boundary between damaging and motivating levels of stress was perceived individually. More recently, Branson et al. (2019) explored children and adolescents (13-20 years old) ideas about negative stress (distress) and positive stress (eustress). Unsurprisingly, distress was commonly linked to negative emotions (e.g. anger, sadness, fear), cognitive problems (e.g. inability to focus, ruminations, overthinking) and negative outcomes in terms of performance (e.g. making mistakes, confused behaviour), health (e.g. mental and physical exhaustion, poor health), and social relationships (e.g. being unpleasant to others, withdrawal and alienation). Eustress, on the other hand, was associated with better focus, increased motivation and effort, proactive behaviour, and positive emotions or composure (Branson, Turnbull, et al., 2019). Also, undergraduates believed that stress increases motivation and performance (Kilby et al., 2020).

However, a negative perspective of stress seems to be more salient in lay people's minds. Studies showed that both adolescents (Park et al., 2018) and adults (Crum et al., 2013) tend to believe that stress is harmful rather than beneficial to health, vitality, performance, productivity, learning and growth. Liu et al. (2017) asked participants to provide up to four words they associate stress with. The majority (76.47%) wrote more negative than positive words, and in 66.67% of cases the first word was negative. This negative conceptualisation of stress might be also culture-specific to some extent, as while research in the Western cultures (e.g. Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010) showed that lay people conceptualise stress as negative with some possible positive effects, Malaysian employees saw stress only as detrimental (Idris et al., 2010). Furthermore, Souza-Talarico et al. (2016) demonstrated that Brazilians agreed with the ideas "stress is bad" and "being totally stress-free is a good thing" more than Canadians.

## 2.5. Stress is a weakness

Several studies suggest that lay people may perceive stress as a personal weakness and a sign of being unprofessional. For example, in Harkness et al. (2005), although participants thought experiencing stress at work was normal, at the same time they believed that showing stress or admitting that a person was struggling or unable to cope was unacceptable. Respondents believed it would be a sign of weakness, vulnerability or incompetence. Medical students were also found to avoid displaying stress as this might affect their career i.e. they would be expected to handle stress and being unable to do this was a signal that one should not work as a healthcare professional (Verdonk, Räntzsch, de Vries, & Houkes, 2014). Interviews with school superintendents revealed that both men and women tended to hide their stress, although

for different reasons (Hawk and Martin (2011). Specifically, males declared it is not a ‘male thing’ to show emotions in general, while females expressed fears that if they displayed stress symptoms they would be seen as weak. A study on stress discourse among Swedish public service employees showed that people tended to experience shame for getting stressed because they felt unable to cope and worthless (Thunman & Persson, 2015). In another study, healthcare employees suggested that healthcare workers who had stress-related emotional problems were weak, unstable or lazy, ascribing those problems to personal characteristics. At the same time participants expressed pride that they were not susceptible to such issues (Selamu et al., 2017).

The belief that stress is a weakness seems to be common but may also depend on more specific institutional or organisational culture. Meyerson (1994) interviewed social workers from four acute-care hospitals and one long-term care hospital. In acute-care settings where medicalised discourse dominated, burnout was seen as a disease of an individual: a personal character flaw or a professional failure resulting from inability to cope properly. People did not admit to feeling stressed or being burned out because they believed a professional should be able to cope well enough not to get burned out. However, in the chronic care institution people interpreted stress in psychosocial, rather than medical terms, and saw stress and burnout as a normal response and a warning that a person needs to take care of themselves.

## 2.6. Stress can be dealt with in different ways

Older studies (Brown, 1996; Pollock, 1988) showed that people associated stress with external, ambient stressors of which they felt out of control. This made them think not much can be done about stress apart from accepting it and being vigilant to avoid threats (Brown, 1996). However, more recent research revealed that lay people conceptualise stress as caused by various factors, sometimes quite context-specific (e.g. different stressors in different occupations), they talk about different ways of dealing with stress and believe that they need to develop and apply individual coping strategies (Farquhar et al., 2018; Harkness et al., 2005; Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005; Selamu et al., 2017). These involve both active, problem-focused and emotion-focused coping strategies, as well as actions aiming at restoring or developing resources. While relaxation and time off is an important coping and recovery strategy, there is some evidence that people feel guilty when they take a break instead of working (Lee & Graham, 2001).

British workers discussed a number of strategies that could help manage stress at work. Most common were time management and personal organisation, introspection and counselling or emotion disclosure, getting support from co-workers, family or friends, and taking care of oneself (diet, sleep, exercise, hobbies and leisure) (Bhui et al., 2016; Kinman & Jones, 2005). In Malaysia, workers often talked about slowing down and taking a break, as well as talking to the manager, and turning to religion. Selamu et al. (2017) found that healthcare workers in Ethiopia employ a range of strategies to cope with work-related stress, including enduring the stress, quitting the job, preventing and solving problems (e.g. getting technical support), and developing resources (e.g. upgrading education to get promoted and gain financial stability, improving

communication skills). In the lay conceptualisation of stress, social relationships play a significant role as they can be both a stressor and a factor alleviating stress (Gudjonsson & Adlam, 1982; Guillet et al., 2010; Kilby et al., 2020; Okihiro et al., 2017; Selamu et al., 2017).

Research on students' conceptualisation of stress also showed that students have diverse coping mechanisms. Lee and Graham (2001) found that medical students often reported talking to others to vent emotions, maintaining close relationships, taking time off, relaxation, exercising, religious activity, meditation, and entertainment. Korean students in the US endorsed five main types of coping strategies: psychological coping (praying, meditating, or resting), physical coping (exercise, eating, drinking), problem solving (studying more, asking for help, being assertive), social support (meeting and communicating with friends or family), and entertainment (listening to music, reading, watching TV, etc) (Chun & Poole, 2009). Medical students generally reported more problem-focused strategies but applied both problem and emotion-focused strategies depending on the situation, and saw both types of strategies as effective with the exception of avoidance and wishful thinking (Wu et al., 2018). Most recent research on Australian undergraduates also revealed that students usually used multiple coping strategies depending on the situation, first emotion-focused to alleviate negative stress-related emotions, and subsequently problem-focused to deal with the stressor (Kilby et al., 2020).

## 2.7. Individual responsibility for stress management

Several studies on job-related stress highlighted the idea of individual responsibility for coping with stress, even though people generally agreed that stress is caused by external factors. This was often reinforced by the idea that stress and inability to cope could be seen as weakness which may lead to taking all the responsibility for coping on oneself. For example, Sharpley and Gardner (2001) found that although managers were aware of damaging effects of stress, they did not take part in organisational stress management interventions at work for fear of drawing attention to themselves as unable to cope and being seen as weak. In Harkness et al. (2005) participants discussed their own individual coping strategies (e.g. relaxation or good nutrition) but disregarded the idea of stress management training at work. They described it as unhelpful and unrealistic because they believed that actions suggested by experts, such as taking time out to rest or to plan the day, would be seen as a sign of weakness and earn them a label of a troublemaker. In medical settings, as expressing stress seems unacceptable and stress is not openly discussed, students and employees try to develop coping resources and strategies on their own (Verdonk et al., 2014).

Previous research suggested that people think will-power, self-control and having enough information as well as seeking professional help are the most effective strategies to alleviate stress (Furnham, 1997; Rydstedt et al., 2004). However, as these two studies asked only about individual factors it is not possible to infer any conclusions regarding the lay perspective on organisational responsibility for stress reduction. Another study (Dewe & O'Driscoll, 2002) showed that managers believed employees to have little control over workplace conditions that

could contribute to stress. At the same time, many managers think employees are responsible for dealing with stress-related problems (Dewe & O'Driscoll, 2002; Kinman & Jones, 2005)

Previous studies showed that when asked what could be done about stress at work, participants talked mainly about individual coping strategies such as time management, counselling, or self-care; few employees mentioned preventive, systemic changes aiming to increase job control and reduce workload (Idris et al., 2010; Kinman & Jones, 2005). Interestingly, one study showed that when having stress-related health problems, people felt full responsibility for getting stressed and not being able to manage it well enough which led to health issues and poorer performance. Stress was seen as a result of the demands that a person put on themselves (Thunman & Persson, 2015). Others suggested that employees believed organisation and community-level stress management interventions could be effective and helpful but there were no such initiatives in their workplaces or communities (Hawk & Martin, 2011; Selamu et al., 2017). However, in a recent study on occupational stress people reported more organisational interventions, both focused on job design and organisational practices (primary prevention) as well as on individual (secondary and tertiary prevention) (Bhui et al., 2016). This may represent a shift in public understanding of stress and the responsibility for stress management, at least in the UK.

In summary, the literature exploring lay understanding of stress suggests that the lay public tend to believe that stress is unavoidable (especially at work) and thus people need to learn how to manage it. Most commonly stress is regarded as unpleasant and detrimental i.e. associated with unpleasant physiological, emotional, cognitive symptoms as well as negative outcomes such as poor health and poor performance. However, it seems to be associated with mental health and with minor rather than more serious physical health problems. Lay people acknowledge that stress can have multiple causes. Specific stressors may vary across contexts but generally people perceive stress as caused by various problems, difficulties and undesirable circumstances such as unsatisfactory relationships. While there seems to be some awareness of structural causes of stress (such as poverty, or living and working conditions), previous studies found lay people discuss individual coping responses and strategies more often than systemic changes at the community or organisation level. Some studies showed that lay people see stress as a sign of a personal weakness. Evidence suggests that while it is crucial that a person is equipped with coping skills and takes care of themselves, the acceptance of stress as a part of life and the individual responsibility for managing it may hamper more collective and systemic initiatives (e.g. Harkness et al., 2005; Thunman & Persson, 2015; Verdonk et al., 2014).

The existing literature suggests that the lay and scientific conceptualisations of stress overlap to a degree. In both cases the term stress is applied to cover a range of issues, and the two perspectives are mutually reinforcing (Furnham, 1997; Pollock, 1988; Rydstedt et al., 2004). At the same time, there is evidence that certain discrepancies exist between the two perspectives, and that public understanding of stress can be limited and depend on cultural and educational background (e.g. Souza-Talarico et al., 2016). Importantly, recent research has emphasised

recognition of positive aspects of stress (e.g. Jamieson et al., 2018) which is less salient in the lay discourse. Furthermore, while there is evidence that at least some lay people acknowledge the role of stress in illness development, only one study conducted in the 1980s (Pollock, 1988) provided some insight into the lay understanding of the mechanisms underlying the link between stress and ill-health. Given the relative scarcity of studies focused on the lay perspective on stress, and the implications of lay beliefs for individual well-being and performance (Furnham, 2017; Keller et al., 2012; Molden & Dweck, 2006), more research is required to establish the meaning, scope and usefulness of the concept of stress among lay people. The current research project addresses this need through three studies (chapters 5 to 7) which aim to explore the lay understanding of stress, identify the differences between the lay and scientific perspective, and test metaphorical descriptions as a tool which could be further used in science communication to enhance public understanding of stress so it becomes more consistent with the scientific perspective. The following chapter introduces the idea of metaphors as well as their role in conceptualisation and communication.

### 3. Metaphors – a conceptual and communication tool

Traditionally, metaphors were considered purely rhetorical devices – a figure of speech applied on purpose, in a conscious way, primarily by artists to embellish a speech or a text and expendable in everyday communication (Kövecses, 2010). However, Lakoff and Johnson (1980) argued that not only is metaphor pervasive in everyday language, but also that the human conceptual system, the basis for thinking and acting, is metaphorical in nature. Since then numerous studies on metaphors in linguistics, psychology, and social science have been conducted (see e.g. Gibbs, 2017) and metaphor has been widely recognised as a conceptual tool, vital for thinking and speaking (Knowles & Moon, 2006; Kövecses, 2010; Lakoff & Johnson, 1980). This chapter introduces the idea of conceptual metaphor and provides a brief review of the literature describing the use of metaphor in health and science communication. It also describes what metaphors have been used in discourse on stress.

#### 3.1. Conceptual metaphor

According to Conceptual Metaphor Theory (CMT) (Lakoff & Johnson, 1980), metaphor allows for understanding one thing in terms of another. CMT distinguishes between conceptual and linguistic metaphors. Specifically, a conceptual metaphor involves a systematic set of conceptual links (mappings, correspondences) between two different conceptual domains, i.e. coherent organisations of human experience (Kövecses, 2017). The source domain – the one that is mapped onto the target domain – is typically more concrete or familiar. The target domain is usually more abstract or less familiar; to be understood, it needs to be described in terms of more familiar terms (Kövecses, 2017; Lakoff & Johnson, 1980). As a result people can think about arguments (target) in terms of war (source), time in terms of money, ideas in terms of food, anger in terms of fire, or a PhD project in terms of a journey. This way of thinking is reflected in specific metaphorically used linguistic expressions also known as linguistic metaphors such as **indefensible** claims (ARGUMENT IS WAR), **spending** time (TIME IS MONEY), **food for thought** (IDEAS ARE FOOD) or **burning** with anger (ANGER IS FIRE). To ensure clarity, conceptual metaphors are conventionally reported in A IS B (TARGET IS SOURCE) format using small capitals, e.g. PHD PROJECT IS A JOURNEY. Linguistic metaphors are quoted using lowercase and italicised, underlined or bold font (bolding is applied throughout this thesis), e.g. She was **half-way through** her literature review. Conceptual metaphors can also have non-linguistic realisations, such as drawings, sculptures, cartoons, buildings, symbols, or gestures (El Refaie, 2019; Forceville & Renckens, 2013; Kövecses, 2010, 2020). Linguistic metaphors can take a form of an analogy<sup>1</sup> e.g. My job is **a jail** (target: job, source: jail/entrainment) but there are plenty of metaphorical expressions where the source domain is only implied e.g. I feel **trapped** in my job (target: job,

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<sup>1</sup> However, an analogy can be either within-domain when the two ideas, situations, or objects compared belong to the same conceptual domain, or cross-domain when they are from two different domains (Ruiz & Luciano, 2011) – from this point of view, metaphor is a type of analogy, specifically, a cross-domain analogy

source: jail/entrapment). Some scholars distinguish similes from metaphors with the former involving explicit comparison through the use of 'like' or 'as', and the latter involving implicit comparison (Dancygier, 2017; Knowles & Moon, 2006). However, in this thesis, following Steen (2017), any expression inviting cross-domain mapping is considered a linguistic metaphor.

Different ideas and themes are conceptualised through metaphor. The most common target domains include abstract, presumably more difficult to understand, issues such as emotions, morality, thought, society, nation, politics, economy, human relationships, communication, time, life, death, religion, events and actions. The most common source domains, on the other hand, involve more familiar ideas and experiences, tangible objects, or observable processes e.g. living beings (animals, plants), human body, health and illness, machines, tools, buildings and construction, plants, games, sports, food, money and economic transactions, physical and natural forces, light and darkness, heat and cold, movement and direction (Kövecses, 2010).

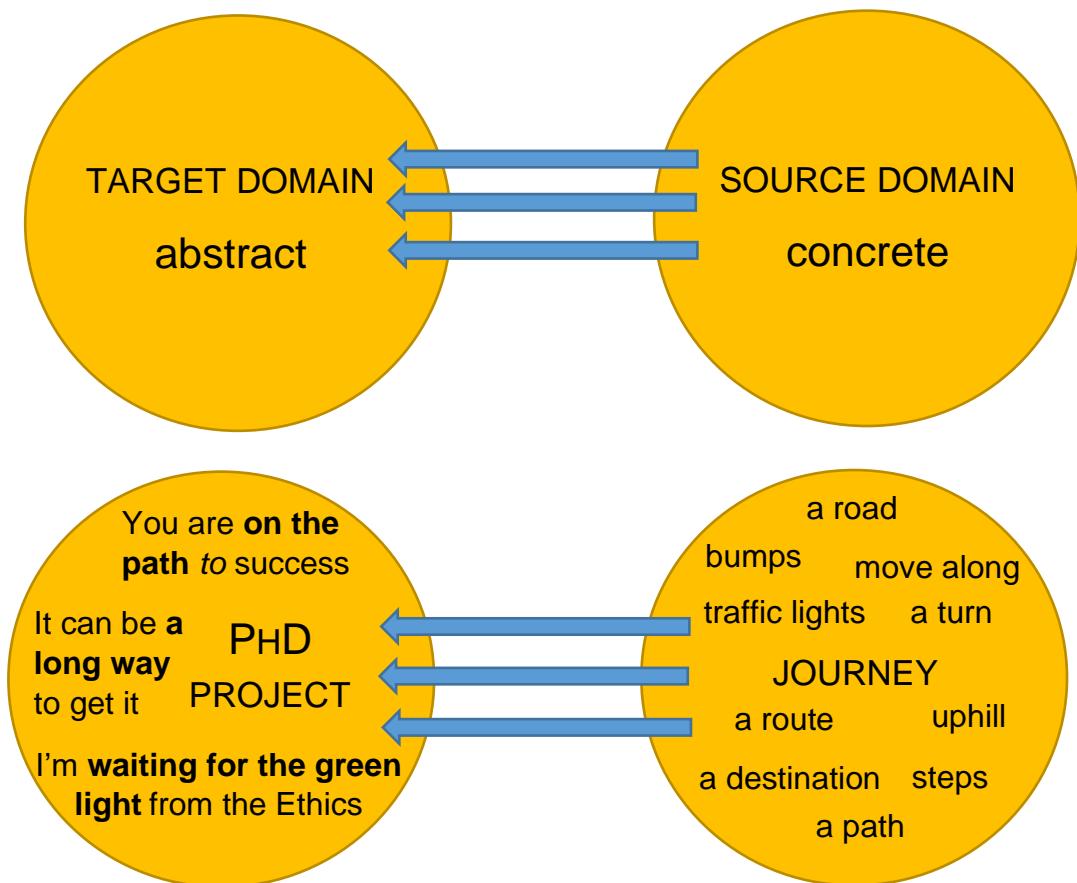
THE PHD PROJECT IS A JOURNEY can serve as an example of how conceptual metaphors work (Figure 1). A journey is a relatively well-known experience that as a concept involves different interrelated aspects. A person who was not moving starts travelling through space in a certain direction to get to a destination. They move along roads and paths and they may travel at different speed. They usually encounter crossroads where they need to make a decision about where to go further; there might be traffic lights or obstacles that impede the journey etc. Similarly, in the case of a PhD project, there is a person working on the project to complete it, there are different decisions to be made, and there might be factors that help or hinder their work meaning the project might be done more quickly or more slowly. The conceptual metaphor A PHD PROJECT IS A JOURNEY involves a mapping of these different aspects and relationships between them in the source domain (i.e. a journey) onto the elements and their relations within the target domain of a PhD project. Through this mapping, people can relate their knowledge about journeys to the experience of working on a PhD project. It creates a specific conceptualisation of a PhD project where, for example, it might be necessary to **wait for a green light** from the Ethics Committee, without which a researcher will not be able to **move further** with work. Obviously, there are no real lights nor, in most cases, are PhD projects about moving from a geographical point A to point B. However, these expressions help people describe and understand a potentially frustrating experience of waiting until further action is possible.

Importantly, the same target can be conceptualised through different metaphors and understood using various source domains. Lakoff and Johnson (1980) provided examples suggesting that love can be viewed as a physical force, madness, magic, patient, or war, while ideas can be seen as food, people, plants, products, commodities, or sources of light. For instance, a recent study showed that the emotion of pride is commonly conceptualised as a physical object, victim, pressurised gas, autonomous living being, liquid, and others (Wezyk, 2017). Furthermore, the same source domain can be used to describe various targets. For instance, distinct concepts such as anger, love, imagination, conflict, or enthusiasm seem to be

conceptualised in terms of fire (Kövecses, 2010). Whether a certain source domain is coupled with a particular target domain may depend on the resemblance (objectively real similarity, perceived similarity, or a similarity in the generic-level structure) or a correlation between a physical, somatosensory experience and some other subjective, abstract experience (Kövecses, 2020). Thus, two things can be linked metaphorically because they are similar in some way (Littlemore, 2019) e.g. the metaphorical expression ‘roses on one’s cheeks’ stems from a conceptual metaphor which is obviously based on the resemblance of reddened cheeks and red roses.

**Figure 1**

*An example of metaphorical mapping: PHD PROJECT IS A JOURNEY*



However, many conceptual metaphors are grounded in somatosensory experience (Deignan, 2005; Lakoff & Johnson, 1980; Littlemore, 2019), and based on a correlation. For instance, INTENSITY IS HEAT (**heated** debate, a relationship has **cooled off**) has been suggested to exist because being engaged in some intense activity is correlated with the increase in body heat (Kövecses, 2020). This is consistent with recent developments in cognitive science which suggest that cognition is embodied; people use physical experiences, bodily sensations and movements to understand the world and build conceptual knowledge (Barsalou, 2008; Fincher-Kiefer, 2019).

These experiential correlation-based metaphors are called ‘primary metaphors’ because they are acquired naturally through interacting with the environment and can be combined into

more complex ‘compound metaphors’ (Grady, 1997; Kövecses, 2020; Littlemore, 2019). A PHD PROJECT IS A JOURNEY involves several primary metaphors such as PURPOSES ARE DESTINATIONS, DIFFICULTIES ARE IMPEDIMENTS TO MOTION, and ACTION IS MOTION. As primary metaphors refer to bodily experience which is predominantly universal, they are common in unrelated cultures. Notwithstanding, many conceptual metaphors based on primary metaphors differ across languages and cultures because of environmental, social, and cultural context (Kövecses, 2020).

Apart from the distinction between primary and compound, conceptual metaphors also differ in terms of conventionality i.e. the extent to which a metaphor and the related linguistic expressions are familiar and used in everyday life (Kövecses, 2010). Highly conventional metaphors are deeply embedded in everyday language and so people often do not realise they are metaphors. For instance, prepositional phrases about time e.g. *in* May represent TIME IS SPACE metaphor but most people would not say this expression is metaphorical. Novel (unconventional) metaphors are less familiar, and may be difficult to interpret without cues. They are usually introduced into language by artists, journalists and politicians and may eventually become more conventional. Furthermore, what can be deemed conventional in one culture or language might be regarded as novel in others (Kövecses, 2010). The level of conventionality has implications in terms of cognitive processes underpinning metaphor comprehension. Interpreting novel metaphors is based on comparison of the source and target domains. As metaphors become conventionalised, there is a shift from comparison to categorisation of the target domain as subordinate of the source domain (Bowdle & Gentner, 2005). However, whether comparison or categorisation is applied may also depend on the aptness of the metaphor with very good (even if novel) metaphors inviting categorisation rather than comparison (Gibbs, 2017).

Conceptual metaphors structure human knowledge and reasoning which has implications for understanding the world and for acting in that world (Deignan, 2005; Kövecses, 2020; Lakoff & Johnson, 1980). The process of structure mapping involves two intertwined mechanisms: alignment and projection. Alignment allows for linking the elements from the two domains. Projection involves projecting the unmatched elements from the source domain to the target domain (Gentner, 1983). Through this process, people can understand one concept in terms of another and learn something new about the target. As in most cases the mapping goes from concrete to abstract domains (Kövecses, 2017, 2020), metaphors can improve understanding of complex, abstract issues by linking them to more familiar, concrete, understandable concepts such as those of physical experiences. However, the links between domains are by definition partial. Obviously not all the aspects of the source domain are mapped onto the target domain. For example, while not impossible, it would be quite difficult to transfer the element of different means of transport from the source domain of journey to the target of a PhD project, unless it was a novel, creative metaphorical description. Various explanations have been suggested as to why certain aspects can or cannot be mapped onto a target domain. They focus on the features of the target domain (Lakoff, 1990), source domain (Kövecses, 2010), or links between the two domains (Grady, 1997). These are a matter of cognitive linguistics beyond the scope of this work.

If one domain could be mapped completely on another one, the two would be exactly the same concept (Lakoff & Johnson, 1980). Thinking or talking about one thing in terms of another highlight certain aspects of the issue (target domain) while backgrounding others (Lakoff & Johnson, 1980; Schön, 1993). Thus, as Deignan (2005) pointed out metaphors are ideological, i.e. they convey specific, partial information and provide a worldview which is to some extent biased. In a way they may limit understanding of the reality. At the same time they can serve different functions in discourse such as explanation, clarification, description, expression, evaluation or entertainment (Knowles & Moon, 2006; Lakoff & Johnson, 1980) and be an effective tool for improving understanding or changing the perspective on an issue and promoting new solutions to problems (Deignan, 2005; Mayer, 1993; Schön, 1993).

### 3.2. Metaphor in health and science communication

Lakoff and Johnson (1980) showed that metaphors are common in language and thought, which has since been confirmed by research (e.g. Morgan, 1997; Musolff & Zinken, 2009; Semino & Demjén, 2017). Metaphors might be applied to a different extent across genres and registers (Deignan et al., 2013). Nonetheless, they are undeniably widespread in both public and scientific discourse and have significant potential as explanatory tools. For instance, Cameron (2003) found that teachers in primary education used metaphors when talking about potentially difficult or new ideas, in order to describe these ideas using words and concepts more familiar to pupils. Metaphors are also deliberately employed in higher education to communicate abstract scientific concepts; apart from the explanatory value, they may also serve entertaining and social functions (Berger, 2016). Studies revealed that metaphors were frequently used in economic, management, and science textbooks as well as academic lectures (Littlemore, 2017) and in the healthcare context (Demjén & Semino, 2017; Tay, 2017).

Importantly, metaphor allows for understanding cognitive and emotional experiences of others e.g. in psychotherapy (Blenkiron, 2005; Killick et al., 2016; Sims, 2003; Tay, 2017). As Tay (2017) explained, metaphors not only serve as a general conceptualisation tool but may also help through ‘making a point more vivid, introducing the new insights, making the therapeutic encounter less intimidating, and facilitating recall of previously discussed content’ (p. 372). Recently, metaphors were successfully applied in cognitive restructuring of everyday problems which resulted in distress reduction (Hu et al., 2018). It was also showed that metaphorical restructuring activates a specific neural network which is involved in insightful problem solving (Yu et al., 2019). There is evidence that people often use metaphors to talk about their experience of such health conditions as cancer (Gibbs & Franks, 2002; Hommerberg et al., 2020; Semino et al., 2017), hypertension and diabetes (Sinnenberg et al., 2018), endometriosis-related pain (Bullo & Hearn, 2020), psychosis (Demjén et al., 2019) and depression (Charteris-Black, 2012; Levitt, et al., 2000; McMullen & Conway, 2002). It was showed that metaphors can have different functions and patients employ them to express emotions, make sense of the experience, give it a meaning and integrate it in one’s life, manage the new self after treatment, and plan for the future (Appleton & Flynn, 2014; Gibbs & Franks, 2002). Furthermore, Boylstein et al. (2007)

concluded that by describing stroke in terms of commonly understood ideas of a disaster and war, patients were able to share their experiences with others who might not be able to fully understand or feel what it was like to experience stroke and the recovery process. Semino (2010) found that physical sensations of pain are commonly described metaphorically. It was suggested that re-conceptualising pain by using specific metaphors could help patients accept pain as part of their life and find better ways to manage it (Loftus, 2011). Evidence for improved outcomes in chronic pain was provided in a study by Gallagher et al. (2013). Participants who were educated about biology of pain through metaphors and stories reported lower level of catastrophising up to three months after the intervention, compared with participants who received advice on how to manage chronic pain based on established cognitive-behavioural principles. Furthermore, Casarett et al. (2010) found that cancer patients rated the quality of the communication with their oncologists higher when the doctors used metaphors and analogies. Thus, metaphors can be used to improve patient-healthcare professional communication, and health outcomes.

Metaphors are closely related to framing defined as 'select[ing] some aspects of a perceived reality and mak[ing] them more salient in a communicating text in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described' (Entman, 1993, p. 52). Schön (1993) introduced the idea of generative metaphor. He discussed how metaphor shapes and reshapes people's understanding of the world around them and frames any given problem. As it enables understanding one concept in terms of another, metaphor can provide a new perspective on a subject, enabling individuals to reflect on it in a different way, and discover alternative solutions to a problem. Therefore, it has the power to generate insight and set a new course of action.

At around the same time, Mayer (1993, p. 570) described a concept of instructive metaphor which he defined as "metaphoric information in a passage that improves problem-solving transfer". He suggested that an appropriate metaphor i.e. one in which source domain elements correspond with the target domain elements and allows for creating familiar analogies may: (1) attract an individual's attention to crucial information about the subject; (2) help the person link different aspects and features of the target domain into a coherent structure as the relations between elements of the source domain are mapped onto the target; and (3) create external, additional (not covered in the metaphorical description) connections between the source and target domains. Mayer (1993) concluded that using metaphors in education can foster learning processes (selecting, organising and integrating information) and lead to better retention of the key information as well as transfer of the new knowledge to other tasks or problems.

More recent research also showed that specific framing through the use of metaphor influences the way people perceive issues and what solutions they suggest to a problem. DeWall and Bushman (2009) showed that being exposed to words related to heat (as opposed to neutral words or those related to low temperatures) resulted in an increase in aggressive thoughts and hostile perceptions. While this study did not utilise linguistic metaphors, it provided evidence that words used to frame a message may influence people's attitudes and behaviour. Further evidence

comes from studies on framing health and social issues. Barry et al. (2009) asked American participants to read seven metaphors related to obesity (e.g. obesity is a sinful behaviour and obesity is an addiction) which differed in the extent to which they put blame on the overweight person. All seven metaphors were endorsed as useful explanation of obesity, and almost 90% of the sample reported three or more metaphors as important causes of obesity. Importantly, the participants' choice of metaphors was associated with specific suggestions as to what social policies should be implemented to deal with the obesity crisis. For instance, those who supported mid and low-blame metaphors evaluated compensatory (e.g. food labelling) and redistributive policies (e.g. governmental funding of obesity treatment programmes) positively and showed much less support for more punitive price-raising policies (e.g. higher insurance rate for overweight people). Those who endorsed high-blame metaphors (e.g. sinful behaviour) disagreed with redistributed policies and endorsed punitive policies. In another study (Thibodeau & Boroditsky, 2011), participants were presented with short texts which described crime either as a beast or as a virus and provided some statistical information about crime. Those exposed to the beast metaphor were more likely to suggest the city authorities should use criminal law enforcement to respond to crime (as opposed to reform-related solutions) than those who read the virus metaphor. Participants exposed to the beast metaphor also more often wanted to investigate the city's criminal justice system, which suggested that metaphor affects what type of information people are looking for when seeking solutions to a problem. Interestingly, participants were not aware of the influence of the metaphor. The majority considered statistical information to influence their decisions most, although the statistical information was exactly the same in both conditions – the descriptions differed only in terms of the metaphor involved.

Research by Spina et al. (2018) showed metaphorical framing in health messages may positively influence intentions of preventive behaviour, such as taking a Pap smear test if the metaphor is consistent with cultural values of the target group. Landau et al. (2019) found that metaphor framing in health messages worked better when people were primed to focus on the abstract meaning of the information provided. In those participants who were 'abstract oriented,' framing sun exposure as enemy confrontation led to higher awareness of skin cancer risk and increased intentions of sun-safe behaviours. Also, describing smoking cessation as an arduous journey made participants appreciate the difficulties in quitting smoking and raised their interest in smoking cessation tools (Landau et al., 2019).

Conversely, framing an experience of an illness as a battle or war may have negative effects for an individual's well-being, particularly if it is depicted as a 'losing battle'. For instance, post-stroke patients who thought about their recovery process in terms of an ongoing fight that the person is not winning, tended to report higher levels of depression six months after the stroke (Boylstein et al., 2007). It was suggested that describing cancer with war-related metaphors may promote aggressive, not necessarily effective, treatment (Hauser & Schwarz, 2015; Reisfield & Wilson, 2004). Hauser and Schwarz (2015) conducted several experiments to test the effects of framing cancer as an enemy or imbalance on the intention for specific behaviour in a non-patient group. They found some evidence that metaphors influenced intention for preventive behaviour.

Specifically, depicting cancer as an enemy led to a decrease in intention to engage in self-limiting behaviour (limiting or avoiding behaviours associated with increasing one's risk of cancer e.g. avoiding salty foods). However, contrary to the hypothesis, framing cancer as the enemy did not increase the intention to engage in self-bolstering behaviour (active behaviour in order to lower their risk of cancer e.g. eating more fruit). Participants who read a description of cancer as imbalance reported higher intention to engage in self-bolstering behaviour. However, neither metaphor influenced the intention of monitoring or treatment behaviour. Another set of experiments provided evidence that framing cancer as a battle may make people have more fatalistic beliefs about cancer and consider treatment to be more difficult than if the illness is described in a neutral (non-metaphorical) way or as a journey (Hauser & Schwarz, 2019). Furthermore, Hendricks et al. (2018) found that metaphors applied to describe cancer or depression may have an effect on how the patient is perceived by others. In comparison to participants who read a text describing the illness as a battle, those who were exposed to a journey metaphor perceived the patient to be more likely to make peace and less likely to feel guilty. However, there is evidence that both violence-related (battle, enemy) and journey-related metaphors may be used by patients in both empowering and disempowering ways (Semino et al., 2017). Also, illness in general, and cancer in particular, is a complex concept and experience, thus a range of metaphors might be necessary to describe one's emotions, perceptions, and other experiences (Gibbs & Franks, 2002; Hommerberg et al., 2020).

What is more, conceptual metaphors have been successfully applied in different educational interventions in various contexts including health and social issues. For instance, Naik et al. (2011) conducted team-based learning sessions where they used a weather metaphor to teach diabetic patients about crucial physiological parameters, so-called diabetes ABC (haemoglobin A<sub>1</sub>C, blood pressure, cholesterol). After three months, participants showed better understanding of the parameters, and greater knowledge of their own ABC values, and of guideline-derived target goals for the ABCs than the control group who took part in a traditional group session about self-management and received educational materials. Gallagher et al. (2013) found the use of metaphors when teaching about the biology of pain improved participant knowledge to a greater extent than non-metaphorical materials.

### 3.3. Metaphors of stress in lay and scientific discourse

Metaphors have also been successfully used to communicate psychological concepts to the lay public. Kendall-Taylor and colleagues developed explanatory metaphors aiming to bridge the gaps between public and experts understanding of various psychosocial issues. For instance, they successfully used an air traffic control metaphor to increase lay people's understanding of brain executive function (Kendall-Taylor et al., 2013). Another study tested several metaphors which communicated the science of resilience in children; framing child development as a scale turned out to be the most effective in improving understanding of resilience (Kendall-Taylor & Haydon, 2016). A more recent study showed that metaphors can help people understand better the social determinants of children's maltreatment and abuse (Kendall-Taylor & Stanley, 2018).

Psychological issues such as emotional states, interpersonal relationships, attention, intelligence, or stress are abstract concepts. Thus, metaphors are commonly used to talk about them in both lay and scientific discourse (e.g. Kövecses, 2010; Lakoff & Johnson, 1980; Leary, 1990). Not only are metaphors a part of cognitive schemas, cultural models (Quinn & Holland, 1987b) or lay theories (Hauser et al., 2017), but scientific models are often of a metaphorical nature (Bailer-Jones, 2000; Leary, 1990; Rybarkiewicz, 2018). In fact, there are several models of stress which employ a metaphor of balance e.g. Job Demands-Control (Karasek & Theorell, 1990), Effort-Reward Imbalance (Siegrist, 2016), and Demand-Induced Strain Compensation (de Jonge et al., 2008) models. Allostasis and allostatic load theory (McEwen, 1998; Sterling, 2012) which explain the links between stress and health also applies the metaphor of balance and weight (load, overload).

Stress, although extremely popular in both public and scientific discourse, seems to be a complex and elusive concept (e.g. Brown, 1996; Kagan, 2016). What is more, stress experience involves different emotions, and previous research showed that people tend to use metaphorical language to a greater extent when talking about emotional experiences as opposed to behaviour (Fainsilber & Ortony, 1987). Thus, it is reasonable to expect metaphors to be applied to think and talk about stress, stressful experiences, and coping with stress. The word ‘stress’ (as well as ‘strain’) has its roots in the Latin verb *stringere* which means ‘to draw tight’, and its past participle *strictus* meaning ‘tight, compressed, drawn together’. From these an Old French word *estresse*, i.e. ‘narrowness, oppression’ and the English ‘distress’ derived, both of which contributed to the etymology of ‘stress’ (Online Etymology Dictionary, n.d.). It is likely that these etymological roots inform contemporary metaphors of stress. Furthermore, ‘stress’ came to social and medical sciences from engineering and this force-related metaphor is reflected in stress terminology (e.g. stress, strain, resilience, pressure).

Despite the high popularity of the term stress, there have been only three studies looking specifically at conceptual or linguistic metaphors of stress (Helman, 1985; Brown, 1999; & Verbytska, 2017). Related to the engineering conceptualisation, STRESS IS A PHYSICAL FORCE seems to be one of the most common metaphors. For instance, Helman (1985, 2007) found that in the lay discourse stress was often described as an invisible, possibly malevolent, external force exerted on an individual (be **under** acute stress) and their body parts (stress causing bronchi to **spasm**), or something that builds up inside the body. Other common force-related metaphors of stress include: a heavy weight (things **piling up**), wire, string, rubber band, or line (be **strung**, be **taut**), interpersonal force (she gave him a nervous **breakdown**), internal chaos (be all **mixed up**, be **churned up**) inner explosion due to internal pressure (**blow one's top**), fragmentation (feel **shattered**, **fall apart**), and depletion of vital liquid (feel **drained**). Similarly, Mulhall (1996) showed that people tend to depict stress as an external force (e.g. being **hassled**, **wound up**), something that they absorb and hold inside themselves (**bottle up**) which can lead to explosion or breaking (about to **break**, ready to **explode**) (Helman, 2007). Both Mulhall (1996) and Helman (2007), also pointed to machine-related metaphors (**recharge batteries**, **grind to a halt**). Furthermore, Brown (1999) analysis of self-help books on stress identified metaphors referring to source domains of

physical force, disease, heat, war, computation, and machine. More recent research found that e-mail has become a symbol (metaphor) of stress as it was commonly agreed to represent the idea of being overloaded with work (Barley et al., 2011). Verbytska (2017) conducted a corpus-based study to explore metaphors of distress and related terms (e.g. grief, pain, suffering) in English. Similar to previous studies (Brown, 1999; Helman, 2007; Mulhall, 1996) she found references to physical force and object or substance in the body-container. Other metaphors depicted distress as lack of balance, insanity, wild animal, illness, infection or injury, and loneliness, darkness, being cold, and being brittle (Verbytska, 2017). From these few studies, it can be concluded that the metaphors of stress and distress in most cases create a negative picture of stress.

Metaphors have also been applied by researchers and scientists to explain the idea of stress. For instance, Donnelly and Long (2003) compared stress to food, which is necessary but can be harmful in excess. To represent a similar idea, Korte et al. (2005) described the stress response as water used by a firefighter. It is good to have and use it, but in excess it can do more damage than the fire itself. Also, if too much water has been used, the pressure gets too low and so firefighting becomes ineffective. To highlight the necessity of studying both distress and eustress (positive stress), Nelson and Simmons (2003a) employed a metaphor of a bathtub. They suggested that just like getting enough water at optimal temperature requires using two faucets, to obtain more complete knowledge about stress, researchers must look at both negative (cold water faucet) and positive (hot water faucet) stress. Levi (2017) described stressful situations at work as deep and troubled waters - they cannot be eliminated but people can be taught to swim (i.e. to deal with stress). He also used a shoe-making metaphor to talk about stress interventions. An individual needs a shoe that fits their foot and similarly, a stress intervention needs to be tailored to individual needs, or there have to be a range of different interventions so that an individual can find something that suits their needs (Levi, 2017). While all these metaphors are interesting and appealing, none have been tested empirically to see if they can help improve either public or scientific understanding of stress.

In summary, previous research found that metaphorical framing makes people think differently about abstract issues such as time (Boroditsky, 2000), heat control (Kempton, 1987), electricity (Gentner & Gentner, 1983 as cited in Mayer, 1993), illness (Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018), or crime (Thibodeau & Boroditsky, 2011). Other studies provided evidence that metaphors can be used to communicate science and improve public understanding of relatively complex issues (Gallagher et al., 2013; Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018; Mayer, 1993; Naik et al., 2011) However, to date no study has been conducted to test if metaphors can improve understanding of stress and its links with health. Knowing what conceptual metaphors are used to talk and think about stress can help establish what assumptions people hold about stress and how it may affect their behaviour. Furthermore, metaphors can serve as a communication tool which may facilitate improvements in public understanding of stress by creating common ground and minimising discrepancies between the lay and scientific perspective. The current research programme of work addresses

these issues by analysing the lay perspective of stress (chapters 5 and 6) as well as developing and testing metaphors which can help enhance lay understanding of stress and its links with health (chapter 7). Before moving on to reporting the results of the studies conducted within this PhD programme, the following chapter provides an overview of the methodology.

## 4. Methodology – mixed-method approach

### 4.1. Research aims and research questions

It has been over a century since Walter Cannon's studies on psychological stress and it is widely accepted that individual appraisal plays a significant role in the experience of stress and its effects (e.g. Biggs et al., 2017; Blascovich, 2013; Lazarus, 2006; Lazarus & Folkman, 1984). Chapter 1 provided a review of the relevant literature on stress and health. Many studies which helped establish the nature of the links between stress and health have been questionnaire or survey-based, linking health outcomes such as physiological indices or self-reported health with theoretically normative stressors (i.e. situations that would evoke a stress response in most people (Hobfoll, 1989)). However, as shown in chapter 2, public understanding of stress and its links to health has been relatively understudied (see e.g. Kilby et al., 2020) and it is likely that the lay perspective might not be entirely consistent with scientific understanding of stress. One of possible methods to enhance lay understanding is employing metaphors (see chapter 3).

This research programme had four specific goals: (1) to explore lay understanding of the complex concept of psychological stress and its link with health, (2) to identify the discrepancies between the lay and scientific perspective of stress, (3) to develop metaphors that could be used to minimise these discrepancies, and (4) to empirically test the metaphors in terms of their effectiveness in minimising the above-mentioned discrepancies. These aims were addressed through three different studies at different stages of the project. Given the exploratory nature of this project and that achieving the research aims required collecting and analysing different types of data, a mixed method approach based on a pragmatic worldview (Creswell & Creswell, 2018) was adopted. The design was driven by the two main research questions:

- 1) How does the lay perspective on stress and its links with health differ from the scientific perspective?
- 2) Can metaphors improve lay understanding of stress?

Considering the individual, subjective nature of the concept and experience of stress (Lazarus & Folkman, 1984), the fact that the lay understanding, beliefs or theories, including the lay perspective on stress, are developed through interactions with the physical and social world (Furnham, 2017; Pollock, 1988), and the paucity of research on the lay understanding of stress (see chapter 2), the first research question called for a more qualitative approach. The second question necessitated a more quantitative approach making it possible to compare different metaphors and evaluate their effectiveness. The qualitative stage was designed to provide a general picture of lay understanding of stress as compared to the scientific perspective (study 1), and to explore conceptual metaphors people use to think and talk about stress (study 2). The aim was that the metaphors participants used in the interviews and workshops would be a source of inspiration for creating metaphorical descriptions towards the purpose of communicating science and minimising the differences between the two perspectives. The quantitative stage aimed to test the idea that metaphors can be an effective science communication tool (study 3).

## 4.2. Methodological process

The methodological approach applied in this project was inspired by the works of Kendall-Taylor and colleagues at the FrameWorks Institute (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018). Their projects involve a multi-stage metaphor development and testing procedure. It begins with identifying the gaps between lay and expert views on a specific social, political, or other issue using individual and group interview methods of data collection. The analysis combines elements of grounded theory (Strauss & Corbin, 1998) and cultural models analysis (Quinn, 2005b). The results serve as a basis for designing explanatory metaphors and outcome measures used in metaphor testing. The metaphors themselves are based on those identified in the lay and scientific interview transcripts (e.g. Kendall-Taylor et al., 2013) or generated by a special team involving researchers, scholars, journalists and PR specialists (Kendall-Taylor & Stanley, 2018), refined and then applied in a short text explaining the issue in question. Finally, they are tested empirically in terms of effectiveness using brief on-street interviews, framing experiments, persistence trials, and usability tests (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018).

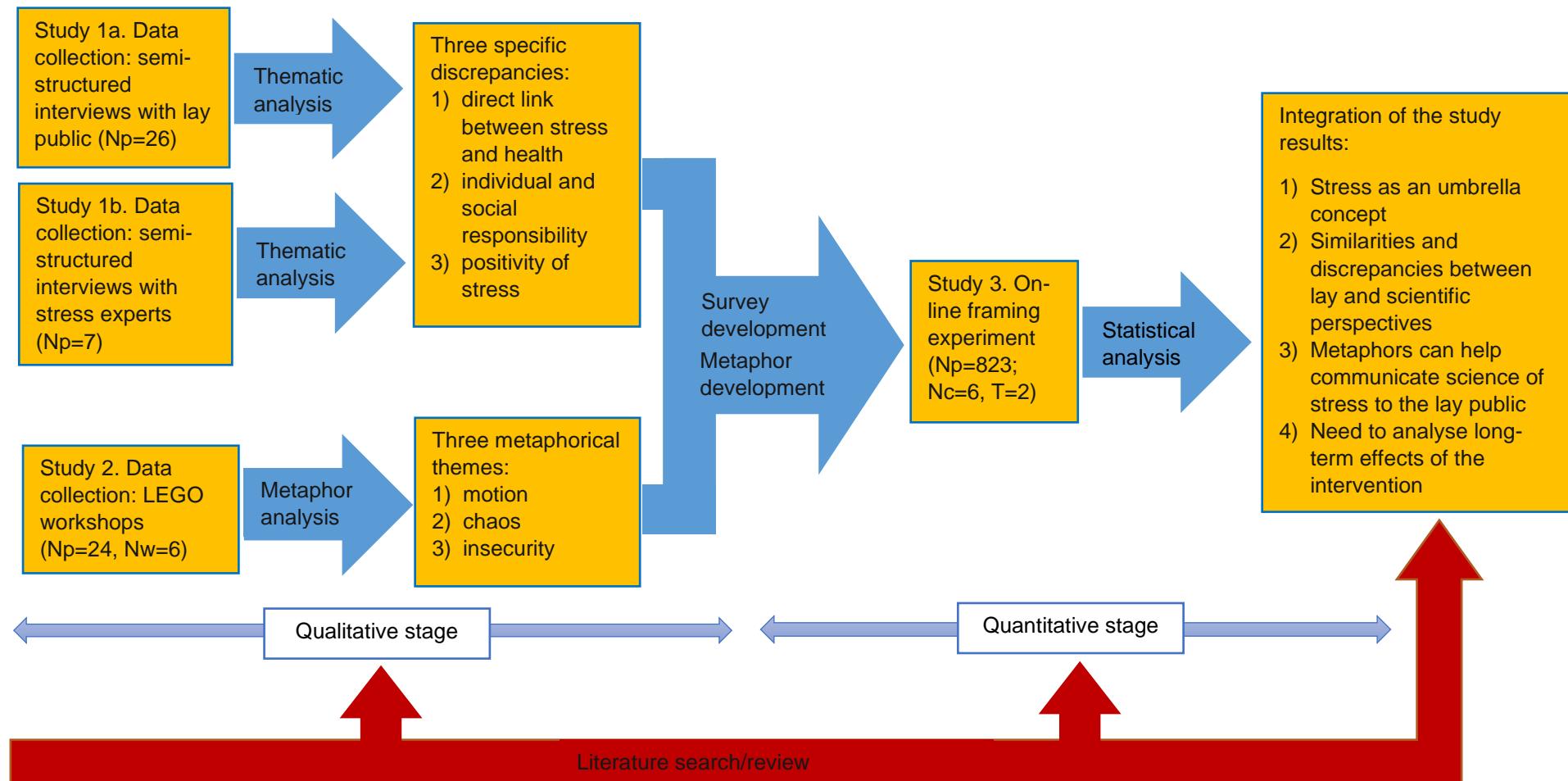
In the current programme of work, a modified procedure was used (Figure 2). It followed the methodological process as developed by the FrameWorks Institute, however, different methods were chosen for analysing the interview data (study 1), generating and identifying metaphors (study 2), and only a framing experiment was used for metaphor testing (study 3). The following sections present a brief description of the methods applied in this project, with more specific details about data collection and analysis relating to each of the three studies provided in Chapters 5 to 7. The findings from the first two studies (lay and expert interviews, and LEGO workshops) were used as a basis for (1) creating the metaphors to reduce the discrepancies between the two perspectives, and (2) developing a survey to test the effectiveness of the metaphors in the final, quantitative study (see sections 4.4.1 and 4.4.2 for more details). Thus, in line with the mixed-method approach, the different types of data collection and analysis methods have been integrated to achieve the research aims and arrive at conclusions (Creswell & Creswell, 2018).

## 4.3. Qualitative stage

The qualitative stage involved two separate studies: the first was an interview-based study, and the second employed LEGO workshops. The main aim of the interview-based study was to explore and compare the lay and scientific perspectives on stress, while the main aim of the LEGO workshops was to identify conceptual metaphors lay people use to think and talk about stress. Qualitative (verbal and visual) data was collected and an inductive approach to analysis was applied. Two specific analytical methods were used in the qualitative stage: thematic analysis (Braun & Clarke, 2006) and systematic metaphor analysis (Schmitt, 2005).

**Figure 2**

*The research process as applied in the current mixed-method programme*



Note: Np - number of participants, Nw - number of workshops, Nc – number of conditions, T – number of measurements

### 4.3.1. Data collection

#### 4.3.1.1. Individual interviews

Study 1 utilised individual in-depth, semi-structured interviews for data collection. As a more flexible approach (in comparison to surveys or structured interviews), it allowed me to establish rapport with the participants and ask them, if necessary, to elaborate on points made to clarify their meaning, and provide specific examples (Quinn, 2005b; J. A. Smith, 1995). Prior to the interviews, based on the literature review, a list of topics was developed. This was then discussed with two other researchers and refined into two separate interview scenarios: one for lay participants, and one for experts. Both parts of the study included open-ended questions and possible probing questions regarding such issues as causes of stress, symptoms, short-term and long-term effects of stress, and possible ways of coping with stress. However, the lay and expert specific questions were phrased differently to ensure that lay participants would focus on their experiences and understanding of stress, while experts would discuss the scientific perspective, their own research and academic knowledge. Furthermore, at various points throughout the lay interviews participants were asked to consciously use a metaphor or simile to describe or explain what stress, a stressful situation, or feeling stress meant. This task aimed to elicit metaphors which might help develop possible tools in communicating science to a wider public. The lay interview scenario was piloted on one non-native (33 years old) and one native English speaker (24 years old), both male. They deemed the questions clear and interesting. These interviews lasted for about 40 minutes, were not recorded and none of the data was included in subsequent analysis.

#### 4.3.1.2. LEGO building for metaphor elicitation

The main goal of the LEGO workshop study was to further explore the lay perspective on stress, particularly in terms of metaphors people use to think and talk about stress. Visual and verbal data was collected during LEGO workshops through creative techniques of developing mind maps and building LEGO models, as well as using a more traditional method of group discussion. The use of creative techniques in psychological research has gained in popularity following the acknowledgement of the multi-dimensionality and multi-modality of people's experiences, the natural world and the culture they live in (Reavey, 2011). In addition to verbal communication, people naturally gesture, act, make films, take photos, write, draw, paint, knit, sculpt, and decorate to share their thoughts and experiences. Individuals engage in a variety of creative behaviours and refer to various (sometimes completely unexpected and surprising) objects to represent their ideas. Visual aids allow people to externalise their thoughts, work on them, develop, review and refine them, and share them with others (Gauntlett, 2014).

It has been suggested that researchers can deepen their understanding of human experiences by considering their multidimensionality and using nonverbal modes of communication (Gauntlett & Holzwarth, 2006; Reavey, 2011). Traditional research methods can be enhanced with other, more creative, methods of data collection to "produce richer and more

insightful data than interviews or the associated method(s) would do alone" (Kara, 2015, p. 8). One of the possible 'enhancers' is LEGO® as it provides an alternative mode of expression which might be particularly useful for elicitation of metaphors of stress. Conceptual metaphors are often expressed in language as conventional metaphorical expressions (collocations, idioms, sayings) such as a *clear head*, *racing thoughts*, *spending time* (Lakoff & Johnson, 1980). However, to elicit more creative representations of stress, less conventional modes of expression could be helpful, whereby certain colours, shapes, sizes or positions in space are linked indirectly to stress. LEGO® bricks provide a tool for eliciting conceptual metaphors as they enable the user to physically represent their thoughts and feelings, the essence of metaphorical thinking.

Aside from the practical reason of wide accessibility to LEGO® sets, there are numerous benefits of using LEGO®. Not everyone feels comfortable with creative arts such as drawing or clay-modelling (Gauntlett, 2014). LEGO® pieces can be linked with each other in a myriad of combinations, both simple and complex structures, sometimes quite unexpected and very creative. Further, building with LEGO® does not require any special skills and almost everyone can build something meaningful and satisfactory without previous practice. Playing with LEGO® is usually fun and gives free rein to imagination, plus the bricks can adopt a meaning of the user's choice (Ackermann, Gauntlett, & Weckstrom, 2009). As LEGO® evolves, sets increasingly include specific bricks depicting various objects, tools, and features, yet even these specific pieces can be used to represent different meanings. For example, a golden crown might symbolise power over other people or the happiness of the person wearing it.

LEGO® co-founders recognised that their bricks had potential as a tool for thinking and sharing ideas about 20 years ago, and developed LEGO® Serious Play® (LSP) as an alternative to traditional planning meetings in adult business organisations (Frick et al., 2013; Nolan, 2010). LSP is now an open-source product. The workshops in this study were inspired by the LSP core process which involves four steps:

- 1) "The facilitator poses a challenge;
- 2) Participants build their answers using LEGO® bricks;
- 3) Participants share their answers with other participants;
- 4) Participants reflect on what they have seen and heard." (Frick et al., 2013, p. 3).

This process can be applied in different activities, both group and individual tasks (e.g. Peabody (2015)). Papers presenting the concepts of LSP and its application in contexts such as training and consulting are available (Frick et al., 2013; Hayes & Graham, 2020; James & Brookfield, 2013; Peabody, 2015; Peabody & Noyes, 2017) but research using LEGO® as a creative method of data collection is surprisingly scarce. Only one research project was identified which used LEGO® models as a source of data (Gauntlett, 2007, 2008). Building LEGO® models enabled the participants to use metaphors to represent their identities and their elements in a more tangible way and allowed the researcher to explore identities in a new, creative way (Gauntlett, 2008). This method was deemed appropriate for the purposes of the current study

which aimed to explore lay conceptualisation of an abstract issue i.e. stress. The workshop scenario was developed in line with the LSP process. It was based on the workshop Gauntlett (2007) conducted in his project on identity, and inspired by a LEGO® workshop organised at Bournemouth University which the author attended in 2018. The workshops in study 2 involved six parts: 1) an introduction, 2) a warm-up, 3) creating a joint mind map, 4) building LEGO models, 5) presenting LEGO models, 6) a general discussion. As it was specific to this particular study, the detailed description of the procedure is provided in chapter 6.

#### *4.3.1.3. Recruitment and inclusion criteria*

The aim of study 1 and 2 was to explore lay understanding of stress, and - in study 1 – to juxtapose it with the scientific perspective to establish the potential misconceptions or underdeveloped areas of knowledge among the lay public. While a dictionary definition posits that a lay person has no professional or specialized knowledge in a particular subject (Lexico, n.d.), in health research, the adjective ‘lay’ is used to describe those who are not healthcare professionals (e.g. medical doctors, researchers) but who may possess specialised knowledge on health issues (Entwistle et al., 1998). Lay representations, theories or beliefs can be described as implicit, informal, “non-scientific” understanding of people, their behaviour, and the world around them (see Furnham, 1988). They are complex and multidimensional, but often inconsistent and incoherent and thus may involve both scientific facts and misconceptions. Nonetheless, being ‘lay’ does not necessarily mean that an individual does not hold any scientific knowledge about an issue. On the contrary, an individual’s perspective changes over time, and it is informed by various sources including one’s own experiences and observations, as well as information acquired from others (e.g. authorities, media) (Entwistle et al., 1998; Furnham, 1988). For the purposes of study 1, ‘experts’ were defined as active professionals having at least five years of experience in either teaching or conducting stress research. “Lay” meant a non-expert, non-academic perspective (Furnham, 1988; 2017), i.e. in contrast to “expert” anyone with no experience of teaching about stress or conducting stress research could have been counted as a “lay participant”. This of course meant that participants could differ in their knowledge about stress as those more interested in the topic would have probably developed a greater understanding of stress and its links to health. However, as mentioned above, in the contemporary research on ‘lay perspective’ it is acknowledged that ‘lay’ people can possess scientific knowledge about an issue in question. The distinction between lay and expert perspective in this study was applied to allow for an examination of the possible differences. The intention was not to reinforce a power imbalance or suggest that the two perspectives are dichotomous or independent but rather to enable science communication and a dialogue between experts within the field and lay public in order to improve understanding and decision-making.

Thus, to explore the lay perspective on stress for Studies 1a and 2, members of the local community (South-West England) were recruited through advertising the study in the BU Psychology Department Volunteer Scheme newsletter and on social media, through placing posters around the campus and through the word of mouth (i.e. participants were asked to share

the information about the study with their families, friends and colleagues). For Study 1b, convenience sampling was used. Two experts were recruited when they came to Bournemouth University to give a guest talk, and another two were recruited at conferences (covering topics of stress and health) which I attended in person. Two further participants were contacted via email after receiving a recommendation from an expert who had already completed the interview. Finally, one expert was accessed at the university where he teaches. The inclusion criterion of having at least five years of experience in research or teaching in higher education about stress was to ensure that all the experts were well-informed and familiar with the state-of-art in the topic of psychological stress and its links with health.

Only people aged 18+ years old, and native British English speakers were eligible for the interview-based and LEGO workshop studies. This enabled a focus on adult stress and as it has been also suggested that stress is a socio-cultural phenomenon and conceptualised differently across cultures and languages (e.g. Idris et al., 2010), the criterion of being a native speaker of English was considered necessary to retain homogeneity. Furthermore, stress might be seen as a sensitive and unpleasant topic to discuss. Therefore, the participants had known in advance that they would be talking about stress in the interview. These factors might mean that the sample was self-selecting and possibly led to collecting data from those with a personal interest in the research topic. This could also mean that participants may have possessed some scientific knowledge about stress. Since the topic of stress is common in popular language and broadly defined stress is acknowledged as common experience (e.g. Brown, 1999), it would not have proved possible to find people who had never experienced stress or had no knowledge whatsoever about it. It is likely that some of the interviewees had taken part in some form of well-being training sessions at their workplace in which the topic of stress was covered, or that they had read self-help books on stress and well-being.

In this project (particularly in Study 1), one of key issues was the possible differences in understanding the links between stress and health between experts and lay people. In that regard, the participants who had no formal education in health psychology, psychoneuroimmunology, or behavioural medicine can be regarded as 'lay' in comparison to experts who to be eligible for Study 1 had to have at least five years of teaching or research experience in the area of stress (and as described in chapter 5, all the experts had at least 15 years of such experience).

#### 4.3.2. Reflexivity

I am a white middle class cisgender woman. I was born and spent most of my life in Poland until about three years ago when I came to the UK to do my PhD. I am a white middle class cisgender woman. I was born and spent most of my life in Poland until about three years ago when I came to the UK to do my PhD. I got interested in the topic of stress and health early on in my academic career, specifically in the second year of my five-year Master's degree course when I attended a Health Psychology unit. The concept of stress is key in all the careers I was considering at that time. My first research job (which I continued for seven years) was in occupational health psychology and most of the projects I worked on involved the idea of stress

or related concepts. In 2015-2017, I also completed an MA in English Philology, which opened my eyes to the role of language (and particularly metaphors) in our everyday thinking and behaviour, as well as scientific reasoning. My history and background was the crucial reason I applied for the PhD programme which resulted in this thesis. I wanted to learn more about stress not only from books and theories, but also from real people to understand what people believe and know about stress. I also wanted to apply my knowledge about stress and metaphors to help others. Whilst my educational background helped me focus on the research questions in the project, it might also have limited my perspective in that I thought about stress through the lens of health psychology . However, stress is a complex issue and can be studied from different perspectives and through different lenses. I recognised that and consciously chose to focus on the lay understanding of stress and its links to health.

The results I produced from the data collected in this PhD programme have been influenced by my personal background throughout the research. At the recruitment stage, the fact that I was a female Polish (not British) researcher and a student (at that time) might have influenced willingness to take part both positively and negatively: it could have made some people more likely to take part, while others might have been less willing to volunteer and talk about stress with me e.g. because they felt I might not be able to relate to them. Thus, myself as the interviewer affected the type and range of data I collected. My position has always been that the experience of stress is highly individual, in that it depends on how the person sees the situation, but also that the concept of stress is socially constructed. That is, factors such as social norms, social and cultural background, and wider context influence what the individual thinks stress is and whether they could think about themselves as being stressed in certain situations. I was genuinely interested in participants' point of view and the metaphors they used to think and talk about stress. At the same time, I was aware of the fact that an interview is a dialogue and the meaning is co-created. From the outside, at the data collection stage I was likely positioned by the interviewees as a researcher - asking questions, probing for different answers. I made my best to design the questions to be free of scientific jargon and always tried to make sure that any prompts, comments or additional questions during the interview were clear and understandable to the participants. Still, it is likely that the way I expressed my thoughts and formulated the questions was influenced by my own personal history, educational and cultural background. For instance, one interviewee discussed lack of money as a stressor, providing a and example of people not being able to afford heating during winter. I responded with a brief question "That still happens?" expressing my shock and disbelief because this was something I would never thought would happen in the UK which for me represented a highly developed country with supportive social policies. Nonetheless, I believe that my personal experiences, background or linguistic skills have hampered the interview process in any way. However, it is likely that participants may have decided (consciously or not) to speak in a different way about different issues knowing that I am not a native speaker of English e.g. they may have chosen to use simpler language if they felt I might not be able to understand more colloquial phrases or idioms.

My way of looking at the data and interpreting what the participants said was influenced by my own personal perspective on stress as well as my knowledge of scientific theories. A second coder was not included in the analysis process. Whilst I appreciate the potential benefits of multiple-coders and intercoder reliability which are often suggested to ensure reliability and consistency of data coding (e.g. O'Connor & Joffe, 2020), including multiple coders and intercoder ratings have also been criticised as removing subjectivity, which is a key issue in qualitative research (Braun & Clarke, 2021). In this research project, I was the main person responsible (under supervision) for data collection, analysis and write-up. I personally conducted the interviews and workshops, transcribed the recorded data, coded and analysed it. I was immersed in the data and I felt my position was somewhat unique in this regard. To ensure rigour and trustworthiness, I kept a record of reflexive notes and memos about coding and any changes in categorisation and interpretation of the data. However, it does not mean that I did everything on my own and disregarded the possibility of different perspectives. As suggested by Braun and Clarke (2021), I regularly discussed my codes, subthemes and themes with my supervisors who provided their insights and suggestions for the links between the subthemes and themes, as well as for the presentation of the results. I felt this greatly enhanced the quality of the analysis, and at the same time allowed me to maintain internal consistency (coding across the cases).

### 4.3.3. Data analysis

#### 4.3.3.1. *Transcription challenge*

All the interviews, as well as all the LEGO workshops were audio-recorded and transcribed verbatim using playscript/secretarial transcription (Howitt, 2016). However, the transcript was aimed to be kept naturalistic, so no grammar mistakes or mispronounced words were corrected. Non-word vocalisations (such as uhm, uh-huh, laughter, cough), as well as long pauses and physical gestures were included in the transcript where it was relevant to the topic (e.g. one of the lay participants talked about a hamster wheel and imitated the motion with her hands). Transcribing posed a challenge for me given that I am not a native speaker of English, and I am aware of possible incongruencies between the spoken data and the transcripts. Where I could not hear what exactly was said or was uncertain as to what words were used, I labelled this as 'inaudible' to avoid guessing and marring the data. In most cases these were single words or short phrases and did not prevent understanding the meaning of the relevant part of the interview.

#### 4.3.3.2. *Thematic analysis*

Verbal data from the interviews and workshops were analysed using thematic analysis (Braun & Clarke, 2006). The analysis drew from the idea of cultural models, a concept developed by anthropologists (Quinn, 2005a; Quinn & Holland, 1987a), similar to lay theory or cognitive schema in psychology. These cultural models can be uncovered using different analytical methods e.g. by analysing keywords and metaphors (Quinn, 2005a; Quinn & Holland, 1987a). Kendall-Taylor (2012) reported using elements of grounded theory in the projects conducted by the FrameWorks Institute. However, for the current research programme thematic analysis was

selected as it is a very flexible approach, not tied to any method or theory (Braun & Clarke, 2006). It enables generating data-driven themes which can be seen as parts of a cultural model, and can be compared within and across groups of participants. Thematic analysis is a multi-stage, iterative process which begins with data familiarisation. This is followed by generating initial codes through systematic, line-by-line coding in an attempt to identify interesting or important information and to catch the essence of a particular segment of the text. The next step involves searching for themes when all the codes are collated, sorted and grouped into higher-level categories. At this point the analytical process shifts gradually from description to interpretation as it requires looking for the relationships between individual codes and groups of codes (themes). When all the codes have been classified, the themes are reviewed to check if each theme forms a coherent pattern and is valid in relation to the whole data set. At the following stage, the themes are defined in terms of their scope and content and named. Subthemes and overarching themes are usually identified. Finally, a report is written up (Braun & Clarke, 2006). Detailed information regarding how the analysis was conducted is presented in chapters 5 (interview-based study 1) and 6 (LEGO workshops-based study 2).

#### *4.3.3.3. Systematic metaphor analysis*

Systematic metaphor analysis has been developed by Rudolf Schmitt (2005) to ensure the rigorous and reliable analysis of metaphors in social sciences. The procedure involves several steps. The first one is the identification of the target domain. As the second step, Schmitt (2005) recommends scanning academic and popular literature to search for various metaphors relevant to a given topic, or phenomenon. This leads to an unsystematic, broad collection of possibly competing conceptual metaphors applied to discuss and/or present an issue in question to different recipients. It serves as a background for the reflection and interpretation of the metaphors appearing in the texts chosen for the analysis. The next step involves a thorough analysis of the texts (transcripts) to identify all the relevant metaphorical expressions. At this stage, I followed the Metaphor Identification Procedure (MIP) developed by the Pragglejaz Group (Pragglejaz, 2007). According to MIP a lexical unit can be categorised as metaphorical if it has a more basic contemporary meaning in the context other than present in the analysed text. The basic meaning is usually more concrete, related to bodily action, more precise (not vague), and/or historically older; however, it is not necessarily the most frequent meaning (Pragglejaz, 2007). For instance, one of the participants in study 2 talked about "**breaking a problem down** to smaller chunks". This phrase has a metaphorical meaning. While in this particular context it denotes an idea of identifying specific issues that can be more easily solved, 'breaking down' has a very concrete meaning of separating parts of a physical object. Thus, there is a contrast between the basic and the situated contextual meaning of the phrase 'breaking down' which might be indicative of conceptual metaphors such as PROBLEMS ARE PHYSICAL OBJECTS and SOLVING PROBLEMS IS DESTROYING THEM.

The identification process results in a list of the metaphorical expressions which need to be categorised or clustered, usually according to the source domain (Kövecses, 2010; Schmitt,

2005). Sometimes, however, metaphorical expressions are grouped on the grounds of the aspects of the issue/phenomenon they describe or highlight (Quinn, 2005b). Both identification and categorisation stages are iterative processes, continued until all the relevant metaphorical expressions are spotted and classified. While the initial list of metaphorical expressions may contain hundreds or even thousands of specific instances, the end product is usually a catalogue of approximately a dozen conceptual metaphors. Then, the categories can be interpreted or compared across individuals or groups (Schmitt, 2005).

#### 4.4. Quantitative stage

This stage involved an on-line framing experiment designed to test the idea that metaphors can be useful in communicating science to the lay public. Numerical, survey data was collected and analysed with inferential statistics appropriate for the mixed design with one between-participant and one within-participant factor.

##### 4.4.1. Metaphor development

As described in chapter 3, framing involves making some aspects of a problem more salient in order to activate a particular way of thinking about it (Entman, 1993). Considering this definition and the suggestion that “a good [explanatory] metaphor leads people to think and talk productively about something that they were not previously proficient in thinking or talking about” (Kendall-Taylor et al., 2013, p. 415), metaphorical descriptions of stress were developed prior to the framing experiment. Study 2 revealed different source domains commonly used by lay people to think and talk about stress which created three metaphorical themes: limited mobility, instability, and chaos. Based on these findings, several metaphorical descriptions were generated through brainstorming. These were: being a captain of a ship, a steam engine train, a hot air balloon, riding a bike, running on a treadmill, gardening, building a house, a pine tree, a rosebush, and a philharmonic orchestra. Each of these referred to at least one of the three metaphorical themes. However, testing so many different conditions would require a complex design and a high number of between-groups comparisons which would increase the risk of type I error. Therefore, all the metaphors were discussed with two other researchers, experts in health psychology and native speakers of English. Four metaphors which were deemed most promising and able to cover all the discrepancies between the lay and scientific perspective were chosen to be tested. These were then reviewed and refined to ensure they were grammatically correct, clear, and that they presented the information about stress in the same order. Each text was approximately 575-words long (from 559 to 592 words). Two descriptions, Ship and Train, referred directly to the theme of limited mobility (motion). The Train description built also upon the Orchestra and House descriptions referred to the theme of chaos. None of the descriptions specifically related to the theme of instability (imbalance), but balance-related expressions and ideas were interwoven in the four descriptions. The Ship description evoked a mental picture of a ship balancing on the waves and with potential to capsize. The House referred to instability and precariousness as a house can have weak foundations and collapse. The Train metaphor was about internal balance or lack of it as the system can get dysregulated if the engine’s temperature is not balanced. The

same applied to the Orchestra metaphor which described the need to balance sounds to create harmony not cacophony. The combination of different source domains was justified as stress, like other complex issues (see e.g. Barry et al., 2009; Hommerberg et al., 2020), may require more than one metaphor to be described fully.

To test the effectiveness of the metaphors, two control texts were also developed. One involved a 535-word non-metaphorical, technical description of stress. While some scientific terms were used in this text, it was made sure that the description did not differ in terms of difficulty and complexity from the metaphorical descriptions. The information about stress was presented in exactly the same order as in the metaphorical descriptions. The other control text, 550-word long, was unrelated to the issue of stress. It presented a weather forecast and was composed of the information published on The Weather Outlook and BBC Weather websites. The decision to include two control conditions was based on the need to check if the metaphors can be used to communicate stress science in general (comparison to neutral text, not presenting any information about stress), and if they can work at least as effectively as a non-metaphorical description of stress using simple technical language.

#### 4.4.2. Survey development

Following the FrameWorks Institute methodology (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018), a survey was developed to measure understanding of stress. A list of statements was generated, each of which related to one of the three incongruities between lay and scientific perspectives identified in study 1: links between stress and health; individual and collective responsibility; and positivity of stress. Three items on attitude to self-care were also included, since in study 1 and 2 self-care and self-neglect were linked to stress-related health problems and to beliefs regarding individual responsibility for stress and coping.

The original pool consisted of 31 statements: positivity of stress (five statements), responsibility for getting stressed (six statements), responsibility for coping (five statements), self-care (six statements), and stress-health links (nine statements), including unhealthy behaviour, physical health and the direct link between stress and health, and mental health. Study 1 showed that lay people had a good understanding of the indirect pathway between stress and health and acknowledged that stress may lead to mental health issues. Technically, the statements regarding unhealthy behaviour and mental health were not required in the survey as there was no need to enhance lay perspective in that regard. However, these statements were decided to be included to ensure that metaphors would not change people's understanding of stress in unexpected ways (e.g. increase the awareness of stress-related physical health issues but at the same time make people disregard mental health or the indirect pathway between stress and health).

Some of the original 31 statements were similar and overlapping and after a discussion with two other researchers (native English speakers, experts in health psychology), the total number of statements was reduced to 23 items. Those statements were then reviewed and

refined to ensure clarity and correct grammatical form. The final pool contained statements referring to seven stress related issues: positivity of stress (three statements), stress-related unhealthy behaviour (four statements), direct link between stress and physical health (four statements), mental health (one statement), responsibility for getting stressed (four statements), responsibility for coping with stress (four statements), and self-care (three statements). The response scale utilised a seven-point Likert scale with extremes of 'strongly disagree' and 'strongly agree', and a midpoint 'neither agree nor disagree'.

#### 4.4.3. Online framing experiment

##### 4.4.3.1. Sample size

Previous studies on metaphorical framing used between-participant designs with a different number of conditions, from two in Hendricks et al. (2018) and Thibodeau and Boroditsky (2011) to eight in Kendall-Taylor et al. (2013) study. Sample sizes varied from 66 (Hauser & Schwarz, 2015) to 2000 (Kendall-Taylor et al., 2013; Kendall-Taylor & Stanley, 2018), and different statistical tests were employed: chi square (Thibodeau & Boroditsky, 2011), t-tests (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018) or ANOVA (Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018). Effect sizes were not provided in most cases, with the exception of Hauser and Schwarz (2015, 2019) who reported effect sizes from 0.10 to 0.66 depending on the study conducted. Hendricks et al. (2018) reported the necessary information to calculate size effects which turned out to be small (from 0.10 to 0.25). For the purposes of this study, it was assumed that mixed ANOVA would be used to test the differences between 6 groups (four experimental and two control condition) and measurements (pre and post-reading). Based on the data from previous studies and adopting a somewhat conservative approach i.e. effect size  $f = 0.25$  (as calculated based on  $\eta_p^2 = 0.6$ )  $\alpha = .05$ , and power of 0.95, the required sample size was calculated using G Power 3 (Faul et al., 2007). The recommended total sample size totalled 324 participants.

##### 4.4.3.2. Data collection and analysis

Data for the framing experiment (study 3) was collected through a survey developed specifically for the purpose of this study (see section 4.4.2). Qualtrics™ (<https://www.qualtrics.com>) software was used to create the online survey and the link to the survey was published on social media and the online recruitment platform Prolific. More details about the procedure can be found in section 7.2.4.

All the statistical analyses were performed using IBM SPSS 26.0. The experiment involved answering the same set of questions before and after intervention (reading a description). There were six conditions to which participants were randomly assigned. Therefore, a mixed analysis of variance was applied to test the hypotheses. A full description of the design, assumptions check, and results of the statistical analyses is given in sections 7.2 and 7.3.

In summary, this chapter outlined the methodology of the current research programme. Two main research questions were formulated, and an outline of the research process was

provided. To answer the research questions three studies have been conducted. Qualitative and quantitative data was gathered and analysed with the relevant methods as described in the previous sections. The following three chapters present the results of the three studies.

## 5. Study 1. Differences between the lay and scientific perspectives on stress

### 5.1. Introduction

In addition to stress having become a popular term in both academic and everyday discourse, it has also acquired quite a notorious reputation as an ambiguous concept (Kagan, 2016; Young, 1980). It has been studied through the lens of different paradigms and definitions, and with the use of a variety of measurement tools. In psychology, at least three main conceptualisations of stress (stimulus, response, interactional process) as well as numerous specific models have been developed (e.g. Cox & Griffiths, 2010; Jones & Bright, 2001; Parkash et al., 2014). Furthermore, lay people understand the term 'stress' in various ways and may mean different things when talking about 'stress' or 'stressful' issues. Jex et al. (1992) showed that 'stress' might be interpreted either as stressors (e.g. workload, conflicts) or strains, i.e. psychological, physiological, or behavioural responses to stressors (e.g. anxiety, depression). Recently, Souza-Talarico et al. (2016) explored understanding of stress in Canadian and Brazilian adults and claimed to find some stress misconceptions, particularly in the Brazilian subsample. By misconceptions they meant that people tended to see stress as negative and believed conflict, work overload, and time pressure to trigger stress while endorsing such 'scientific' (as the authors put it) determinants as novelty and unpredictability to a lesser extent. However, these can hardly be considered misconceptions because even though scholars see stress as a potentially adaptive mechanism (Sapolsky, 2004) and point to positive aspects of stress (Crum et al., 2013; Hargrove et al., 2013; Nelson & Simmons, 2003a), much research focuses on the negative side of stress (Nelson & Simmons, 2003a). Furthermore, workload, time pressure, and conflict are acknowledged stressors particularly in the context of work (Hassard et al., 2018; O'Driscoll & Brough, 2010). This only highlights the need to further explore the possible discrepancies between the lay and scientific perspectives on stress.

From the evolutionary perspective, the stress response has helped in adaptation and survival. However, the majority of studies suggest that stress is perceived as natural and inevitable but negative and detrimental to well-being both in scientific (e.g. Cohen et al., 2016; Lovallo, 2016; Paradies, 2011) and public understanding (Donnelly & Long, 2003; Kranz & Long, 2002; Meyerson, 1994; Mulhall, 1996; Thunman & Persson, 2015; Whittaker & Connor, 1998). Even though the traditional theories of stress recognised the positive side of stress (Selye, 1978), only recently has the idea of eustress been discussed to a greater extent (Hargrove et al., 2013; Nelson & Simmons, 2003a, 2011). Still, the lay perspective highlights that stress is something to be avoided or coped with and the inability to deal with stress is seen as abnormal (Donnelly & Long, 2003; Harkness et al., 2005; Meyerson, 1994). Thus, positivity of stress is possibly one of the less salient issues in lay conceptualisation of stress. Moreover, it seems that the responsibility for coping with stress is placed mainly or sometimes solely on the individual (e.g. Harkness et al., 2005; Kranz & Long, 2002; Thunman & Persson, 2015). No studies have looked specifically at

lay understanding of the links between stress and health beyond asking about possible outcomes of occupational stress (Furnham, 1997; Idris et al., 2010; Kinman & Jones, 2005; Le Fevre & Kolt, 2010) or asking participants to attribute various illnesses to different causes among which 'stress' was listed (J. D. Parker et al., 1993).

Individual perception of stress is vitally important for the appraisal process (Lazarus & Folkman, 1984) and stress outcomes (Crum et al. 2013). Despite advances in stress research, knowledge of the lay perspective on stress is relatively scarce. Therefore, this study addresses the needs to explore lay understanding of stress and to identify possible misconceptions and differences between public and scientific perspectives on stress. It was designed to answer three specific research questions:

- 1) How do lay people define stress and explain the links between stress and health?
- 2) How do stress experts define stress and explain the links between stress and health?
- 3) What are the differences between lay and scientific understanding of stress and its links with health?

Semi-structured interviews with members of the public and stress experts were conducted. Thematic analysis was applied to identify themes in both groups separately; these were then juxtaposed to highlight discrepancies between lay and scientific understanding of stress.

## 5.2. Method

### 5.2.1. Participants

*Study 1a.* Twenty-six members of the local community took part. The interviewees were aged 18-62 years old, English native speakers with various educational background both academic and vocational (ranging from GCSE to PhD) (Table 1). Six people were students. There were 12 males and 14 females. Half of the participants were either married or had partners, one was divorced and the remaining 12 were single. Seven interviewees, including two single mothers, had at least one child younger than 18 years old. Two people (a married couple) had grandchildren which they took care of on a regular basis. Three participants were currently or had been recently caring for at least one elderly member of their family. Twelve participants worked part-time, eight worked full-time (including one full-time PhD student), one was a free-lancer, one was self-employed, two were unemployed (one looking for a job, the other starting a new job about two weeks after the interview), and the remaining two were retired.

*Study 1b.* Seven experts (4 males) took part in the study. They specialised in the field of psychobiological research, health psychology, occupational health psychology, behavioural medicine, and mental health nursing. All of them had at least 15 years of experience in either teaching or conducting research on stress (see Table 2 for details).

**Table 1***Demographic Information of the Lay Participants*

<b>Id</b>	<b>Gender</b>	<b>Age (years)</b>	<b>Qualifications</b>	<b>Married</b>	<b>Children under 18</b>	<b>Student</b>	<b>Job</b>
P1	Male	48	ONC	Yes	No	No	Unemployed/ new job
P2	Male	18	A-levels	No	No	Yes	Part-time
P3	Female	21	A-levels	No	No	Yes	Part-time
P4	Female	26	Bachelor's degree	No	Yes (single mother)	No	Unemployed/ looking for a job
P5	Female	61	NVQ3	Yes	No	No	Part-time
P6	Male	60	Master's degree	Yes	No	No	Retired
P7	Male	59	City&Guilds qualifications	Yes	Yes	No	Self-employed
P8	Female	28	Bachelor's degree	No	No	No	Freelancer
P9	Male	18	A-levels	No	No	Yes	Part-time
P10	Male	23	A-levels	No	No	Yes	Part-time
P11	Female	61	NSCPP	No	No	No	Retired
P12	Female	53	Master's degree	No	No	No	Part-time
P13	Male	23	Bachelor's degree	No	No	No	Part-time
P14	Female	34	Bachelor's degree	Yes	Yes	No	Full-time
P15	Female	33	Bachelor's degree	Yes	Yes	No	Part-time
P16	Female	55	MBA	Divorced	No	Yes	Full-time PhD
P17	Female	30	PhD	Partner	No	No	Full-time
P18	Male	32	PhD	Yes	No	No	Full-time
P19	Male	45	Master's degree	No	No	No	Full-time
P20	Female	38	GCSE	Partner	Yes	No	Part-time
P21	Female	54	Bachelor's degree	Yes	No	Yes	Full-time
P22	Female	39	Bachelor's degree	Divorced	Yes (single mother)	No	Full-time

P23	Male	27	Bachelor's degree	Yes	No	No	Full-time
P24	Male	44	Bachelor's degree	Yes	Yes	No	Part-time
P25	Female	47	Master's degree	Partner	No	No	Part-time
P26	Male	33	Bachelor's degree	No	No	Yes	Part-time

**Table 2**

*Demographic Information of the Stress Experts*

Id	Gender	Expertise	Area of expertise	Years of experience
E1	Male	Research and teaching	Psychobiology	>20
E2	Male	Research and teaching	Health Psychology	>20
E3	Female	Research and teaching	Occupational Health Psychology	>20
E4	Female	Research and teaching	Behavioural Medicine	15-20
E5	Male	Research and teaching	Behavioural Medicine	>20
E6	Female	Research and teaching	Occupational Health Psychology	15-20
E7	Male	Research and teaching	Mental Health Nursing	15-20

In both studies, all the participants agreed freely to take part in the interview and signed the informed consent before the interview. They were aware that the interviews were recorded to be transcribed. The questions were quite general, and no sensitive data was collected in the interview. However, recollection of stressful situations is possibly upsetting. Thus, in study 1a, the informants were advised to share only the information they wanted to share. They were also informed that they did not have to answer any questions should they feel uncomfortable, and that they could withdraw at any point during the interview and up to two months after the interview, when the data had been anonymised. No one decided to withdraw. In one case, a participant asked to delete a small part of the recording in which they talked about a very unpleasant, traumatic experience. In study 1b the questions regarded scientific perspectives on stress, which did not require participants to talk about personal experience. The experts participating in study 1b were also informed about the right to withdraw. All interviewees were offered £10 in cash as a reimbursement. Both studies were approved by the Bournemouth University Ethics Research Committee (ref. id. 17377).

### 5.2.2. Data collection

As described in section 4.3.1., the data from the lay public and expert samples was collected using semi-structured interviews which were audio-recorded. During the interviews in

study 1, I also made hand-written notes e.g., when participants made specific gestures illustrating what they said or when a participant said something related to one of the following questions and I wanted to remember it and refer to it when we got to the particular question. The lay interview questions were designed to encourage the interviewees to talk freely about their experiences of stress and stressful situations, as well as their beliefs about the influence of stress on everyday life (see Box 1). Participants were asked to answer a series of questions and also were given space to provide explanation for their reasoning (Quinn, 2005). As conceptual metaphors are crucial in thinking and this is reflected in speech (Lakoff & Johnson, 1980), the participants frequently used various metaphorical expressions, both conventional and creative. At various points they were also asked to deliberately use a metaphor, an analogy, or a simile (e.g. Please, finish a sentence “stress is like...”).

**Box 1.**

*Lay interview script*

**Socio-demographic questions:**

1. How old are you?
2. Are you a student? what is the last school you graduated from?
3. Have you got a job? what is it?

**Interview** (with examples of probing questions and prompts)

1. What comes to your mind when you think of ‘stress’?
  - a. What can you see in your mind? (A specific situation? A response to a situation? Anything else?)
  - b. Please, finish a sentences “stress is like...”/ if you were to compare stress to something, what it would be like?
2. What kind of situation you would describe as stressful?
  - a. What it would be like? (example)
  - b. Do you think that other people will feel stress in that situation?
  - c. What is the most stressful situation you can imagine? Why is it so stressful?
3. What kind of life would you describe as stressful?
  - a. Is your life stressful? Why do you think so?
  - b. Can you imagine life without stress? What it would be like?
4. What does it mean to be stressed? What is it like?

- a. How would you describe a person that is stressed? (feelings, behaviour, thoughts)
  - b. Do you think that some people are more stressed than others? Why it might be that? How do you know that you are stressed?
  - c. How would you describe yourself when you are stressed?
  - d. Do you think that you get stressed easily? Why?
  - e. How would you describe a person that is not stressed at all (relaxed)?
  - f. How do you know that you are not stressed?
5. Can you tell me about the last time you felt stress?
- a. What happened?
  - b. Why was it stressful?
  - c. What did you feel like?
  - d. What did you do?
6. How does stress influence your everyday life?
- a. Health, relationships (family, friends, partner/boyfriend/girlfriend), work/studies?
  - b. Does it help you in any way? (example)
  - c. Does it hinder in any way? (example)
7. What do people do when they are stressed?
- a. Why they do it? What do you do? Why?
  - b. What might make it difficult for you to be less stressed?
  - c. What might help you to be less stressed?
8. Is there anything that you would like to add? Anything that we have not covered today?

Interview questions for experts were similar to those in the lay interviews but participants were asked about scientific perspectives rather than personal experiences and beliefs (see Box 2). The interview focused on theoretical approaches adopted by the participants and the research they did or knew about, and participants were not asked specifically to use metaphors. However, four interviewees shared the metaphors of stress and related issues they use in teaching (one of them did not talk about it in the interview but sent her lecture slides with metaphors).

**Box 2.***Expert interview script*

1. Can you tell me about your research?
  - a. How did it happen that you got interested in stress?
  - b. For how long have you been doing research on stress and/or teaching about stress?
2. What comes to your mind when you think of stress?
3. How would you define stress?
  - a. Have you got a 'favourite' theory of stress?
4. What kind of situations are stressful?
5. Is there anything like stressful life? What it might be like?
6. Is it possible to have a stress-free life?
7. What does it mean to be stressed?
8. How would you describe someone who is stressed?
  - a. How would you know that he or she is stressed?
9. How does stress influence everyday life?
  - a. health, work, social relationships
10. What people do when they are stressed? Why they do it?
11. What can help in coping with stress?
12. What makes it more difficult to cope with stress?
13. What would you like people to know about stress?

The lay interviews lasted from 45 minutes to almost two hours. They were conducted face-to-face at Bournemouth University or (in one case) at the participant's home due to their mobility issues. Expert interviews took from 40 minutes to 1.5 hours. Four of them were conducted face-to-face; three at the university and one at a national conference in a hotel lounge. The remaining three interviews were conducted using an on-line platform (Skype).

### 5.2.3. Data analysis

Audio-recordings were transcribed verbatim and thematic analysis (Braun & Clarke, 2006) was applied to identify the recurrent themes in both lay and expert interviews. I both conducted the interviews and transcribed them which allowed me to familiarise with the data, think over it and get ideas about possible codes, themes, metaphorical expressions and conceptual

metaphors used by the interviewees. For this study I used Word and Excel to code, organise and analyse the data.

Following Braun and Clarke (2006) guidelines, I printed out all the transcripts and read them several times highlighting, coding and making notes on the possible themes and conceptual metaphors. Subsequently, all the transcripts were copied into excel worksheets (one worksheet per participant) with one segment of data (a sentence or a smaller chunk of text if meaningful), per cell in the first column for line-by-line coding. The codes were data-led and referred to various aspects of the idea of stress and – in the case of lay interviews – stressful experiences. I reviewed and refined codes several times to ensure precision and accuracy. My initial codes involved a fine level of detail, thus in the following stage I grouped them and labelled the relevant segments of text with more abstract codes. For instance, lay participants provided different examples of stressful situations such as different types of threat. Initially I coded them specifically as participants referred to them e.g. worrying about a grandchild no coming home, something horrible potentially happening to one's child, elderly parents who may soon die, partner's drinking possibly affecting their health. These were then re-labelled as "threat to important people". Afterwards, these new codes were again grouped together and labelled with higher-level codes which were to an extent informed by theories and scientific terminology, e.g. threat to one's goals/values, threat to self-esteem, threat to one's life, and threat to important people were categorised and labelled with the higher-level code "threat". Higher-level codes were in turn arranged as subthemes, e.g. "uncomfortable, disturbing or unwanted situations", "discomfort", and "threat" were clustered "Unpleasantness". Consequently, subthemes were categorised into themes which were then labelled and defined including the links within and between themes. The whole process was non-linear, multi-staged and multi-level – I moved back and forth through codes, higher-level codes, subthemes and themes to review and refine them. When I was satisfied with the quality of the analysis results, I described them in a report format in this chapter. The same procedure was applied to both lay and expert interviews which were treated as separate data sets. Theme tables and full lists of quotes in each subtheme can be found in Appendices 1-14. The codes, subthemes and themes identified in the two data sets were then compared to find the incongruities between the lay and scientific perspective on stress.

Whilst the overall aim of the thesis was to subsequently use information gathered in this study to contribute to metaphor development, in this study note was also made of metaphor use. The interview data was also analysed to explore conceptual metaphors using systematic metaphor analysis (Schmitt, 2005) as described in section 4.3.3.3. However, the main aim of this study was the identification of the incongruities between the lay and scientific perspective. Therefore, only the results of the thematic analysis are reported in this chapter. In brief, both members of the lay public and experts used various metaphorical expressions, although the former group did it to a considerably greater extent. Metaphors were employed to describe stressors and (non)-stressful situations, stress as an idea and experience and the state of no or low stress, the effects of stress, (non)-stressed person, their feelings and thoughts, and coping process. Most metaphorical expressions depicted stress as negative or neutral at best. Some of

the linguistic metaphors were conventional, ingrained in everyday language, and so they were used by the majority of the participants (e.g. put stress on somebody, be under stress, time pressure, social support, deal with something, cope with stress etc.), others were more individual and creative (e.g. 'it's like someone wrapped a rope around you and they're pulling it tighter, ever so slightly, only a tiny bit at a time' (P3)). Experts mainly employed conventional metaphors, while lay interviewees referred also to more creative metaphors. Most common source domains included: physical force, motion, imbalance, lack of order and clarity, restriction and confinement. Examples of the conceptual metaphors used by lay and expert participants can be found in Appendix 15.

## 5.3. Results/Discussion

### 5.3.1. The lay perspective

Five main interrelated themes were identified, each consisting of two to four subthemes (see Figure 3). Interviewees acknowledged that stress is a *Part of Life* (section 5.3.1.1). Participants described it as inevitable, natural and common, and admitted that everyone gets stressed from time to time. However, stress was also seen as an *Individual, Complex Experience* (section 5.3.1.2). Participants discussed various stressful situations and explained that people differ in terms of what they see as stressful depending on the context. The stress experience as such was depicted as individualised and complex, involving a range of causes, symptoms and behaviour that may but does not have to occur when a person is in a stressful situation. Most often stress was described in negative terms: elicited by unwanted and/or unpleasant situations and leading to short and long-term negative effects in terms of health/well-being, social relationships, and performance. It was widely associated with feelings of oppression, i.e. lack of control, unmanageability, and powerlessness. *Negativity* (section 5.3.1.3) was the biggest, most salient and internally complex theme in the lay interviews. At the same time, it was internally consistent as all the participants referred to the same or similar negative and unpleasant issues. However, most participants also mentioned some positive aspects of stress, hence the theme of *Positivity* (section 5.3.1.4). As opposed to Negativity, the positive side was discussed briefly, and different participants proposed different ideas as to how stress could be positive. Finally, the smallest theme was *Nature-Civilisation* (section 5.3.1.5). Interviewees linked stress to civilisation and technology, particularly media and information technologies. With their increase in everyday life, stress has become more likely for some people. Also, the natural environment was related to peacefulness and relaxation which is a coping strategy and as such a part of the stress experience.

#### 5.3.1.1. *Part of Life*

This relatively small – in terms of content but not prevalence across interviews – theme comprised two subthemes. In general, participants rejected the notion of a stress-free life. The majority acknowledged that, even though a stress-free life would be very nice it is impossible to have no stress whatsoever.

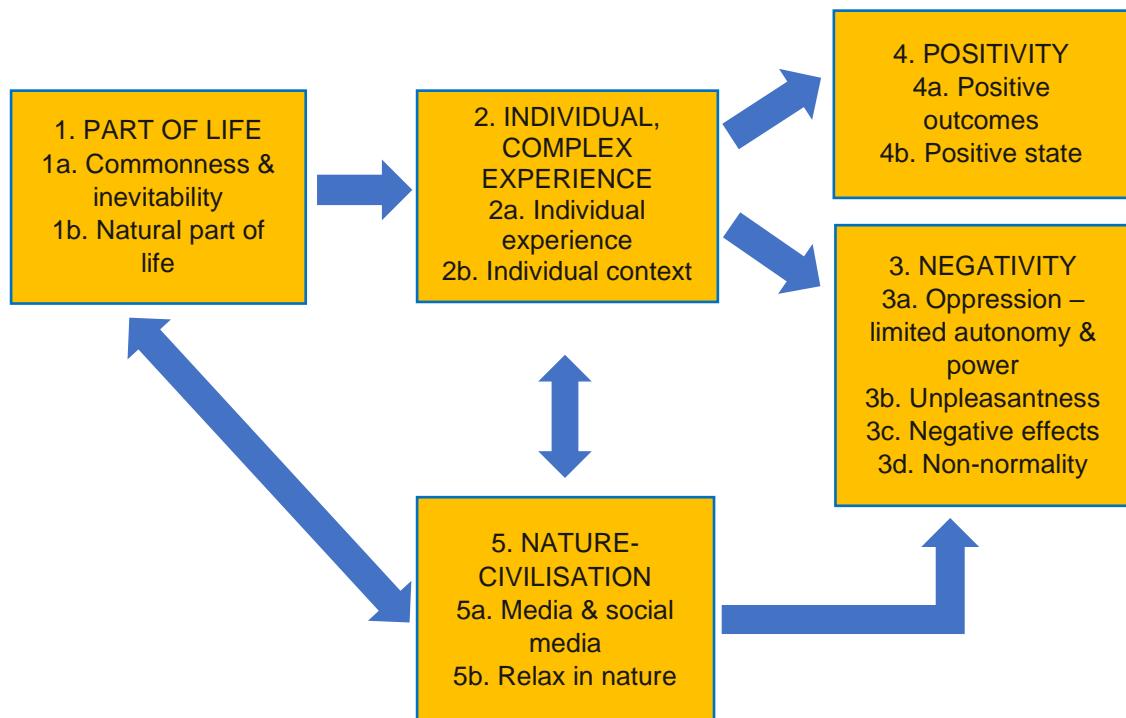
### 5.3.1.1.1. Commonness and inevitability

Stress was deemed inevitable because “too much is going on in the world” (P25) and there will always be some problems, difficulties, disturbances, or worries. As participants discussed, it is not possible to prevent all stress, avoid or withdraw from all stressful situations. Most areas of life are potentially stressful:

“Say, work can be stressful, personal life can be stressful, money can be stressful. Uhm, most things can have stress attached to it, really. [P22]

**Figure 3**

*Themes and subthemes identified in the lay perspective on stress*



Interviewees explained that even positive events like holidays or weddings can be stressful. Also, if certain critical issues were resolved, people would start worrying about other things:

“[...] if all those things went away and we didn’t have wars, and we didn’t have terrorism, then we might not have stress, so we might be stressed about something completely different, maybe we focus on different things like all the ice melting in North Pole and South Pole.” [P1]

In general, participants admitted that “everyone gets stressed” (P18) but it is mild, everyday stress (e.g. “some problems” (P1), “slight worries” (P5), “a tiny bit of stress” (P10), something that “niggles at you” (P20)) rather than extreme stress.

### 5.3.1.1.2. Natural part of life

As participants agreed that stress is common and inevitable, they also explained that it is natural and normal to feel it. Stress was seen as a part of being a human, a part of life or even – to some extent – a synonym of life itself:

"No, I think you'll be a robot [without stress]. [...] [Laugh] I've got an image of being like a cabbage, you know, yeah, because, I know theoretically it's not possible, that... becoming a robot." [P7]

According to interviewees, it is natural to experience stress at least in some situations, and it would be strange if people did not get stressed in certain situations. Stress was described as a natural survival mechanism enabling people to protect themselves and those close to them. Several participants recognised that an element of stress was necessary and healthy because otherwise life would be pointless, boring, and unchallenging and people would not achieve anything, which links to the theme of Positivity. As one of the interviewees explained:

"And if I wasn't stressed, I'd think I wasn't maybe pushing myself hard enough" [P16].

Previous research showed that lay people saw stress as inevitable due to the fast pace of life (Brown, 1996; Pollock, 1988; Whittaker & Connor, 1998) or the nature of their job (Farquhar et al., 2018; Harkness et al., 2005; Idris et al., 2010; Kinman & Jones, 2005; Meyerson, 1994; Thompson et al., 2013). However, these studies associated the normality or commonness of stress with external factors or environmental features. In the current study, participants also acknowledged that stress is a part of being a human, and that not experiencing stress would be unnatural or selfish.

### *5.3.1.2. Individual, Complex Experience*

The interviews showed that stress is a complex and individualised experience, which is consistent with the existing literature (Lazarus & Folkman, 1984, Fink, 2016). Participants talked about different causes of stress, different responses to stressful situations, and various factors that influence people's reactivity, appraisal of events and situations, as well as the short-term and long-term response to stress.

#### *5.3.1.2.1. Individual experience*

Participants provided various examples of causes of stress which included both mild and severe stressors as well as acute and chronic stressors. They talked about relatively minor issues such as being late for a meeting, or failing to do household duties; more important things like exams, job interviews, public speaking events; and transition experiences and major life events such as graduation, job loss and looking for a new one, loss of a close person etc. Most often they discussed ongoing daily hassles, particularly high workload and deadlines, but also caring duties and family responsibilities, financial strains, health and body image concerns. Linking to the Negativity theme, causes of stress were generally unpleasant or undesirable as they involved various types of threat and demands-resources imbalance. While different interviewees mentioned similar stressful events and circumstances, they also acknowledged that people differ in terms of their appraisal of any given situation which is consistent with contemporary theory of stress (Lazarus & Folkman, 1984).

Interviewees reported various (physical, emotional, cognitive, and behavioural) responses to stress, in line with the existing literature (e.g. Kinman & Jones, 2005; Le Fevre & Kolt, 2010).

However, participants explained that a stressed person will not necessarily experience all types of stress symptoms and not everyone will have them in every stressful situation or react in the same way to a stressor:

“[...] my mum’s always said if my sister was angry or upset, she’d just go off and sit in her room, and be quiet whereas I’ll scream and shout, get it all out of my system, but then I’ll sit and have a cup of tea.” [P25]

What is more, according to participants, what people experience and what they display might differ greatly; some individuals may not show they feel stressed and that some tend to bottle it up and are really good at hiding stress. This implies that stress may be considered a personal weakness that should not be openly displayed (Harkness et al., 2005; Hawk & Martin, 2011; Selamu et al., 2017).

Another issue which makes stress an individual experience is the variety of coping strategies that an individual can use. The existing literature describes a wide range of possible coping responses and techniques that people can apply when they are stressed (e.g. Bhui et al., 2016; Folkman, 2011; Harkness et al., 2005; Skinner et al., 2003; Stephenson et al., 2016). The distinction between different coping behaviours is not clear-cut – many of these have several functions, are interlinked and combined to address the specific situation. Participants talked about different coping responses, yet acknowledged that there is no universal, perfect way of coping. They discussed how people respond differently to stress and that specific ways of coping may work for some people but not for others. Individuals seem to have certain preferences when it comes to particular coping techniques:

“Well, mindfulness seems to be very trendy these days. [...] I’m not really into that, but people seem to like it.” [P8]

“You see, I’d hate to sit down and write, that wouldn’t work for me, so I’d, I would recommend it just because I know lot people are, writing helps [...]” [P19]

Understanding how people cope with stress, what strategies they apply can help explain the nature of stress (as a concept and as an experience). For instance, the fact that interviewees often talked about active coping strategies (e.g. taking action to complete a task, prevent or solve a problem) suggests that stress can be elicited by fixable problems, as well as various responsibilities, and duties to be fulfilled:

“Sometimes someone comes to me and go ‘I’ve got so much going on, it’s really stressing me out’, to me, I just go ‘well, prioritise it’. Pick the thing that’s easy, or, you know, pick the thing that needs to be done first, do that, work your way through.” [P23]

At the same time, as interviewees reported using cognitive strategies such as acceptance or mental detachment, it was clear that stress can also be caused by situations and issues that people may not be able to change. Along with active coping, interviewees often discussed cognitive strategies to cope with stressors and stress. Several participants explained that stress may result from and in seeing problems as bigger, worse, or more difficult. Consequently, people may overreact to certain situations:

[...] and then it just becomes blown out of proportion almost, and that's where, that's, that's stress gets then, doesn't it? [P5]

Thus, one of the commonly mentioned cognitive coping strategies was getting a different perspective on the stressor or one's own situation to counteract exaggeration or catastrophising.

Withdrawal and avoidance as well as distraction and detachment strategies imply that stress is unpleasant or at least tiring and thus requires either physical or mental distancing to enable recovery and protecting resources. Furthermore, stress was often associated with constant thinking about the stressor and/or the way of dealing with it (more details provided in section 5.3.1.3 on *Negativity* theme). The existing literature suggests that psychological detachment plays an important role in the recovery process (Sonnenstag & Fritz, 2007, 2015), and participants often explained how they tried to physically and/or mentally switch off, stop worrying, forget about stressors or the experience of stress. In many cases this seemed helpful and healthy because it enabled rest. Yet, as several interviewees explained, this type of strategy may involve maladaptive behaviour when people develop unhealthy habits (e.g. snacking, alcohol consumption) which give them excuses to get a break or help them forget about problems.

Moreover, recurrent mentions of arousal and emotion regulation strategies tell us that participants understood and experienced stress as a high-arousal negative-valence state that potentially involves loss of control over one's own emotions. Interviewees often talked about coping through trying to induce positive feelings, and improving mood by doing things that make them feel better and happier at least in a short term:

"Uhm, then I would say, uhm, doing positive things to make yourself feeling better [...] just generally treating yourself." [P22]

Participants also discussed attempts to regain control over their emotions (not always successfully) through calming down themselves or keeping calm in the face of some difficulties or problems.

Many of the strategies described above involved other people: family members, friends and co-workers, professionals. The stress-buffering effects of social support have been well-documented in the literature (e.g. Avison, 2016; Chandola & Marmot, 2011; Cohen & Wills, 1985). Social networks provide emotional, instrumental, informational, and appraisal support (House, 1981) and all these were to some extent discussed by interviewees.

A widespread conceptualisation of stress equalled it with "having a lot to do", primarily but not necessarily at work. Caring duties and house chores were also mentioned but rather as 'additional' demands than 'main' ones. All these required investing resources especially in terms of time and energy, rendering fatigue a kind of natural symptom or effect of stress. Most participants described stress as tiring or exhausting and were well aware that recovery and self-care play a crucial part in coping with stress. Interestingly, some individuals saw respite periods as something that differentiated bad from good stress or at least helped with not passing the line where "it becomes too much": This is consistent with the existing literature which distinguishes between acute and chronic stressors (Epel et al., 2018; Paradies, 2011) and suggests that without

any opportunity for rest and recovery, frequent or too long stress response may result in allostatic load and overload (McEwen, 1998; Sonnentag & Fritz, 2015). As participants suggested, stress can result from unrealistic self-expectations (see sections 5.3.1.2.2, 5.3.1.3.1 and 5.3.1.3.2 for more details). Therefore, self-compassion (Neff, 2003) and a more realistic perspective of oneself may help prevent unnecessary stress. Also, leading a healthy lifestyle to keep fit and have enough energy enables people to deal with everyday demands:

"Being more lenient with myself I think, telling myself, I think... Because when I'm stressed, I forget that other people take time out." [P3]

Notwithstanding, several participants acknowledged that people may feel selfish or guilty when they take time for themselves. One participant also talked about letting themselves experience an unpleasant state of stress as a punishment:

"I didn't want to just get over the feeling because I felt like I deserved to feel stressed [laugh]" [P4]

However, others explained that a certain dose of healthy egoism is acceptable and desirable as it supports self-acceptance (not caring too much about what others think) and enables benefitting from recovery.

Participants provided various examples of causes of stress which included both mild and severe stressors as well as acute and chronic stressors. They talked about relatively minor issues such as being late for a meeting, or failing to do household duties; more important things like exams, job interviews, public speaking events; and transition experiences and major life events such as graduation, job loss and looking for a new one, loss of a close person etc. Most often they discussed daily hassles, particularly high workload and deadlines, but also caring duties and family responsibilities, financial strains, health and body image concerns. Linking to the Negativity theme, causes of stress are generally unpleasant or undesirable as they involve various types of threat and demands-resources imbalance. While different interviewees mentioned similar stressful events and circumstances, they also acknowledged that people differ in terms of what they get stressed about because different issues are important to them. Therefore, the same situation might not be equally stressful for everyone:

"[...] if I share with, like, my friends something I'm going through, and, you know, they, they tend to say 'oh, it must be so stressful', and stuff like that, and I'm like 'no' [laugh]" [P4]

What is more, certain situations might be seen as stressful and dreadful by one person but exhilarating or boring by another:

"[...] some things are more stressful to some, that same incident can be stressful to some people, exciting to someone else, and just totally boring to someone else." [P11]

Also, according to participants, people can cope better with certain things than others, and they perceive as stressful the things that are more difficult for them to cope with:

"I think it's just some people are more, I do think some people are just, can handle certain things, this can't, this, what won't stress one person out would certainly stress, you know, another person now." [P25]

The fact that participants saw individual coping skills as personal resources which influence the appraisal process is consistent with contemporary theory of stress (Lazarus & Folkman, 1984).

Interviewees reported various responses to stress, in line with the existing literature. Apprising a situation as stressful elicits a multifaceted stress response which may involve physical sensations, emotions, cognitive aspects, and behavioural patterns (e.g. Kinman & Jones, 2005; Le Fevre & Kolt, 2010). Again, the majority of those are unpleasant and uncomfortable reflecting the *Negativity* theme. However, participants explained that a stressed person will not necessarily experience all types of stress symptoms. Some of these could be seen as more common or universal (as they were mentioned by most participants) but not everyone will have them in every stressful situation or react in the same way to a stressor:

“[...] my mum’s always said if my sister was angry or upset, she’d just go off and sit in her room, and be quiet whereas I’ll scream and shout, get it all out of my system, but then I’ll sit and have a cup of tea.” [P25]

What is more, what people experience and what they display might differ greatly. Some of them “may come and tell you, they may, they may be quite vocal about it” [P2], others will not actually exhibit any signs of stress:

“I think sometimes people are just better at hiding it.” [P1]

Interestingly, several participants mentioned how people may not show they feel stressed and that some tend to bottle it up and are really good at hiding stress. This implies that stress may be considered a personal weakness that should not be openly displayed (Harkness et al., 2005; Hawk & Martin, 2011; Selamu et al., 2017).

Another issue which makes stress an individual experience is the variety of coping strategies that an individual can use (Skinner et al., 2003). However, according to participants, there is no universal, perfect way of coping. They might not be equally appropriate or effective depending on the person and situation:

“What do they do? Uhm...? I think it depends on the person, how stressed they are, and what they’re stressed about...” [P20]

Interviewees acknowledged that people respond differently to stress and have specific coping mechanisms or strategies they resort to when stressed:

“[...] you either kind of, you deal with the problem, or you just try and avoid it. Uhm, so it kind of depends on what kind of a person you are.” [P9]

“I think there’s all sorts of people that, you know, some people seem to take things very much in their stride. You know, it’s like oh, whatever I can just, you know, do when I need to, or pull it out the bag, you know, whereas other people tend to think about things, worry about things, and get anxious about whatever it is that they’re doing.” [P16]

Moreover, participants discussed how specific ways of coping may work for some people but not for others. Individuals seem to have certain preferences when it comes to particular coping techniques:

"Well, mindfulness seems to be very trendy these days. [...] I'm not really into that, but people seem to like it." [P8]

"You see, I'd hate to sit down and write, that wouldn't work for me, so I'd, I would recommend it just because I know lot people are, writing helps [...]" [P19]

### 5.3.1.2.2. Individual context

Interviewees acknowledged that whether a person appraises a situation as stressful and how they respond to a stressful situation depends on a variety of factors, which is consistent with the existing theory and research on stress (Blascovich, 2013; Hobfoll, 1989; Lazarus & Folkman, 1984). As participants discussed, there is a specific, individual optimal level of stimulation or demands; people differ in terms of their need for stimulation and thus, in their threshold of getting stressed or tolerance for stress as an experience. Therefore, what is an acceptable level of demands for one person may be too much or not enough for someone else:

"[...] I thrive on pressure, and other people can't stand pressure." [P25]

Another factor mentioned by the interviewees was the current level of demands placed on an individual, and access to resources an individual has (believes themself to have). Participants referred to the idea of interactions between different demands as well as to specific individual factors and circumstances that may make a person more prone to stress:

"But if I've had not enough sleep and I'm already in bad mood then, and I'm more susceptible to stress, stressful situations." [P2]

All participants confirmed that some people get stressed more easily than others. This individual reactivity was considered partly rooted in an individual's nature and character such as genes, the way people are, in-born characteristics, and personality:

"I think it's just part of me. I'm just a bit of a worrier at that times. [...] I think I've always had that underlying thing that I do worry, perhaps more than I should do at times." [P5]

I don't know, I think some people are just naturally laid-back, aren't they, really? [P12]

However, interviewees also acknowledged the role of environmental (external) factors such as previous experiences, upbringing, modelling, learning and developing skills (including coping skills), as well as some acquired mental health problems:

"[...] I think the good thing about the good parenting, and a good family life, I think, it gives you resources to cope with stress." [P19]

Most interviewees were aware of both nature and nurture influences but in several cases, they were less certain about the role of genes and biology. Furthermore, participants saw stressfulness as contextual rather than an immanent feature of any situation. They discussed how individual appraisal can change over time and something that used to cause them stress might not be perceived as stressful anymore and vice versa because of changes in values or the importance of certain issues as well as because of resources development (e.g. gaining knowledge or skills):

"I maybe will face redundancy now, uhm, it wouldn't be such a big, it wouldn't be a stressful situation this time, whereas years ago it would have been, when we were younger, and we were just managing, you know, paying all the bills, and things." [P5]

An important issue was identified within this theme. Stress was often thought to be self-inflicted which suggests that people might be blamed for their getting stressed. This idea of individual responsibility for stress and coping was widespread:

"You could, you, you know, let everything be stress. Every day is stress [...] It could be if you let it." [P11]

Several participants discussed self-inflicted stress and/or making the situation or their life in general more stressful. Usually, this was a result of unrealistic self-expectations or not controlling one's own thoughts or emotions well enough (e.g. worrying too much). Others also mentioned being too enthusiastic or not assertive enough and therefore accepting too many demands.

There seemed to be an underlying scheme of achieving a lot as an individual. The busier a person is and the more they achieve (mainly in terms of productivity and successful career), the better. Achievement was perceived to be the measure of a man:

"And if I can't be productive in a day, then that stresses me out, because I feel, I guess, there's that frustration I guess that I haven't, I guess, done enough." [P10]

Participants suggested that people may feel pressured to engage in different activities and try to achieve certain goals even though they do not really want that. As this may require considerable effort and create demands, for some it can become too much to deal with and result in stress. Consequently, this can contribute to seeing stress as a personal weakness (a sign of ineffectiveness, inability to achieve a lot, inability to cope) and stigmatisation. Furthermore, several interviewees tended to blame themselves for not coping well enough or not approaching the situation in the right way.

Most coping strategies discussed in the interviews placed the responsibility on the individual. It is the person that has to take care of themselves, develop resources, regulate their emotions, and take action to prevent stress or deal with the existing demands. This all, in addition to seeing oneself as a source of stress (self-expectations, self-inflicted pressures) and blaming oneself for not coping well enough suggested that participants tended to see stress as individual responsibility and were less aware of social determinants of stress and coping. However, the existing literature calls for a holistic approach and recognises the need for more collective action in stress and health management (Kasperczyk, 2010; Levi, 2017; Minkler, 1999; Slavich, 2020).

#### 5.3.1.3. *Negativity*

*Negativity* was the biggest theme in the lay interviews and consisted of four subthemes. Stress was commonly linked with lack of control over the situation and oneself. Participants also discussed how the stress experience is caused by unpleasant events and circumstances, and involves psychological as well as physical discomfort. They also pointed to various negative effects, particularly in terms of physical and mental health but also poor performance and social relationships.

### 5.3.1.3.1. Oppression – limited autonomy and power

Interviewees suggested that stress creates a feeling of being oppressed. They explicitly referred to the idea of oppression, restriction, constraint, or confinement, having one's autonomy or independence endangered, being powerless (or at least having one's power limited or others'/situation's power being higher) and hopeless when they defined stress and described their own experience of stress. This was often through metaphorical language (source domain of confinement/entrapment or restricted mobility; bolded in the quotes below) e.g. depicting a stressful situation as a confined space without exit or a stressed person as someone whose mobility has been drastically restrained:

"I think that's probably the most stressful, when **you can't see a way out**, or you know that, you know, **there's not just, you know, door that you can open**, and then **you'll be there eventually.**" [P4]

Uhm, I suppose, being stressed is a bit like being in... one of those like medical, you know, the... [showing with hands being strapped to a chair] when **they tie you up**, and, uh... when you're kind of **incarcerated** [...] just **trapped**, kind of **trapped inside of yourself**, maybe. [...] [P26]

Moreover, non-stressful or low-stress situations were associated with the freedom to do whatever the person wanted to do, flexibility, having no restrictions in terms of time or choice:

"You could do what you wanted. I'm not saying we did that, but like nobody knew you, or no one, I don't know, it was nice! [...] Uhm... I don't know, I just, you just felt free." [P14]

Also, in those few cases where interviewees explicitly mentioned positive stress, they linked it to flexibility, decision latitude, and freedom:

"But they are good stresses, you're not doing it... you're doing it of your free will, you want to do it." [P7]

All participants but one referred directly (i.e. used the word 'control' e.g. out of control, in control, to control etc.) or indirectly to the idea of control and manageability when talking about stress. Importantly, control was regarded as a personal resource and when interviewees talked about it, they often implied individual responsibility – it is the person who should keep control, not let things take over, is in control of one's stress. In line with the contemporary stress theory (Lazarus & Folkman, 1984), having limited control or being deprived of control for whatever reason seemed to be a central notion in defining stress:

"Uhm... I guess, it means, it means to me to be in a situation, uh, that is out of your control [...] and it's like basically being in a situation that's out of control [...]" [P10]

And a situation was deemed not stressful as long as an individual had some control over it:

"[...] it's kind of very much in my control, so I wouldn't say it's particularly stressful" [P9].

Consequently, according to participants, regaining control (even if only to some extent or over some things) is a part of the coping process. Having control promotes a feeling of being able to manage the situation. However, if one cannot take control over the situation, the only way is escape or avoid it:

"Uhm, I think it was just so many things out of my control that, I, I knew I couldn't fix it [...] I knew it was kind of beyond repair, and then it was a, how, how would you get out of this" [P15]

The idea that avoidance, denial, escape is possibly adaptive – especially in the short term - when the situation is uncontrollable is well-established in the literature (Biggs et al., 2017; Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984).

Controlling the situation and considering it manageable is one side of the coin. The other is having control over oneself – one's own emotions, and not letting oneself get stressed, or overreacting.

"Well, I think, yeah, I think controlling your emotions, you know, are my way to control stress, really" [P6]

Interviewees talked about lack of self-control in terms of being less able to control one's thoughts: worrying too much about something, overthinking, and being unable to switch off. Stress was commonly connected with being over-focused on the stressor and/or coping with it. This is not surprising given that a stressor by definition is a personally meaningful and relevant stimuli (Lazarus and Folkman, 1984) and as such it attracts one's attention. Participants explained how thinking about the stressor can be positive as it enabled focusing on solving the problem which links with the theme of Positivity. However, they also acknowledged that it could become problematic if there are more stressors competing for one's attention (which may result in inability to focus on anything), or if the stressor is uncontrollable. Focusing on a stressor or demands in general – not stressful, not exceeding the resources as yet e.g. some kind of unresolved matter (as in Zeigarnik effect (see e.g. Syrek et al., 2017) – can be a background process which nevertheless gradually strains the resources possibly making it more difficult to deal with other things, and consequently, in time, contributing to the feeling of unmanageability:

[...] waiting for something to happen that is obviously going to keep you awake, is the more you think about it, the more you worry about it. [P5]

On the other hand, lack of self-control may refer to doing things automatically, or without thinking because of panicking or being in some kind of "manic" (P5, P23) or "headless chicken" (P9) mode. Also a few participants explicitly discussed emotionality-rationality opposition, indicating that stress is emotional and by trying to be more rational one can reduce stress, while being emotional exacerbates the experience of stress. Emotionality (and so being stressed) seemed to be regarded as something lesser or possibly a weakness as compared to rationality which enables an individual to think properly and solve problems and so not get stressed so much:

"Uhm, I'm just thinking about two little men in my brain and like a fight. Uhm, and so trying let the kind of calm and rational bit, uhm, dictate what I'm doing rather than the anxious, crazy bit, yeah [laugh]" [P17]

"[...] if we perhaps, before we got to that situation, if we perhaps tried to be calmer, and, and sit and think about it logically, it most probably wouldn't be as stressful as, as we think it is." [P5]

In general, participants tended to think that when stressed, people do not think logically, they need to calm down, control their emotions. This is consistent with previous research which found the most common advice to a stressed person was to relax and calm down (Brooks, 2014). However, while emotions can make people act unwisely, they are not in opposition to reason (Lazarus, 2006).

Another aspect of feeling oppressed and having limited power involved demands-resources imbalance. From what participants said it can be concluded that whether the demands are perceived as (too) high or not depends on the resources an individual has or how much of their resources might be needed to deal with the demands. If the resources are low (e.g. no necessary skills/knowledge) or limited (e.g. because they were used up to deal with some demands earlier) even minor issues can result in feelings of stress. Also, relatively small demands can pile up and eventually exceed the resources an individual has at their disposal at the given moment. This is consistent with the transactional theory of stress (Lazarus & Folkman, 1984) and more specific models such as job demands-resources imbalance (Demerouti et al., 2001).

Interviewees provided various examples of demands or pressures: internal and external expectations, tasks, assignments, deadlines, responsibilities, household chores and professional duties. These demands usually require effort and energy and may take so much time that an individual has limited opportunity to get rest and replenish resources. Consequently, even if the objective level of demands does not change, the perception of it may change because the accessible resources may be insufficient. This links with Individual, Complex Experience theme and specifically the contextual influences on individual appraisal.

In line with the existing literature (Blascovich, 2013; Hobfoll, 1989), interviewees saw the same factors as both a potential stressor and as a resource. Specifically, time, money, social support, energy, skills, confidence etc. were deemed to help cope with stress while a lack of them could cause or exacerbate stress. The way interviewees talked about lack of time created a sense of oppression metaphorically (time **pressing** on the individual) and literally (time-related constraints resulting in having no choice but working hard and fast to complete the task within allotted time):

[...] uhm, never any time to yourself, never any time to relax [...] and there's never time to switch off, then that will be very stressful. [...] being very, very, very, very busy. All the time [P17]

The same applied to expectations (cultural norms, social, external and internal expectations) which may literally and metaphorically limit an individual's freedom and choice:

"I think that because I work part-time, uhm, sometimes I feel an expectation, maybe from others, maybe something that I perceive myself, that I need to achieve the same things that somebody who is full-time achieves." [P24]

Interestingly, in most cases participants focused on personal resources such as time, energy, self-confidence, skills and knowledge. Even when they talked about more external resources such as money or social support, they still discussed them. mainly at the individual

level (e.g. personal savings, friends and close family) rather than the institutional, community or national level:

“[...] my mum, uhm, were struggling for money, and she had so much stuff going all at once [...] my dad being, uhm, refusing to pay child maintenance which really didn’t help [...]” [P9]

While being able to identify one’s own resources was seen as a part of coping (self-awareness), this way of thinking is likely to reinforce individual responsibility for stress and coping. Only one person actually mentioned a wider context and more systemic issues possibly contributing to demands-resources imbalance (possibly because she had a background in sociology):

“I mean, in the UK it doesn’t help working people, predominantly doesn’t help working mother, because they’re still predominantly the carers [...]” [P14]

A situation of high demands and low resources may lead to a sense of unmanageability which seemed to be an important characteristic of stress and linked back to lack of control. Participants explained how having too many problems, too much to do, unrealistic expectations and goals result in feeling overloaded, overwhelmed, unable to cope, powerless or hopeless:

“[...] having to do everything at once, uhm, because I’d say typically feeling stress about [laugh] this isn’t really help, uhm...yeah, feel, feeling a bit overwhelmed, there’s a lot, a lot on your plate as people would say” [P2]

Interestingly, for some interviewees, unmanageability equalled to stress in general but for others it meant specifically bad, maladaptive or negative stress (as opposed to positive stress):

“But there’s always like a line, and once it passes that line, it becomes really overwhelming, and it’s no longer good for us.” [P4]

This implies that people hold different conceptual models of stress. For some it encompasses both negative and possibly positive experiences (when the situation is stressful but manageable) while others see stress only as negative (only unmanageable situations can be stressful; if the situation is manageable there is no stress).

#### 5.3.1.3.2. Unpleasantness

The unpleasantness of stress was very salient in the participants’ minds. While feeling oppressed, powerless and out of control may be commonly experienced as unpleasant, this subtheme extends this further to unpleasant causes and unpleasant symptoms of stress. When asked about how being stressed feels like, interviewees usually referred to different types of discomfort (physical or emotional, also discomfort of mind, e.g. racing thoughts). Also, when talking about stressors or stressfulness of a situation they depicted them as an unpleasant event or circumstances threatening important values, goals (e.g. self-esteem, health/life) and thus causing mild to severe discomfort.

Consistently with previous studies (e.g. Kilby et al., 2020; Okihiro et al., 2017) participants reported that stress is experienced when a person encounters difficulties, obstacles, hardships, problems to solve, complex tasks and other situations perceived as challenging and strenuous

mentally or physically. Also, non-stressful circumstances were described as easy and non-demanding:

"[...] my job isn't that stressful anymore because it's quite easy, what I do now." [P5]

In line with the existing literature (Blascovich, 2013; Kilby et al., 2020; Lazarus & Folkman, 1984) another category of stressful situations involved unexpected or unfamiliar events. This was intertwined with low resources e.g. not having time, knowledge or skills to deal with whatever had happened. Furthermore, similarly to previous studies (e.g. Kilby et al., 2020; Okihiro et al., 2017; Tuckey et al., 2017) participants recognised that social interactions can be a source of stress when they involve uncomfortable or unpleasant social situations. This may also be seen as a 'secondary' stressor i.e. someone who is stressed may be unpleasant (e.g. snappy or aggressive) to others. This creates tension or conflict which in turn results in 'new' stress or contributes to the existing stress. Some participants suggested that stress can be 'contagious' i.e. if someone is stressed people around may also get stressed especially if they care about the person:

Yeah, because if you're, if you, if somebody is stressed around you that can, that can pass on, you can start to feel their anxiety or whatever it is." [P16]

Furthermore, stress was associated with being in an unpleasant, uncomfortable situation of having to or choosing to do things that are out of one's comfort zone.

"Uhm... stress is something that puts you out of your comfort zone, essentially. [...] stress is something where you find yourself in a situation that you don't feel comfortable with." [P22]

While this by definition results in discomfort, some participants mentioned that getting out of one's comfort zone may stimulate development or progress and thus it links to the Positivity theme.

Stress was commonly discussed in relation to various types of threat which is consistent with the scientific theory. Threat appraisal as a cause of stress is well-established in the literature (Blascovich, 2013; Hobfoll, 1989; Lazarus, 2006; Lazarus & Folkman, 1984; Tomaka et al., 1993; Tomaka et al., 1997). Participants described their experiences of stress when their goals or values were threatened, i.e. when they thought that for some reason they might not be able to complete a task, or their plans had been somehow disrupted. This also involved anticipation of possible problems, difficulties, losses or failures:

[...] where you, where you, where, for example, something gets in the way, and I'm not able to meet that goal, of what I expect. [P4]

Stress was associated with social exposure and being evaluated, particularly, the idea of letting others or oneself down was deemed unsettling and uncomfortable:

"For example when you're working on a group projects, and you're behind, you'd probably be stressed, you don't want let people down [...]" [P2]

Not being able to live up to (internal or external) expectations may pose a threat to self-esteem or one's image in the eyes of others, particularly if the expectations are unrealistic.

Participants also related stress to circumstances when an individual's health or life is in danger e.g. because of serious illness, accident, or violence (including terrorism and war). This kind of threat was quite often seen as ultimate stress. Interestingly, similarly to what Clark (2003) found, for some interviewees only life-threatening situations were 'real' stress which suggests that they saw other circumstances as not genuinely stressful:

"Uhm, and that's where I think stress has become real stress, when there is a life-and-death situation." [P6]

Furthermore, participants explained that it would be stressful if someone close or otherwise important to an individual was in danger (e.g. illness, physical harm), if there was a risk of losing someone, or if the close person's important goals or values were at stake.

The unpleasantness of stress refers also to the feelings and symptoms people experience when they are stressed. As in previous research (e.g. Kilby et al., 2020; Kinman & Jones, 2005), participants depicted stress as an unpleasant state which involves high arousal (agitation and restlessness) and negative emotions, mainly worry and anxiety which were used as synonyms of stress or at least as a constitutive part of stress. Interviewees also talked about anger, annoyance, fear, panic, nervousness, embarrassment, frustration, concern, disappointment, sadness, guilt. Stress was described as something people do not like. Some participants even mentioned they did not even like themselves when stressed. It was commonly equated with unhappiness and psychological discomfort, while happiness, joy, merriness, and feeling relaxed were related to not being stressed. Furthermore, participants described times when they had no stress or were relaxed as nice and pleasant. Also, people who were not stressed were regarded as nice to be around:

"It's a really nice feeling not having, not knowing that something's going to stress you out, uhm, you can just go about your life, uhm, yes, it's a really nice feeling." [P2]

Participants also mentioned symptoms related to cognitive disorganisation such as foggy thoughts, brain confusion, fuzzy head or thoughts, cloudy head, racing thoughts, and inability to think clearly. Not only can this be unpleasant, but it also might translate into poor concentration and performance – negative effects of stress frequently reported by the interviewees (section 5.3.1.3.3). Furthermore, stress-related physiological changes in the body can be unpleasant, undesirable, and/or cause discomfort. One of the most commonly discussed stress symptoms was muscle tension which can lead to tremors and hands shaking. Interviewees often associated stress with general body tension. They also reported tight chest, racing heart or arrhythmia, quicker or irregular breathing, and a sense of changing temperature i.e. feeling cold or hot, and getting sweaty, tension headaches, and stomach discomfort.

### 5.3.1.3.3. Negative effects

Participants pointed to various negative effects of stress on health, social relationships and performance. As regards health problems, interviewees most often referred to mental health and generally agreed that stress was not good for it:

“[...] if you, if you get stressed a lot then it can be bad for your mental health [...]” [P17]

However, they mostly discussed relatively short-term unpleasant symptoms of stress such as lower mood, worry and anxiety rather than clinical disorders. Several participants mentioned feeling depressed but in many cases the language they used (“slightly depressed”, “almost like depression” (P1), “a little bit depressed” (P7), “sort of depression” (P11)) suggested that they meant it more as period of lower mood, not a depressive disorder. Nonetheless, at least some interviewees understood that stress can lead to serious mental problems and a few participants reported their own stress-related mental health issues: anxiety, PTSD symptoms after being bullied at work, situational depression. Others also mentioned mental breakdown (though it was unclear what this meant), PTSD, reduced libido, self-harm, and suicide as possible outcomes of stress.

Interviewees linked stress to physical health problems but either very general (feeling unwell, sick or ill) or rather short-term and quite ‘proximal’ ones i.e. immediate and easily linked with a specific experience. These were either minor ailments such as headaches, indigestion, and musculoskeletal issues (e.g. neck pain), or temporary physiological changes e.g. higher heart rate and blood pressure (cf. Kinman & Jones, 2005). However, only a few participants associated stress with more ‘distal’ and severe physical health issues such as cardiovascular disease, strokes, and heart attacks, or impairment of the immune system. Two people also mentioned aging faster but did not provide any details. For most interviewees, if they discussed any long-term physical health problem related to stress, it was about the body being worn-out and meant fatigue rather than serious health issues:

I: “[...] is stress related to any... like more grave problems, health problems, do you...?”

P5: “No, I don’t think so. I mean I’d hope not, really, it may do. I’ve not really thought about it. I shouldn’t, I would imagine if you were under stress for a long time, or always under stress, I would imagine, yeah, certainly, your body might probably, would feel absolutely worn out.”

Unsurprisingly, most participants discussed some level of tiredness and/or sleep disturbances as the effects of stress. They explained how high workloads and family left them tired or even exhausted because they would give up on rest and sleep to complete their tasks:

“Uhm... yeah, they usually have these periods they’ll be up all night, drinking coffee, and I’ll come in next day, sleep, they had no sleep, so they’ll be even more grumpy, uhm, yeah”. [P2]

Furthermore, stress was coupled with general bad quality of sleep. It was also acknowledged that sleep problems led to insufficient recovery and fatigue which might increase vulnerability to stress because a person might not be able to tolerate or deal with issues that they would be fine with otherwise:

“[...] it’s like a vicious circle. If you don’t get your sleep, I think you then, everything then becomes too much, because you are so tired. [...] everything seems horrendous, so everything seems ten times as worse as it perhaps even is. But because you’re not sleeping properly, everything just gets too much.” [P5]

In general, participants knew about immediate physiological changes (stress response) but did not associate them with more long-term physical health issues. This might be simply because physiological symptoms of stress response were widely experienced while only a few interviewees actually suffered from grave mental or physical health problems. Previous research showed that although stress may lead to ill-health, most people exposed to stressful events do not experience health issues (Cohen et al., 2019). Furthermore, development of serious disorders is often a lengthy and complex process and for members of the lay public it might not be easy to pinpoint stress as a cause of or a contributor to an illness. Most participants who talked about more serious health problems were also quite unsure as to how stress might lead to those issues and they admitted it explicitly or used hedges ("I'm not an expert on this sort of stuff" [P20], "I haven't got any doctor's training" [P16]).

Thus, it can be concluded that the understanding of the link between stress and physical health was rather underdeveloped in terms of underlying physiological, neuroendocrine mechanisms. At the same time, participants were well-aware of the indirect influences of stress on health through unhealthy behaviour such as under- or overeating, unhealthy eating, smoking, drinking alcohol, and generally not caring enough about oneself. In fact, when asked about the possible influence of stress on health, most interviewees referred either to mental health or unhealthy behaviour. Only after being prompted did they think about physical health. Previous studies also found that lay people link stress with unhealthy behaviour such as smoking, drinking, changes in appetite and eating or sleep patterns (e.g. Furnham, 1997; Kilby et al., 2020) and these links have been well-documented in research (Chandola et al., 2008; Heikkilä et al., 2012; Hughes et al., 2017)

Unhealthy behaviour was often referred to as a coping strategy to regulate one's emotions. People resort to alcohol, cigarettes, or drugs to relax or feel positive emotions. Unhealthy eating was depicted as comforting oneself:

[...] so some people can be chocoholics, some people can be alcoholics, or some people will just eat something that they really want to eat just to try and cheer them up. It might be a curry or a pizza, or something that may be perhaps not as healthy as it should be. [P1]

Some participants also explained that they were unable to eat or lost weight when stressed. Also, as stress was linked with not having time for or forgetting about healthy habits such as regular meals and drinking water, choosing the most convenient but not necessarily healthy food or not having time or energy to eat properly or be physically active. A few participants explained that stressed people may not take care of themselves, often because they have other priorities:

"I certainly think that people who are constantly under stress probably don't take care of themselves as much as someone who isn't stressed and can focus on other things. Uhm... I suppose it can, it can affect health." [P2]

Stress was also commonly perceived to have negative effects on social relationships. In line with previous findings (Furnham, 1997; Kilby et al., 2020; Kinman & Jones, 2005), stressed people were described as less sociable or socially withdrawn as well as more likely to get irritated or angry, while non-stressed, relaxed people were depicted as nice, easy-going and willing to

chat. Interestingly, from what participants said, these social effects might be more direct i.e. as stress involves negative emotions e.g. anger which are possibly difficult to control, people may become unpleasant, snappy or aggressive toward others:

“Uhm, but yeah, so I know that I shout a lot, and then I get really inconsiderate, and selfish, and...” [P3]

However, the relationship between stress and social effect can also be indirect, i.e. non-social effects of stress such as tiredness and lack of resources (which were used up for dealing with certain demands or a stressful situation) may result in the person not being able to tolerate the presence of other people or engage fully in social interactions. Also, as interviewees discussed, having too many or too high demands may mean that people have no time for ‘social life’ or may isolate themselves as they would rather get immersed in work.

Finally, according to the participants, stress affects performance. Similar findings were reported previously (e.g. Dewe & O'Driscoll, 2002; Kinman & Jones, 2005; Sharpley & Gardner, 2001). A couple of interviewees mentioned they would get clumsy and less coordinated. Several more explained that people are less productive or effective when stressed. Commonly discussed effects of stress on performance included low motivation, rushed decisions, concentration problems, and inability to think clearly, to stop thinking about some stressors, or to prioritise things or organise one's work:

“And then you're just not concentrating, and you start making mistakes then that's, that can cause issues at work because you, you know, you make mistakes [...]” [P25]

All this could lead to subsequent stress because of not meeting certain demands. Also, as one participant mentioned, people who feel unwell due to stress may take days off so their productivity at work is null.

#### 5.3.1.3.4. Non-normality

This was a relatively small subtheme. Generally, participants saw stress as a normal element of life (as described in the Part of life theme). On the other hand, many of them suggested that stress is abnormal, it leads to non-normal behaviour and feeling as if the person was not themselves:

“I know that when I get stressed, I turn into a very, very different version of myself.” [P3]

Furthermore, participants discussed how coping with stress involves trying to get back to normal and when the stress finishes, the individual's mind, body and behaviour go back to normal:

“Just to try and get back to the normal state of mind.” [P2]

All this pointed to the idea that stress is not a normal state as opposed to the time of not being stressed:

“When I'm not stressed, I'm just normal at the time when I'm doing one thing or another.” [P16]

#### *5.3.1.4. Positivity*

The picture of stress that emerged from the interviews was largely negative, and only a few participants discussed positivity of stress on their own. Others were able to come up with some positive aspects of stress when asked directly whether stress can be helpful in any way. Two subthemes constituted this theme. Many participants acknowledged that stress brings about certain positive outcomes e.g. it makes people motivated and focused, it enables learning and development. However, as discussed below, even those positives were tainted with negativity. A few interviewees also mentioned that stress can be a positive state.

##### *5.3.1.4.1. Positive outcomes*

Participants associated stress with hard work and relaxing with a degree of laziness and doing nothing (or at least nothing significant). Stress may be unpleasant, but it made them work better, harder or faster to get things done:

"It's sort of like a necessary evil almost. Uhm... it makes you unhappy, but generally it's for the best, it motivates you to keep going, and it doesn't let you become too lax." [P2]

There seemed to be a "no pain, no gain" attitude. According to participants, people get stressed when they need to deal with something difficult. They often experience it as unpleasant but when they achieve their goal, they feel proud and satisfied. These positive outcomes would not be possible if the situation was easy or non-demanding:

"I really enjoy my work, but it's not the same sense of 'wow, I've achieved so much', I think stress is definitely a contributing factor to have, feeling good at the end of doing something stressful." [P8]

Furthermore, several interviewees explained that if there was a stressful situation, but it was resolved or ended well, then the stress was either 'worth it' or became less important than the sense of achievement. This also links to the underlying scheme of "achieving a lot" described in section 5.3.1.2.2:

"I'm partially there, like there are things I'm better at than other people, that make me realise that the stress was worth it." [P3]

Stress was often described as a state of high arousal and a few participants suggested that it could enable a person to react quickly when necessary, or help them get through various situations by providing the body with energy which is necessary to do any work:

"So I think, yes, that sort of keeps you up high for a time, and helps you get through the situation that you have to go through." [P5]

The interviews also revealed a belief that people need a certain level of stimulation to get motivated and accomplish something. Some interviewees described how they used procrastination as a strategy to get stressed and finally start dealing with a task:

"[...] what I needed doing was, uhm, procrastinating for a few days, and when I finally did it, I actually did it quite well, because I, I really threw myself into it, and it meant that I gave it my all [...]" [P19]

Linked to the above, participants discussed how stress makes people focus on the stressor or task at hand enabling an individual to deal with what is perceived as most important and stressful. It "helps direct your mind" (P23), shuts off any distractions, and allows for channelling resources to deal with a specific demand:

"So if I'm really stressed because of finances, I can focus more on what needs, what I do need to buy, and not spend unnecessarily, perhaps, and, uhm... if I'm stressed with a deadline, you know, I can focus my energy, and my time more to that to make sure that I get it done." [P4]

By definition stress is about issues that are personally important. An individual would not get stressed about something they did not care about (Lazarus, 2006; Lazarus & Folkman, 1984). Consistently, interviewees suggested that stress can be positive because getting stressed signals that something important is at risk. Several interviewees indicated stress may serve as a warning that something wrong is going on, that certain things need to be dealt with or changed. Stress was considered to help detect some dangers and risks and mitigate them. Moreover, periods of stress provide a point for comparison and promote appreciation of non-stressful times:

"You need the stress to know you're not stressed. Whilst you'd just be not stressed, but you won't appreciate it, you just wouldn't acknowledge that is the thing." [P8]

Also, according to some participants being completely uncaring was egoistic and unhealthy. Stress is therefore important and positive because it shows that a person cares. However, there seemed to be a fine line here between positivity and negativity. If somebody cares 'too much' or about too many things, stress may become excessive or unnecessary, and have negative effects.

Some participants suggested that stress promotes helping behaviour. In stressful situations, people may get together to help and support each other which may improve relationships. Also, people tend to help those who are stressed:

"[...] if you see someone quite stressed, you can help them out, or when people see that you're stressed they're like, OK, we'll split this out and make it work, so I think, I think, you know negative things can bring out good things in other people [...]" [P8]

Unmanageable situations and excessive stress are undesirable and can be detrimental as discussed within the Negativity theme. However, several interviewees explained that life without stress will be boring:

"I think it [stress-free life] might be a bit boring [laugh] [...] So yeah, it might be quite dull if that was removed." [P17]

Furthermore, according to interviewees, certain difficulties and stressful situations provide an opportunity to learn and change. Doing things which are out of an individual's comfort zone can be – at least initially - unpleasant but without it people would not learn new things, develop skills and resources:

"[...] maybe at the time you think that, this is not great, uhm, but actually achieving that, uhm, benefitting from the learning, uhm, is really good, I think." [P24]

Also, in line with the existing literature (e.g. Seery, 2011) exposure to some stress was sometimes described as necessary to develop resilience and prepare to deal with bigger stressors:

[...] if you don't have a little bit of stress, I think sometimes if something major happens, and it becomes a big stress then, I think you'd find that really difficult to cope with because it's such a shock to the system, and you don't know how to cope. [P5]

Moreover, stress may lead to trying to find out some new solutions, doing things in a different way if more 'traditional' ways do not work:

"Well, you've got to be, uhm... in a way you have to admit to yourself, well, I can't do that. And now I've got to do something else in a different way, or whatever." [P12]

All this points to an understanding of stress in terms of the Goldilocks effect. Neither too much nor insufficient stress is good. Although people tend to see stress as something negative, they do accept that stress is a part of life and some stress is actually necessary and healthy. This is consistent with the existing theories of stress such as the Yerkes-Dodson law (Yerkes & Dodson, 1908), Selye's concept of eustress (Selye, 1978), the Individual Zone of Optimal Functioning (Hanin, 2000), or the Holistic Model of Stress (Nelson & Simmons, 2003a). Based on the interviews and previous literature, it can be concluded that stress can be positive as long as it is manageable and not excessive. This, however, calls for redefining stress. Most popular contemporary theory sees stress as unmanageable situation (one in which demands exceed resources (Lazarus & Folkman, 1984)). Thus, either manageable stress should not be labelled stress, or a definition of stress should be changed to incorporate the cases of manageable stress.

#### 5.3.1.4.2. Positive state

This was a fairly small sub-theme as very few interviewees actually described stress as an enjoyable state. Some admitted they (or other people) may thrive under pressure. A few interviewees admitted they enjoy being busy and working under pressure, which links back to individual tolerance for stress described in section 5.3.1.2.2. However, for others stress was more of a negative reinforcement. They would do whatever they had to do to get rid of the unpleasant feelings:

"It's so horrible you'd do anything to get away from it [...] So the only way to get rid of it is to conquer, or to solve an issue, or to deal with it." [P22]

A couple of participants differentiated between good and bad stress and linked good stress with having fun and experiencing positive emotions, when "[...] you're enjoying the moment, you're pushing yourself" (P7). However, at times participants were not sure if the positive experience was actually stress or some other state which highlighted the confusion resulting from vagueness and breadth of the term 'stress':

[...] you can have a good stress, as stress, is it stress, or is it excitement [...] [P11]

Some interviewees when asked about positive stress talked about 'adrenaline rush' but they distinguished it from stress even though the two would feel similar. They saw stress as something negative, more serious and related to an unmanageable situation (consistently with

Lazarus and Folkman (1984) definition) while adrenaline was related to nervousness and excitement and seen as possibly helpful:

"So difference, I think, is when you're nervous you're kind of, you feel adrenaline in your body [...] you feel like, oh, want to make sure you're doing the job. But stress is like it's out of your hands, and you can't do anything about the situation [...]" [P3]

#### *5.3.1.5. Nature-Civilisation*

This was a comparatively small theme with two subthemes. Stress was associated stress with civilisation advancements, particularly information technology. At the same time, a state of no stress or relax was linked with nature. It is interesting, as quite up-to-date and perhaps not so well-researched yet. The concept of technostress was developed in the recent decades (Riedl, 2013; Tarafdar et al., 2007), and there has been a growing interest in how media and internet affect people's well-being. However, the fact that participants discussed this issue calls for even more attention to it. This might be particularly important nowadays in the light of the Covid-19 pandemic (e.g. Chao et al., 2020). Moreover, as the world becomes more urbanised, more research is being conducted and interest gaining on how green spaces and fresh-air activities promote resilience and health (e.g. Chawla et al. 2014; Hansmann et al., 2007; Hedblom et al., 2019).

##### *5.3.1.5.1. Media and social media*

Participants saw the media as a source of bad news which may result in people being worried about possible dangerous, unpleasant, or unwanted things happening to them or their families:

"It's, it's on news, some things, so [...] So, I've, I've seen something, and I transferred it's gonna happen to me, it's negativity, really." [P12]

Both traditional and new media may lead to information overload. Some participants reported that they want to be kept informed, but the amount of information they get from the media might be extremely difficult to manage. Information technology was depicted as pervasive and invasive because it enables constant communication and creates new demands such as responding to numerous e-mails. This links back to high demands and feeling oppressed as described in Negativity. This unrestricted communication seems common in the contemporary world, and e-mail has become a cultural symbol of overload and stress (Barley et al., 2011).

Another issue discussed by a few interviewees was that social media may lead to developing unrealistic expectations of oneself which is especially dangerous for youngsters. They also make it more difficult to detach from unpleasant and harmful experiences e.g. bullying:

"I think as good as social media is, I think it's taken away children's their childhood, they, they're too alert to what's going on-line, the bullying goes on-line, it's, uhm...2 [P25]

The Internet may also endanger other resources. For instance, one participant explained how he was constantly exposed to on-line offers which may coax him to spend more and more money and put at risk of bankruptcy

#### 5.3.1.5.2. Relax in nature

Participants often described relax and relaxing activities as being close to nature and getting some 'fresh air'. Interestingly, they associated the natural environment with no work, slow pace of life and peacefulness which helped them relax and replenish resources:

[...] what might be happening is then you fall asleep in the sunshine but, but just sitting there before that is nice, water in the, in the waterfall, birds twitting out there, and bathing out there [...] [P21]

This might be a valid assumption in many cases, but it shows how the perception of the world can change. In the past, nature was probably perceived as much more perilous, and natural dangers (e.g. wild animals) were the reason why the stress response evolved (Sapolsky, 2004). Living in natural settings (as opposed to urbanised areas and civilisation advances) were idealised by participants as a perfect life, even though in reality this comes with specific risks and demands.

Sometimes, relax in nature referred to having no people around. A few participants mentioned solitude as an aspect of a no-stress situation or a stress-free life e.g.:

"Uhm, I... I like the idea of moving in a slight, in the middle of the forest, and just having a hut, and then, you know, and not complying with society, and grow vegetables, and removing that stress." [P22]

However, they often explained that this would be more of a short-term respite from social interactions rather than permanent isolation which actually would be uncomfortable or stressful for them. Interestingly, some interviewees believed that natural phenomena (e.g. weather) influence stress reactivity and coping abilities.

#### 5.3.2. The scientific perspective

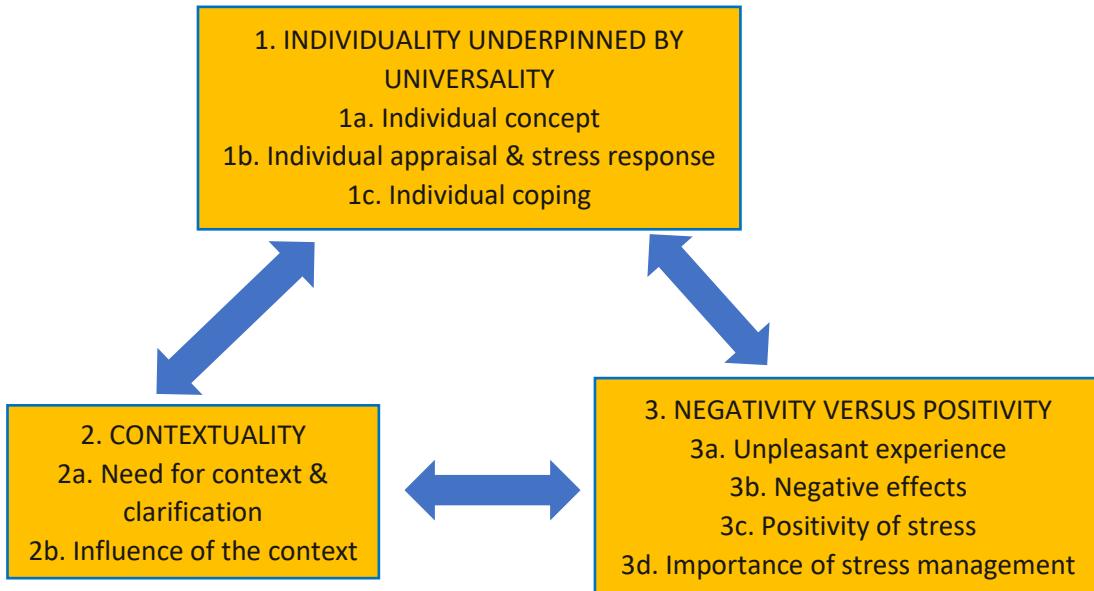
Base on the data collected through interviews with stress experts, three main interrelated themes were produced: *Individuality Underpinned by Universality, Contextuality and Negativity versus Positivity*, with three, two and four subthemes respectively (see Figure 4). Participants widely acknowledged the idea that stress is an idiosyncratic concept and a subjective multifaceted experience which varies greatly among people. All the interviewees referred more or less explicitly to Lazarus and Folkman (1984) transactional theory of stress which highlights the role of individual appraisal of a stimulus. Individuality pertains also to experienced symptoms and outcomes as well as coping strategies people may apply in a given situation. Theme table with all the quotes can be found in Appendix 14.

*Individuality* is closely related to *Contextuality*. Stress is a very broad category (both in science and lay understanding) and – as experts declared – without contextual details the term becomes meaningless. Context, understood as a dynamically changing set of specific individual and environmental variables (e.g. resources and characteristics of the stimulus), influences how people perceive a stimulus/event, how they respond to it and what the short-term and long-term effects of this interaction are. This links *Contextuality* to *Negativity versus Positivity*. While generally stress was considered to be an unpleasant experience which may have serious

negative consequences, in certain circumstances it might be desirable and useful. The effects of stress can be very individual i.e. whether it is negative or positive depends on how the person perceives the transaction between themselves and their environment. Also, the negative and positive experiences of stress may reinforce or modify the individual concept of stress.

**Figure 4**

*Themes and subthemes identified in the scientific perspective on stress*



### 5.3.2.1. Individuality Underpinned by Universality

Experts described stress as an individual experience. They talked about people holding different beliefs about stress and life. Individual goals and values vary, and so the specific experiences of stress would differ across people, time and situations. However, the interviewees acknowledged that there must be a certain degree of universality since a common understanding is necessary for the sake of communication. Also, they explained that because the acute stress response is an evolutionary-based mechanism, a specific pattern of physiological change is likely to occur in the majority of people exposed to a stimulus they appraise as stressful.

#### 5.3.2.1.1. Individual concept

According to the interviewees, the term 'stress' means different things to different people. It was described as an idiosyncratic concept, a personal construct that develops over time and is closely related to individual experience. Participants explained that lay people may highlight only certain aspects of stress, but their definitions are true and correct because they are based on the personal experience and knowledge. Researchers and clinicians are not entitled to tell people how they should feel, what they should do, or if they can label their experience as stress; it will be wrong and disrespectful:

“[...] if you ask a hundred people you get a hundred definitions. [...] some people are saying it's mental health problems, you know, mental health symptoms, somebody else's saying,

oh, it's when you get headaches, or you may [have] eating problems, they, they kind of a mix the cause and the effect, but also the moderations, and nobody's wrong. That's the thing. You know, they're all right in their own way [...]” [E3]

This intertwined with the contextuality of stress; experts emphasised that the way people understand stress in general and how they perceive any given situation would be grounded in the context: their previous experiences, current demands, available external and internal resources, genetic make-up, individual beliefs, cultural norms.

At the same time, ‘stress’ was described as a socio-cultural concept and in its broadest meaning seems to be understood widely, at least within the same cultural context. As stress is a part of human experience, people are inclined to talk about it, share their knowledge and experiences. However, because of individuality (idiosyncrasy) of stress, communication may require some negotiation of what the term “stress” means to arrive at a definition which is acceptable at a given time and within the specific context; “[o]therwise we wouldn’t be able to talk about it as part of human experience” (E7).

#### 5.3.2.1.2. Individual appraisal and stress response

Individuality is reflected in the most popular contemporary theory of psychological stress i.e. transactional theory of stress by Lazarus and Folkman (1984). All the experts defined stress in a similar way i.e. as a perceived mismatch between situational demands and individual resources or abilities to cope with these demands. This is a very broad definition which emphasises the role of individual perception of the situation, perception that depends on the context: individual needs, resources and other specific circumstances which can change over time. It also implies that no event or stimulus is immanently stressful – an individual appraises it as stressful or not:

“[...] stress just like beauty is in the eye of the beholder. Stress, I always say, is in the brain of the perceiver.” [E5]

As a result, people would respond to events in a unique, individual way. Having said that, the experts acknowledged that there is a degree of universality in the stress response:

“[...] even the most laid-back individual would respond to a very intense acute stressor in a set way. [E1]

The acute stress response has evolved as a physiological mechanism enabling an individual to mobilise resources to adapt to a specific context and it involves particular changes in the body systems that support this behaviour. Therefore, this physiological response was seen as a common denominator in stressful experiences. Notwithstanding, considering only the physiological response would not be enough:

[...] I think, certainly perception is essential. I hate these studies that just measure reaction. You know, physiological, when you actually don't get people's, uhm, perception as well. You know, all... uhm, because of course there is evidence that the two are not necessarily correlated. [E3]

According to experts, this more universal set of physiological changes characteristic to acute stress, would not necessarily apply to chronic stress which was regarded as more common in the contemporary world than immediate dangers and life-threatening situations:

“But we’ve evolved and we, and... society were... most of the stressors are not acute in that way. The small, minor stressors, I mean, become chronic [...]” [E2]

As E7 explained, stress can be defined as an appraisal of threat, but there is variability in what people see as threatening. Another expert discussed evidence that appraising situation as a threat as opposed to a challenge leads to different psychological and physiological responses (Blascovich, 2013; Lazarus, 2006; Lazarus & Folkman, 1984; Lovallo, 2016). This again links to Contextuality – individual appraisal of and a response to a situation would depend on the characteristic of the person and the environment. Furthermore, participants agreed that the stress response in humans was complex and multifaceted, not limited to physiological changes only but also including psychological (emotional), cognitive, and behavioural symptoms. From a research perspective, certain patterns can be found at a higher level of abstraction, i.e. there are some tendencies and average responses, but this is all probabilistic and might not be useful from the individual perspective:

“There is no average person you’ll ever find so that’s why the average, the mean is, is, uhm, psychologically a meaningless issue for individual” [E7]

Furthermore, as one of the experts mentioned, recent research showed that people can have blunted, moderate, or exaggerated physiological response (Epel et al., 2018; Lovallo, 2016; O’Connor et al., 2020). When compared, these three groups report the same level of psychological stress but differ in terms of physiological response, “[those with blunted response] felt really stressed out but actually their heart rate and blood pressure didn’t change much.” (E4)

#### 5.3.2.1.3. Individual coping

Stress and coping are inextricably linked – the perception of one’s ability to cope is a part of appraisal process and without perceiving an event as stressful there is no need for coping (Lazarus & Folkman, 1984). As one of the participants pointed out:

“[...] if you know what’s inhibiting you, you know the things that are causing you stress then that is a start of actually being able to do something about it.” [E7]

Experts suggested that since people differ in terms of appraising the same situation as well as symptoms experienced when they appraise situations as stressful, they are likely to have individual preferences regarding coping. Being aware of one’s own resources and ways of coping was deemed to greatly help protect against negative effects of stress. Interviewees explained that two main types of coping can be distinguished, i.e. problem-focused and emotion-focused. However, they accepted that this dichotomy is a bit oversimplifying. There is a variety of coping strategies within both categories and the two are not mutually exclusive as a specific action can both help solve a problem and address the stress-related emotions. Furthermore, there is no universal best way of coping. What works for one person may not necessarily work for another, or even for the same person on another occasion:

"There's many a way people cope, [...] you know, using an emotion-focused coping strategy could be good for you but not good for an x person. Or could be good for you today but not good the next day [...]" [E2]

Notwithstanding individuality, a kind of utilitarian approach allows for specifying certain patterns of coping and their average 'goodness of fit':

"[...] if you look at a whole sector, you need to make judgements, you know, so for most people most of the time this type of coping style may be beneficial" [E3]

Interestingly, some inconsistency was found among the participants in terms of what coping should involve. On the one hand, interviewees acknowledged individual preferences. They believed that people know what is good for them and can choose whatever they feel might be good for them:

"[...] there's a lot of stress management techniques and that's not really my bag, but, again, it is important that what's feels right for an individual is the thing that you do." [E1]

At the same time, one expert admitted that some of the coping behaviours people engage in provide momentary relief but can be maladaptive in the long term.

"So, some people may be stressed about their finances – well, you can hide the bills, forget about it. That's coping. That's, you know, that's... avoidance. It is not helpful ultimately, but it helps you to cope. That's the way in which you solved a particular problem." [E7]

Also, as another expert pointed out, people need education and help to be able to choose more functional and healthier ways of coping because:

"[...] some people choose the wrong way to cope, and they are un-adaptive, OK? [...] just because somebody likes to cope with stress by taking marijuana or drugs, that we should continue doing that? No, it's unhealthy." [E5]

A crucial point made was about acknowledging that no single coping strategy would work in every situation and for everyone. Having a choice would cultivate a sense of agency, control and hope which are important resources when a stressful transaction occurs:

"[...] what the person is encouraged to do is to find solutions which they agree to, which promotes a sense of agency, which immediately is stress controlling. You feel in control of something [...] also hopeful that if this doesn't work, there's a whole variety of other things, so hope, not feeling helpless. The actual giving someone many of options is in and of itself very, very therapeutic" [E7]

Individuality of coping refers also to individual responsibility for it. Interviewees acknowledged that developing individual coping skills plays a vital role in fostering well-being. Yet, they highlighted that researchers and clinicians should not impose coping strategies on the individual but rather they need to give people choice, let them decide what is best for them. As one of the experts explained, putting responsibility on the individual could be empowering and motivating. However, while acknowledging the subjectivity of stress and individual coping preferences, it may also promote the idea of the individual being solely responsible for their health and reinforce stigma around stress and the perception of stress as a weakness (being too weak to cope with problems or difficulties):

“[...] the blame is put on people who can't cope. [...] they're stressed so that means they can't cope. Give them a bit of stress management training [...] But it's kind of, the danger is, it's packaged as this, well, it's all your fault, isn't it? If you were only more resilient, you wouldn't be stressed.” [E3]

This has certain implications for perception of stress, coping and stress management interventions which are elaborated on in section 5.3.2.3.4. Coping was described as individual and contextual, but at the same time at least some experts emphasised that the responsibility for coping should not be placed solely on the individual. They called for a more holistic and collective action at different levels, and the involvement of the individual and their immediate (social support networks) and more distal environment (experts, policymakers).

### 5.3.2.2. *Contextuality*

Two important issues have been discussed within this theme. First, because stress as a concept and experience was seen as highly individual, it was deemed very important to provide context and be specific when talking about stress. This applied both to scientific and public discourse. Second, experts explained that there are plenty of contextual variables (personal and environmental factors), interacting with each other, which determine exposure to potential stressors, appraisal, stress response, effects of stress and the coping process.

#### 5.3.2.2.1. *Need for context and clarification*

From the experts' perspective 'stress' is a generic term, a broad category comprising various issues rather than a single, specific concept. On the one hand, this may be useful as a catch-all phrase because:

“[...] stress is the central component of the whole discipline. It impacts everything that we do.” [E2]

On the other hand, interviewees acknowledged that the term 'stress' has become a very broad label and has been used in the scientific discourse to denote a wide range of issues:

“[...] it's an umbrella term that covers so many different things. It covers the, uhm, predictors, it covers the outcome, it can cover the mechanisms in between. Uhm, it can refer to affective well-being, it can refer to burn-out, anxiety, depression, uhm, if you're looking at the specific impact, the outcomes, the impact on the individuals.” [E6]

They also suggested that in the lay discourse 'stress' serves as a metaphor for general suffering, unhappiness and dissatisfaction (cf. Helman, 2007).

The fact that 'stress' can mean anything and everything may create a lot of confusion and lead to the concepts of stress and coping being misinterpreted both by professionals and lay people. As one of the participants put it:

“So in fact there's huge, huge, huge misunderstanding, and misuse and abuse of concept among professionals, even among doctors, professors, psychologists, psychiatrist. [...] and then they convey to lay people misused concept.” [E5]

According to experts there can be no “one definition” (E5), “universal definition” (E7) or “a unifying theory of stress [because] [...] it would be so big” (E3). However, in general, interviewees

highlighted the need for clarification and strongly recommended careful operationalisation of the variables when doing research and disseminating the findings. As participants mentioned, stress can be researched from different perspectives: events (stressors), biological or psychological responses, longer-term outcomes etc., but it needs to be defined every time it is used. Interviewees recommended scientists should be very clear about what they mean, distinguish between stressor and strain (cause and effect), and not label different components of a stressful transaction with the same name. Talking about stress without specifying the meaning of the term, and providing specific context renders the term meaningless:

“And so we first need to distinguish between a stressor, the situation, and the stress response, these are two different things. [...] We can’t say ‘oh, you’re in stress’ – does that mean the event, or the response? We have to be clear what do we mean, first of all.” [E5]

One of the participants even suggested that using the term ‘stress’ actually hinders research because “it’s a blanket that masks many important things that maybe we should be talking about.” (E6). Experts were not alone in their comments about the confusion related to ambiguity of the term ‘stress’. Over the last few years there has been a heated debate on what the term ‘stress’ means, and what it should be applied to (Cohen et al., 2016; Cohen et al., 2019; Kagan, 2016; Segerstrom & O’Connor, 2012; Slavich, 2019, 2020).

#### 5.3.2.2.2. Influence of the context

Contextual variables participants talked about can be divided into two groups: personal characteristics and environmental factors. The former category comprises of biological and psychological attributes such as genetic make-up and physiology, temperament and personality, previous experiences, needs, preferences, lifestyle, and internal resources such as current condition (e.g. health, robustness, energy level), resilience, skills and abilities. The other group consists of characteristics of the stimuli, socio-economic environment, cultural norms and expectations. All these variables can interact with each other and make a person vulnerable to stress and modify the risk of negative effects of stress in line with the biopsychosocial model (Engel, 1977; Lutgendorf & Costanzo, 2003) and more recent theoretical frameworks of stress (Epel et al., 2018).

As mentioned before, stressfulness is not an immanent characteristic of an event or situation. Participants highlighted that it is an individual who appraises the event as stressful or not. This appraisal depends on the context and can change over time because the context has changed. An individual can get stressed only over things that matter to them (Lazarus & Folkman, 1984). People acquire new skills, gather or replenish resources, their personal preferences, goals, values, environment and economic situation change in different ways, so:

“One day it might be challenging, the next day it might be threatening depending on context, and, and how they’re perceiving their resources at the time.” [E4]

Certain events, even if generally seen as negative e.g. a death of a close relative can “come as a blessing” (E3) depending on the context.

Environment was regarded as a source of stressors as well as resources. Interviewees suggested that socio-economic status, education level, and deprivation may increase exposure to stressors and affect stress reactivity:

[...] individuals from the lower social groups are, you know, they have differential exposure and differential vulnerability [...] [they] cope with stress in addition to that they are also exposed mostly to more noxious environments which means it's more damaging for them all the time. [E2]

Particular events and conditions are more likely in some contexts than others. One of the interviewees, E3, talked about her research in two different professional groups: academics, and prison officers. For the former effort-reward imbalance and change fatigue turned out to be common stressors, while for the latter group exposure to drugs was an important issue. This expert concluded that general models of job stress (e.g. job demands-control model (Karasek & Theorell, 1990)) can be useful to explain the effects of stressors and stress responses, but they might need to be complemented with specific, contextual issues relevant to specific groups (e.g. occupational group, caregivers) to provide a more complete picture.

Participants discussed different characteristics of stressors which may influence the stress response and modify the effects of a stressful transaction. One of these was chronicity of the stressor. Exposure to ongoing demands and therefore constant diminishing of resources without any opportunity to recover may lead to serious negative consequences which is consistent with allostatic load theory (McEwen, 1998, 2016). Other important aspects were the type and severity of the stressor. While experts acknowledged that it is always the individual who appraises an event, they distinguished different categories of stressors: natural catastrophes, life-threatening situations, major life events, and daily hassles.

Importantly, according to interviewees different stimuli may interact with each other and increase both intensity and duration of the stress experience. Acute stressors are short-term by definition but if a person was exposed to a series of acute stressors, the stress response would be activated time and again or switched on all the time and "repeated acute stressors could actually lead to a feeling of chronic stress" (E1). Furthermore, a response to a stressor as well as an outcome of a stressful situation can become a new stressor, e.g.:

[...] people that have heart attack, and then they have unemployment. Unemployment is the stress response. Or the outcome, rather. They're depressed [...] But the fact they're having unemployment, or depression, can be another, new stressor that they need to deal with. [E5]

There can also be "a cascading effect" (E2) as the big stressors, such as major life events, amplify minor, daily stressors and make them less bearable (cf. Segerstrom & O'Connor, 2012).

Another contextual variable that, according to experts, plays a vital role in appraisal and coping is social support which might be limited due to either internal or environmental/external reasons (e.g. mobility issues or geographical location). Interviewees suggested that to be effective, the support received must match the individual's needs both in terms of amount and

frequency and type of support. Apparently, ‘too much of a good thing’ may produce negative or undesirable effects:

“too much social support can be distracting, it, uhm, then reinforce negative things like gossiping, for example, and so on” [E6]

Contextuality applied also to dispositional stress reactivity, i.e. the capacity or tendency to respond to a stressor. Participants generally agreed that it may have a genetic component when it comes to physiological response. However, they also mentioned that the specific context or environment at least to some extent determines the response. By definition, a response requires a stimulus to occur so stress-free life “[...] would suggest somebody lives in an extraordinarily cleansed environment [...] no changes in environment, there’s no situation where to lose control, uhm...” (E2).

Also, experts explained that stress reactivity (in terms of cortisol secretion) is likely to be shaped by early adversities which are more likely in low socio-economic status families and neighbourhoods (Chen & Miller, 2012). Furthermore, context also influences the coping process and its effectiveness. Participants suggested that coping skills are learnable, and so previous experience may lead to better coping. Models and social norms may also promote certain coping strategies, and particular ways of coping may be more appropriate in a given situation. There is a general agreement in the literature that problem-focused coping should be applied to controllable stressors, while emotion-focused is better when the stressor is uncontrollable (Biggs et al., 2017; Stephenson et al., 2016). One of the interviewees confirmed it explicitly:

“So use the problem-focused coping in changeable situations, emotion-focused coping like denial and meditation, relaxation in uncontrollable situations – a lot of data supporting that.” [E5]

#### *5.3.2.3. Negativity versus Positivity*

Terminology employed to talk about stress definitely carries negative connotations. Participants used words such as unsettling, perturbing, disturbing, noxious, damaging, and disrupting. ‘Strain’ applied to talk about outcomes of stress implies some kind of destruction, damage or injury. In the lay discourse ‘stress’ has become a label or any negative experience, unwanted situation or undesirable outcome (cf. Helman, 2007). This was also confirmed by experts:

“It’s a very popular way of explaining practically anything that you can think about which is negative and you don’t like.” [E3]

Participants discussed various negative effects of stress but acknowledged the positive effects as well. They explained how the stress response can be adaptive. Short-term stress can be beneficial; however, extreme and/or chronic stress and overactivation of the stress response are most likely to bring negative outcomes in terms of health issues, problems with social relationships, and poor performance. Negativity and positivity of stress link to individuality and variability as well as contextuality. Context influences appraisal, response and coping strategies

which vary across individuals and situations. All this determines whether the effects of stress will be negative or positive:

"Uhm, because stress can be inhibitory to change as well as facilitating the change, and it's all to do with individual's, you know, interpretation of what that actually means to people and then in a particular sort of time." [E7]

Moreover, as experts noted, a stress-free life is impossible. Therefore, stress management was deemed crucial to maximise the benefits and avoid or mitigate the negative effects..

#### 5.3.2.3.1. Unpleasant experience

It seems that stress (an experience) is negative by definition. Participants declared that they follow Lazarus and Folkman's (1984) theory which describe stress with such phrases as "taxing resources" and "endangering well-being". Interviewees referred to stressors as "noxious things" (E2), unpleasant, undesirable, threatening, irritating or harmful stimuli which are unsettling psychologically and/or physiologically.

Experts related stress to major negative life events e.g. a death of a close relative but experiencing stress was also linked with unpredictability, novelty, change and need for adjustment (which can involve positive events as well), 'having too much to do', long working hours, and quick pace of life. These events and circumstances require resources and potentially create feelings of being overwhelmed, out of control, unable to cope, powerless, and helpless, all of which are unpleasant and undesirable. 'Stress' was commonly described in terms of negative emotions as well as unpleasant cognitive effects and physical sensations (worry, unhappiness, tension, fuzzy thinking, etc.). Participants pointed out that questionnaire-based studies of stress often include self-reported measures of anxiety and tension as indicators of acute stress response

#### 5.3.2.3.2. Negative effects

It was widely acknowledged that stress produces various negative outcomes and in general is detrimental to well-being. Participants provided different examples of how stress can impact an individual's life. It may result in lack of energy and fatigue, problems with concentration, decision making, and controlling impulses, reduced work ability and engagement. It may also negatively influence interpersonal relationships and social life as people who experience stress may be snappy and unpleasant to others or withdraw and isolate themselves from others. Most importantly, as all the participants reported, stress affects health in terms of increasing likelihood of illnesses, precipitating development of and exacerbating both physical and mental health problems, as well as delaying recovery.

As described in chapter 1 a plethora of research (e.g. Cohen et al., 2019; Lovallo, 2016; O'Connor et al., 2020) links stress, though operationalised in many different ways, to both physical and mental health issues. The experts discussed these links in detail in relation to minor health complaints, and more serious issues such as inflammatory diseases, cardiovascular problems, cancer, and diabetes. Stress was also considered a precursor to serious mental health problems such as depression and anxiety disorders, as well as a factor involved in addictions and eating

disorders. Traumatic stress was also reported to result in post-traumatic stress disorder. Interviewees explained that two pathways can be distinguished to explain how stress can lead to ill-health, e.g.:

“[...] [stress] directly influences biological systems, it puts extra strain on them, and indirectly it modifies particularly health behaviours.” [E2]

They made it clear that appraising a situation or event as stressful triggers a complex cascade of physiological changes in various body systems including nervous, endocrine, cardiovascular, and immune. Activation of body systems in the course of the acute stress response was regarded as a natural reaction, an attempt to adapt to environmental demands. Notwithstanding, too frequent, or too long/constant activation was described as leading to dysregulation of the whole system, possibly resulting in health problems:

“So the same physiological things occur but because, you know, we’re experiencing them for much longer period of time, the effects of these hormones long-term has huge devastating effects in terms of laying, depositing fat in our arteries, and increasing risk of cancer and so on, affecting our brain structural functioning.” [E7]

This is consistent with Selye’s (1978) GAS (exhaustion stage) and allostatic load theory (McEwen, 1998, 2016; Sterling, 2012) to which two participants referred explicitly.

Problems with the immune system were one of the most commonly discussed negative effects of stress on health. Interviewees explained that stress influences the immune system at the cellular level. It may change the response to vaccination, affecting cytokinetic production, and neutrophil effectiveness, increase the risk of infections, and exacerbate systemic inflammation. At least some of these effects are related to cortisol which was considered to be “a primary stress hormone” (cf. Chrousos, 2009; O’Connor et al., 2020). However, participants explained that the links between stress, cortisol, and health are complex. While with acute stress cortisol level tends to increase, chronic stress may eventually lead to lower levels of cortisol because of impaired feedback mechanisms.

Some experts discussed the research on stress reactivity as measured by the cortisol response. It revealed that people differ in terms of how much cortisol they release in an acute stress situation. Neither blunted nor exaggerated stress reactivity turned out to be good for health:

“[...] blunted stress reactions, and that they’re bad for your health as well as the exaggerated ones... and they’re related to obesity, and depression, and all those things I just listed, anxiety, uhm, what else, like a whole million tonnes of it [laugh], impulsivity, addictions, eating disorders, uhm, exercise dependence, smoking, like loads of different things.” [E4]

According to the participants, people with an exaggerated response are at higher risk of cardiovascular problems (e.g. hypertension) and other health issues because their immune cells do not produce enough antibodies. Blunted reactivity, on the other hand, characterised by low cortisol levels, impairs anti-inflammatory processes (E4). It has been also found in people who have attempted suicide (E2).

While this direct, neuroendocrine pathway was often linked to physical health, experts also discussed how stress affects functioning of the nervous system and may contribute to mental health disorders. In the case of extreme stress, post-traumatic stress disorder is likely to occur, and as E5 explained, in people with PTSD limbic regions are overactivated, while the prefrontal cortex is not active enough. Literature also shows that stress may disrupt serotonin systems in the brain which is characteristic to depression (Lovallo, 2016) and that prolonged stress may lead to chronic inflammation which may result in development of depressive symptoms (Miller & Blackwell, 2006; Slavich & Irwin, 2014).

Experts also discussed an indirect pathway linking stress with ill-health which involves unhealthy behaviour such as unhealthy eating, smoking, drinking alcohol, and insufficient physical activity. These may be ways of coping through regulation of negative affect (e.g. drinking to relax) but stress-related physiological changes also play a role. Cortisol was considered to be the villain in this case. As mentioned previously, non-moderate cortisol response was related to unhealthy behaviour, e.g.:

“[...] individuals who [...] release more stress, cortisol to an acute stressor in the lab, they are subsequently in the real world [...] when these individuals encounter daily stressors, they’re significantly more likely to eat high-fat food.” [E2]

However, the links between stress and unhealthy behaviour were described as complex and modified by various factors, both physiological and psychological. One of the experts explained that stress hormones were likely to interact with other hormones such as leptin and ghrelin which are directly responsible for controlling appetite. Another hypothesis was that cortisol affects the brain and impairs executive function leading to lower control over impulses and behaviour. Therefore, stress can make cravings for unhealthy foods or other substances less controlled and possibly result in binge eating, or alcohol consumption. One of the interviewees elaborated on the role of conscientiousness in keeping up a healthy lifestyle despite experiencing stress. Highly conscientious people are more likely to exercise even on the days they encounter many stressors. What is more, self-control, as an aspect of conscientiousness, helps inhibit unhealthy behaviours such as unhealthy eating, drinking or smoking which are common responses to stress. The negative effects of stress are therefore dependant on contextual variables as well, such as personality traits

#### 5.3.2.3.3. Positivity of stress

Participants agreed that stressors are usually perceived as negative (even though objectively an event might be considered positive), because they strain the individual's resources or put important goals or values at risk. However, the stress response is not necessarily negative if it is appropriate to the context. The tendency to defend and protect oneself was deemed completely natural. As long as the response is elicited only when it is required because of certain demands or threats and shuts down as soon as the danger passes, it is desirable and adaptive:

“So, if, if the situation requires that you mount a stress response that help you deal with that then that’s good. If the situation doesn’t warrant those, those responses then that’s bad.” [E1]

The idea of a short-term stress response being normal and beneficial was one of the issues the interviewees wanted the lay public to understand. Stress was depicted as potentially harmful and experts explained that if it gets overwhelming there is no point in waiting until it results in severe health problems. Nonetheless, stress can be motivating. Several participants referred to Selye's (1978) concept of eustress or Yerkes and Dodson (1908) laws on arousal and performance. Assuming that appraising a situation as stressful results in increased arousal and mobilisation of resources, there is a certain level of stress essential to do one's tasks and achieve goals:

"[...]if you have too little challenge in your life, let's say, you're gonna be really bored and you're gonna be really bad at what you do, and you can be really, really unhappy. Whereas if you've got too much of it, obviously you're gonna be over, over-aroused, and your performance, your happiness, whatever, is gonna be a problem." [E3]

Participants mentioned other positive effects of stress. For instance, demands perceived as stressful can foster learning and adaptation (e.g., at work) provided an individual has enough resources to meet these demands. This is consistent with learning hypothesis by Karasek and Theorell (1990). Also, in certain contexts, e.g. highly competitive environments of professional sport or higher management, a stress response may give an individual a certain edge. Stress may promote changes, and, if not excessive, it helps the individual acquire and master coping skills in case something more difficult happens. Even traumatic stress may lead to some positive effects, a phenomenon described in literature as adversarial growth, benefit-finding, or post-traumatic growth (Joseph & Linley, 2010; Tedeschi & Calhoun, 2004). Experts highlighted that stress is inevitable; there would always be some changes in the environment to adapt to, expectations to meet, needs to satisfy, and so developing coping skills – being able to recognise possible threats and respond to them – was of paramount importance. Living a sheltered life, experiencing no stress whatsoever, may leave the person with no abilities to face any problems:

"What we really need is a small amount of stress in throughout our lives to inoculate us against it. But if you're 40 and you've never experienced any problems, and all of a sudden something happens to you, you know, you don't have coping skills then, do you?" [E3]

Despite these positive aspects and attempts to normalise the idea of stress, it was commonly pictured as negative and having to be monitored, controlled or reduced. Participants emphasised that the stress response is a natural process. Yet, the language they used created a contradictory image implying that stressors and stress interfere with normal life, they "perturb" (E4) "destabilise" and "take out of the equilibrium" (E5), and after a period of stress rest is necessary to "get back to normal" (E1). Interviewees accepted the idea of positive stress but as one of them put it:

"I have no problems with eustress as a concept, I mean, just the reality is that [...] the stuff damages people. So therefore, I'm less concerned with the positive aspects because I have got business as usual... for functioning, adaptive human-being." [E2]

#### 5.3.2.3.4. Importance of stress management

As experts explained, stress is inevitable in human life and it can lead to positive or negative outcomes. One of the crucial aspects influencing the positivity or negativity of stress are the level and duration of stress. Participants suggested that a certain amount of stress can be useful; however, intense or prolonged stress was described as detrimental. They recognised that stress management plays a vital role in keeping stress in check, maximising the positive effects and avoiding or mitigating the adverse effects.

Interviewees confirmed that person can employ different strategies and techniques to manage stress (Biggs et al., 2017; Folkman, 2011; Skinner et al., 2003) and it is important that people develop coping skills and are aware of the variety of coping techniques they can apply (Mental Health Foundation, 2018). Consistent with allostatic load theory (McEwen, 1998, 2016), experts widely acknowledged that excessive or frequent stress may result in dysregulation and/or re-setting of body systems and, consequently, ill-health. Thus, recovery was often highlighted as crucial for well-being. Interviewees explained how it helps the body to downregulate after a period of activation and replenish its resources. It may also promote better coping in the future:

“A period of re-appraisal of what happened when we experienced that stressor. So that the next time you encounter it, you can hopefully think ‘have I done this before?’” [E1]

In the long term, healthy lifestyle, self-care, and self-compassion were recommended to mitigate negative effects of stress. These not only help avoid overactivation of body systems through lower exposure to stressors, but also promote physical fitness and psychological resilience, making people less susceptible to stress-related health problems.

Another important issue discussed by participants was flexibility in the stress response i.e. ability to switch it on and off depending on the situational demands and individual needs. People may have a limited control over physiological reactions as the changes in the body systems are involuntary to a great extent. However, participants mentioned certain methods of training the body to activate and de-activate the stress response more swiftly. One of these was a special breathing technique stimulating the vagal nerve which plays an important role in the stress response:

“It enables us to have the stress response because we need to. But it enables us to resume to how we were before faster if our vagus works well.” [E5]

Physical activity was recognised as another way of increasing vagal activity, and thus developing more flexibility in the stress response. It was also reported to help reduce stress in other ways. It releases endorphins “in the brain sort of making people perceive less stress” [E4] and may help develop social networks which provides valuable resources. Social support was commonly discussed by the interviewees as a factor protecting against experiencing stress and mitigating its negative effects.

Because of the contextuality of stress, different ways of coping may be appropriate in one situation but not another. Therefore, flexibility in coping was deemed crucial from the wellbeing

perspective. Participants explained how knowing and being able to use various ways of coping was an important internal resource which increased the likelihood of successful coping or stress management:

“[...] people should have, should have a stress coping toolbox [...] where they choose what is the best thing for them.” [E2]

In general, experts emphasised that stress management does not have to involve complex or sophisticated methods, or medication. They discussed simple techniques (e.g. time management, physical relaxation, meditation, breathing exercises, re-appraisal, basic physical activity) that an individual can learn and use to their own advantage. However, experts also acknowledged that sometimes external help is necessary. It is also dependent on the context, as the person should select the right strategy for the situation they are in. Participants recognised that even if an individual possesses certain coping skills, they might not be able to apply them due to external factors. As the environment is a source of both stressors and resources, a systemic change might be necessary which requires involvement of other people at different levels (e.g. management in the organisation, community, policy makers etc.).

Thus, more collective actions and promoting shared responsibility were deemed crucial, especially that “a lot of the time the reason why people are stressed aren’t because of them at all. It’s because of the organisation.” (E3). The organisations have a “moral duty of care and legal duty of care” (E3) and they “can’t just bring in training courses and tell you to go off and sort yourself out.” (E4). Collective actions may involve designing better jobs, changing policies and modifying cultural expectations that put unnecessary pressure on people:

“You need to focus on improving jobs, designing better workplaces, and so on. Not on changing individual’s, uhm, character, traits and so on.” [...] if you improve jobs, improve the working conditions, then you have a chance to influence more people than if you’re focusing on individuals one by one. [E6]

Moreover, experts explained that socio-economic circumstances play a huge role in stress which implies that improving living and working conditions, access to education, healthcare and other resources would be of paramount importance. This requires actions at both community and societal levels (Mental Health Foundation, 2018). Still, interviewees emphasised that individual involvement in stress management cannot be downplayed. A participatory approach is vital in designing successful stress management interventions. Furthermore, experts recommended that everyone should develop coping skills because they help people manage the situation and themselves to stay motivated but not cross “a tipping point after which it becomes negative” (E6).

Interviewees highlighted the need for education and awareness raising which require collective action and systemic changes. According to experts, it is important that people know what the mechanisms of stress are, and that stress can be harmful. However, while knowing that stress can lead to ill-health was seen as instrumental in avoiding excessive stress, participants also recognised the dangers of creating a negative image of stress and people who experience it. They realised that stress had been negatively portrayed in the media and public discourse which had contributed to stigma and perceiving it as abnormal. One of the experts pointed out

that stigma about stress had been reduced over the last few decades, but others acknowledged that stress still had a rather bad image and people, even the experts, tended not to show they are stressed in public:

“But of course, in my head it's like pull yourself together, for God's sake, you know, you don't want people to think you're weak, and, you know, hope, hopeless and people to feel sorry for you. You know, I've got a reputation to keep up for God's sake.” [E3]

At the same time, interviewees clearly refuted the idea that experiencing stress is a result of some personal weakness and explained it should not be considered shameful to feel stressed. They suggested that the negative image of stress would need changing to enable people to disclose their problems and get help when needed. Education at schools, from the very beginning, was deemed necessary to create a healthy self-care culture. Nonetheless, it was also emphasised that people at any age can learn, and should be taught about symptoms of stress, its effects, and coping strategies. Experts advocated that people should be able to recognise their stress levels, their triggers and stress responses to “understand why they're feeling what they're feeling” (E2). They also need to be able to identify their resources and be aware of what can be done about stress at various levels:

“So the insight into a) the experience of stress, and b) what is causing you stress, and then what you can do about it is a very, very powerful package. [E7]

#### 5.4. Differences between lay and scientific perspective

The two perspectives on stress overlapped to a great extent. These similarities were expected to a degree based on the fact that lay theories are closely linked to scientific theories (Furnham, 1988). Previous studies (e.g. Furnham, 1997; Idris et al., 2010; Kinman & Jones, 2005; Rydstedt et al., 2004; Souza-Talarico et al., 2017) clearly showed that lay and scientific understanding of stress are not completely unalike, yet there might be certain differences between the two.

The similarities uncovered in this study, might stem from the fact that stress is a generic and – at the same time – highly personalised concept which can be applied to a variety of issues, and both groups provided a broad range of information on the subject. Also, it is likely that the lay participants already had some scientific knowledge about stress and this could have affected the data collected in study 1. However, the data is still representative of the ‘lay’ perspective, based on the definitions introduced in chapter 4; lay people may possess some specialised knowledge (Entwistle et al., 1998) and research-based facts are often incorporated into lay theories (Furnham, 1988). Stress is a popular topic widely covered in the media and popular science books which disseminate research findings to the general public. Furthermore, psychological research is deeply grounded in lay people's experiences and the research studies findings – which obviously inform scientific theories – reflect what the general or specific population think and feel. In this study, both groups emphasised that stress is an individual concept and experience which depends greatly on the context. They acknowledged the inevitability of stress and discussed various coping strategies. They also talked a lot about negativity of stress, and – to some extent

– about positive aspects of it. Lay and expert understandings of stress were surprisingly consistent at a general level; however, two specific discrepancies were identified.

Firstly, whilst the lay public considered links between stress, unhealthy behaviour, and mental health, they showed less awareness of a direct path between stress and physical health. They associated stress with unhealthy eating and using substances as well as limited physical activity and self-care which may contribute to ill-health. Also, they acknowledged that stress may lead to mental health issues. Lay participants recognised physiological symptoms of the stress response but did not connect them to physical health problems other than tiredness. Only a few mentioned more serious physical health issues, but even they were not entirely sure about their links with stress. Experts, on the other hand, discussed neuroendocrine changes and explained how stress can affect different body systems referring to allostasis and allostatic load theory (McEwen, 1998; Sterling, 2012; Sterling & Eyer, 1988) and their own research on biology of stress and psychoneuroimmunology. Therefore, there is a need to promote understanding of the links between stress and health beyond the indirect path.

Secondly, lay discourse highlighted individual responsibility for experiencing stress and coping, whereas social determinants were much less salient. It was very clear from the lay interviews that people take individual responsibility for stress and coping. This may lead to self-blaming and exacerbating stress as well as reinforce the stigma of stress as a personal weakness. While lay participants talked about financial issues and social support, they approached it from an individual perspective, not a higher community, organisation or society level. Only a couple of lay interviewees discussed sociocultural pressures and resources. However, the existing literature highlights the interplay between biological, psychological and social factors in health and disease (Engel, 1977; Lutgendorf & Costanzo, 2003). Recent developments in theory of stress also emphasise the role of contextual (both individual and environmental) factors (Epel et al., 2018). The experts acknowledged the role of individual coping skills but also emphasised collective responsibility for stress management. There is also a huge body of literature corroborating the role of social determinants and external resources in stress prevalence and effects (e.g. Avison, 2016; Levi, 2017). While understanding that stress might be self-inflicted and that individual coping skills are instrumental in promoting well-being, there seems to be a need to shift the perspective slightly. People need to recognise the importance of socio-economic circumstances and a more holistic approach to stress management which involves both individual and collective responsibility.

Finally, the interviews revealed a negative picture of stress. Technically, there was no discrepancy here, as both lay participants and experts agreed that stress is an unpleasant state caused in most cases by undesirable or uncomfortable events or situations. They also talked about various negative effects of stress on well-being and productivity. Metaphorical expressions used in both groups had negative semantic prosody (e.g. be stuck in, confused, impact, overloaded, overwhelming, under pressure). Some lay and expert interviewees acknowledged the positive role of stress. However, it was much less present and addressed from a rational and

logical perspective. In many cases, stress was more of a necessary evil rather than a real positive experience of pleasurable engagement in a meaningful situation (Nelson & Simmons, 2003a; Simmons & Nelson, 2001). Only a few lay participants admitted that they enjoy stress, business or pressure, one also talked about flow (Csikszentmihalyi, 1990). In general, stress was equalled with distress and its positivity lay in the fact that it makes people deal with demands that cause them stress, and thus eliminate the unpleasant stress-related feelings. Positive perception of stress might not be so deeply grounded in everyday language because stress has been traditionally viewed as negative (distress). The notion of eustress is much less popular in both lay and scientific discourse (e.g. Nelson & Simmons, 2005). While stress – especially excessive – may be harmful, there is a need to create a more balanced perspective. According to recent developments in stress research, people would benefit from being aware of detrimental effects of stress, but a positive mindset regarding demands and stress can optimise the stress response, leading to reduced distress and better health and performance (Crum et al., 2017; Crum et al., 2020; Crum et al., 2013).

In summary, this chapter presented the results of the interview-based study looking at the lay and scientific understanding of stress. Five and three interrelated themes were found in the data collected from the members of the lay public and stress experts respectively. Many consistencies were noted in the two perspectives; however, two discrepancies were identified in the interviews. Furthermore, a review of the existing literature identified a third difference between public and scientific understanding of stress. Study 1 findings informed the design of study 2 in which the lay perspective on stress with particular focus on metaphors was further explored (chapter 6). They also served as the basis for the development of the metaphorical descriptions and a survey used in testing the effectiveness of metaphors as a science communication tool as described in chapter 7.

## 6. Study 2. LEGO® models and metaphors of stress

### 6.1. Introduction

Study 1 revealed specific discrepancies between the lay and scientific perspective on stress. Namely, while experts outlined neuroendocrine processes underlying links between stress and health in line with allostasis and allostatic load theory (McEwen, 1998, 2016; Sterling, 2012; Sterling & Eyer, 1988), lay interviewees were less aware of this direct pathway between stress and health. Also, lay participants focused mainly on demands and resources at the individual level. While this reflects understandable reference to their own specific experiences, the findings highlighted a need to promote understanding of more environmental factors (such as built and physical environments, cultural, economic and political factors) which can also influence stress process and human health (Epel et al., 2018; Levi, 2017). Furthermore, both lay people and experts tended to focus on the negativity of stress. However, the recent advancements in stress research emphasise the importance of acknowledging both positive and negatives sides of stress and developing a more balanced attitude which enables individuals to optimise stress responses is needed (Crum et al., 2020; Jamieson et al., 2018).

Conceptual metaphors are a part of cultural models (Quinn & Holland, 1987b) or lay theories (Hauser et al., 2017), thus identifying them can help understand the lay perspective on stress. They help explain individual experience of pain (Bullo & Hearn, 2020; Munday et al., 2020) and disease (e.g. Demjén et al., 2019; Gibbs & Franks, 2002; Hommerberg et al., 2020; Sinnenberg et al., 2018). What is more, metaphors have been shown to be an effective tool in communicating science to the public and improving or changing perspective on a range of issues e.g. resilience (Kendall-Taylor & Haydon, 2016), child abuse and neglect (Kendall-Taylor & Stanley, 2018), and executive function (Kendall-Taylor et al., 2013), diabetic parameters (Naik et al., 2011), biology of pain (Gallagher et al., 2013). Metaphors have the potential to be involved in reappraisal and mindset interventions which help optimising stress responses (Brooks, 2014; Crum et al., 2020; Hu et al., 2018; Jamieson et al., 2018). They are often used in therapy (Blenkiron, 2005; Killick et al., 2016; Levitt et al., 2000) and have specific implications for reasoning about and coping with stressful situations such as serious illness (Barry et al., 2009; Hendricks et al., 2018).

The literature on the lay perspective and metaphors of stress is relatively scarce (e.g. Brown, 1999, Helman, 2007, Kilby et al., 2020). However, metaphors allow for better understanding of the lay perspective on stress, and can guide the development of metaphorical descriptions to use in educational and therapeutic interventions. Therefore study 2 was designed to explore verbal and visual metaphors that are used by the lay public use to conceptualise stress. The research question that the study set out to answer was:

- 1) What conceptual metaphors do lay people use to think about and discuss stress?

The verbal and visual data was collected in a series of workshops based on LEGO® Serious Play® (LSP) process. This data was analysed with a combination of systematic metaphor analysis (Schmitt, 2005) and thematic analysis (Braun & Clarke, 2006).

## 6.2. Method

### 6.2.1. Participants

Twenty-four (8 male) members of the local community (people living in South-West England) took part in six workshops (3-6 people per workshop). The first workshop was conducted to pilot the procedure. All three participants agreed that the procedure and workshop structure were fine. They also signed informed consent where they permitted the author to include their data in the analysis. As no changes were introduced to the workshop scenario after the pilot workshop, the data from these first three participants was incorporated into the data set. All participants were native speakers of English and aged 18 to 52 years (see Table 3). Fourteen were students, the remainder worked full-time ( $N=8$ ), part-time ( $N=1$ ), or were retired ( $N=1$ ). Eleven participants had pre-university education (A-levels or equivalent), 5 had an undergraduate degree, and 8 a postgraduate degree. The workshops lasted for approximately 2-2.5 hours and participants were reimbursed with £20 in cash. The study was approved by the Bournemouth University Ethics Research Committee (ref. id. 27426)

### 6.2.2. Data collection<sup>2</sup>

In this study multimodal data was collected throughout the LEGO workshops which applied the LSP process in practice and followed the six-step scenario mentioned in chapter 4. Below is a detailed description of each part:

*Part 1: Introduction.* After greetings and participants taking seats, there was a short presentation to remind participants of the basic rules (anonymity, confidentiality, the right to withdraw, audio-recording and photographs of the models) and provide an overview of the workshop. It was explained that (1) LEGO was chosen as a visual aid for discussing the concept of stress because it promotes creativity and fun, (2) everything including shapes, sizes, colours can be used to convey some meaning, and (3) participants decide what the bricks in their model mean. Each participant had a similar set of LEGO bricks at their disposal (LEGO Serious Play Starter Kit). There was also a large pile of two sets of LEGO People Pack (61034) from which all participants could choose whatever they wanted.

*Part 2: Warm-up.* Participants were given five minutes to build whatever they liked and describe their model briefly (these were often quite literal and concrete, and included vehicles, towers or other constructions, animals, and people (LEGO figurines). This aimed to re-fresh and develop LEGO building skills as well as make people more at ease when speaking to the group. Even

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<sup>2</sup> The content presented in sections 6.2.2. and 6.2.3, as well as a part of the second paragraph of section 6.3 were originally included in a paper by Wezyk, Arden-Close, and Turner-Cobb (2020) published in Qualitative Methods in Psychology Bulletin

though most people were familiar with LEGO (only one participant had never played with it) all welcomed a short practice, after which they declared themselves to be comfortable with using LEGO bricks. Part 2 of the warm-up introduced the idea of using LEGO to represent more abstract ideas. To this end, participants were asked to re-build their models ‘to depict how they usually feel on a Friday evening’. This allowed participants to create more metaphorical models and get used to talking about abstract concepts.

**Table 3**

*Demographic Information of the LEGO® Workshops Sample*

Participant ID	Gender	Age (years)	Education	Occupational status
W0P1	Female	28	postgraduate	student (working)
W0P2	Female	49	postgraduate	full-time job
W0P3	Female	26	postgraduate	full-time job
W1P1	Female	32	postgraduate	full-time job
W1P2	Female	41	postgraduate	part-time
W1P3	Female	35	further education	student (working)
W2P1	Female	39	postgraduate	student (non-working)
W2P2	Female	18	further education	student (non-working)
W2P3	Male	18	further education	student (non-working)
W2P4	Male	27	postgraduate	student (working)
W3P1	Female	44	undergraduate	full-time job
W3P2	Female	20	further education	student (non-working)
W3P3	Female	52	undergraduate	retired
W3P4	Female	49	undergraduate	full-time job
W3P5	Male	18	further education	student (non-working)
W4P1	Male	43	further education	full-time job
W4P2	Female	48	postgraduate	student (working)
W4P3	Female	21	further education	student (working)
W4P4	Male	23	further education	full-time job
W4P5	Male	18	further education	student (non-working)
W4P6	Male	50	undergraduate	full-time job
W5P1	Male	18	further education	student (non-working)
W5P2	Female	38	further education	student (non-working)
W5P3	Female	24	undergraduate	student (non-working)

*Part 3: Joint mind-map.* This activity aimed to prompt different ideas and concepts related to stress. Participants were instructed to think about stress and create a joint mind map on a whiteboard with the main node of ‘stress’. They wrote their own ideas and linked them to the main node as well as to others’ ideas without talking to each other. After 10-15 minutes when participants deemed the mind map to be complete, the facilitator summed up these ideas, asking for explanations and further elaboration when needed. Participants discussed their own and

others' ideas and were allowed to add things to the map if they felt something important was missing.

*Part 4: Building LEGO models.* Participants were asked to build a model which represented their idea of stress. They were advised that they could refer to concepts included in the mind map or build something completely different. The facilitator also reminded participants that whatever they built was perfectly fine, and that their models were good because they were their own models based on their ideas. This stage was planned to for 20 minutes, but most participants needed less time. As soon as a participant decided their model was ready, the facilitator took a few photos of the model for further analysis.

*Part 5: Models presentation.* At this stage participants took turns to show their models, describe them and explain the meaning of the bricks they used and of the whole composition. To help participants three questions were displayed on a slide: (1) What does your model show? (2) How does it represent your idea of stress? (3) How (if at all) is stress related to health? The facilitator asked additional questions, if necessary, to elicit more details. Other participants could also ask questions and comment on the presented model to share their own interpretation of it.

*Part 6: General discussion.* Finally, participants were asked if they wanted to add anything to what had already been said. Both mind maps and LEGO models depicted stress as rather negative and when participants talked about health they often discussed mental health issues and unhealthy behaviour, while the direct link between stress and health through physiological (neuro-hormonal and cellular level) changes was brought up relatively rarely. Therefore, in this general discussion I provided some more specific questions around how stress is related to health, if stress is negative or positive, and what, if anything, can be done about stress, particularly to make it more positive.

### 6.2.3. Data analysis

This comprised transcripts from each of the six workshops as well as the models and the photos of them. The analysis began in the workshops as the LEGO models were examined and discussed on-the-spot by myself and participants. We asked questions about different parts of each model discussed individually when we felt something was interesting or could be interpreted non-literally. This contributed to a richer and collaboratively developed verbal description of the models.

Transcripts and photos were analysed using a combination of thematic analysis (Braun & Clarke, 2006) and systematic metaphor analysis (Schmitt, 2005) described in section 4.3.2. The analysis involved reading through transcripts and looking closely at the photographs of the model time and again, simultaneously and in turns. In the analytical process I used the photos to better understand the verbal descriptions. They did not constitute a separate source of data but rather complemented verbal data. Sometimes participants used the bricks in a purposeful way i.e. they deliberately chose certain pieces to represent their ideas. However, other bricks were originally included without the intention of communicating any particular meaning. In some cases, during

the presentation and group discussion, participants agreed that the model, its part, or even a single brick could convey some idea which was consistent with their understanding of stress. Other LEGO pieces were used purely as building blocks or for reasons unrelated to stress conceptualisation. For instance, a participant included a skull in her model (W3P1) which in other models were used to highlight some negative aspects of stress. However, she said that she had put the skull there because it was “quite seasonal” (the workshop took place about a week before Halloween). Another participant (W4P2) included a small block with a picture of an eye on it. Others tried to interpret it but the participant explained firmly that “it represents nothing at all”. Thus, ascribing some specific sense to all the blocks (even highly symbolic) or their characteristics would be unjustified. I did not want to speculate or conjecture anything that could not have been confirmed by the participants or at least extrapolated from their verbal description of the model.

I marked the symbolic features of the models on the photos and made interpretative notes about their meaning (e.g. a LEGO figurine having a string around them was described as tied up/constricted and interpreted as an instance of RESTRICTED MOTION/ENTRAPMENT metaphor. Metaphorical expressions in the transcripts were identified using the MIP procedure (Pragglejaz, 2007). Where necessary, I used Lexico (n.d.) – an online collection of Oxford University Press dictionaries, and the Online Etymology Dictionary (n.d.) to establish the more basic meaning (Pragglejaz, 2007) of specific words and phrases. All the transcripts were read several times and metaphorical expressions were bolded. In this study I used NVivo 12.0 to code the data. In line with both thematic analysis (and systematic metaphor analysis), I looked for recurrent patterns in the data but as opposed to study 1, I focused mainly on the metaphorical content of the transcripts and models. The metaphors used by the participants (in either verbal or visual form) were analysed and interpreted to develop an understanding of how lay people conceptualise stress.

When working on this study, I arrived at similar conclusions to that of Gleeson (2011) who suggested intertextuality and intervisibility, i.e. that the interpretation of verbal and visual data is embedded in culture and can be done only through reference to other texts and images. This, in fact, is consistent with Schmitt's suggestion (2005) for continuous literature review when doing metaphor analysis. Therefore, although I was unaware of it at that time, my analysis was very similar to the Polytextual Thematic Analysis (Gleeson, 2011), however, it focused primarily on metaphorical content.

The mind map activity was meant to help participants structure their knowledge about stress and provide aids and cues for constructing LEGO models. The final discussion served as a summary and clarification of what had been said and done before. These were not intended to be sources of data, however, I looked for recurrent patterns in the maps and transcripts of the discussions (both the discussion of the mind map created by workshop participants and the general discussion at the end of the workshop) to check if these could confirm, extend or complement the findings from study 1 and the analysis of LEGO models. To this end, I applied thematic analysis (Braun & Clarke, 2006). The codes were data driven but many of them were very similar or even the same as in study 1. These were then used to create themes. However,

as the main goal of this study was to identify metaphors that could be used at a further stage of the project, the results of this thematic analysis are not presented in this thesis beyond the following brief summary. Five interrelated themes were identified: *Demands and Concerns*, *Unpleasant State*, *Ways of Coping*, *Negative Effects*, and *Some Stress Is OK*. The findings to a great extent reflected and validated the results from study 1. Participants talked about different events and circumstances (high demands, low resources, unpleasant social interactions) that could be appraised as stressful. These were mostly discussed at an individual level as opposed to a wider socio-economic and cultural context. Stress was described as an unpleasant state involving negative emotions, a sense of powerlessness, and fatigue. Participants mentioned a range of coping strategies, both problem and emotion-focused, some of which were potentially maladaptive. They also acknowledged the need for engaging in self-care but at the same time admitted that they often fail to do so due to lack of time. Furthermore, stress was associated with mental and physical health issues as well as poorer performance and cognitive disorganisation. However, when talking about the links between stress and health, participants focused mainly on unhealthy behaviour. Finally, they suggested that stress is a common experience which can have some positive effects unless it is long-term or excessive.

### 6.3. Results/Discussion

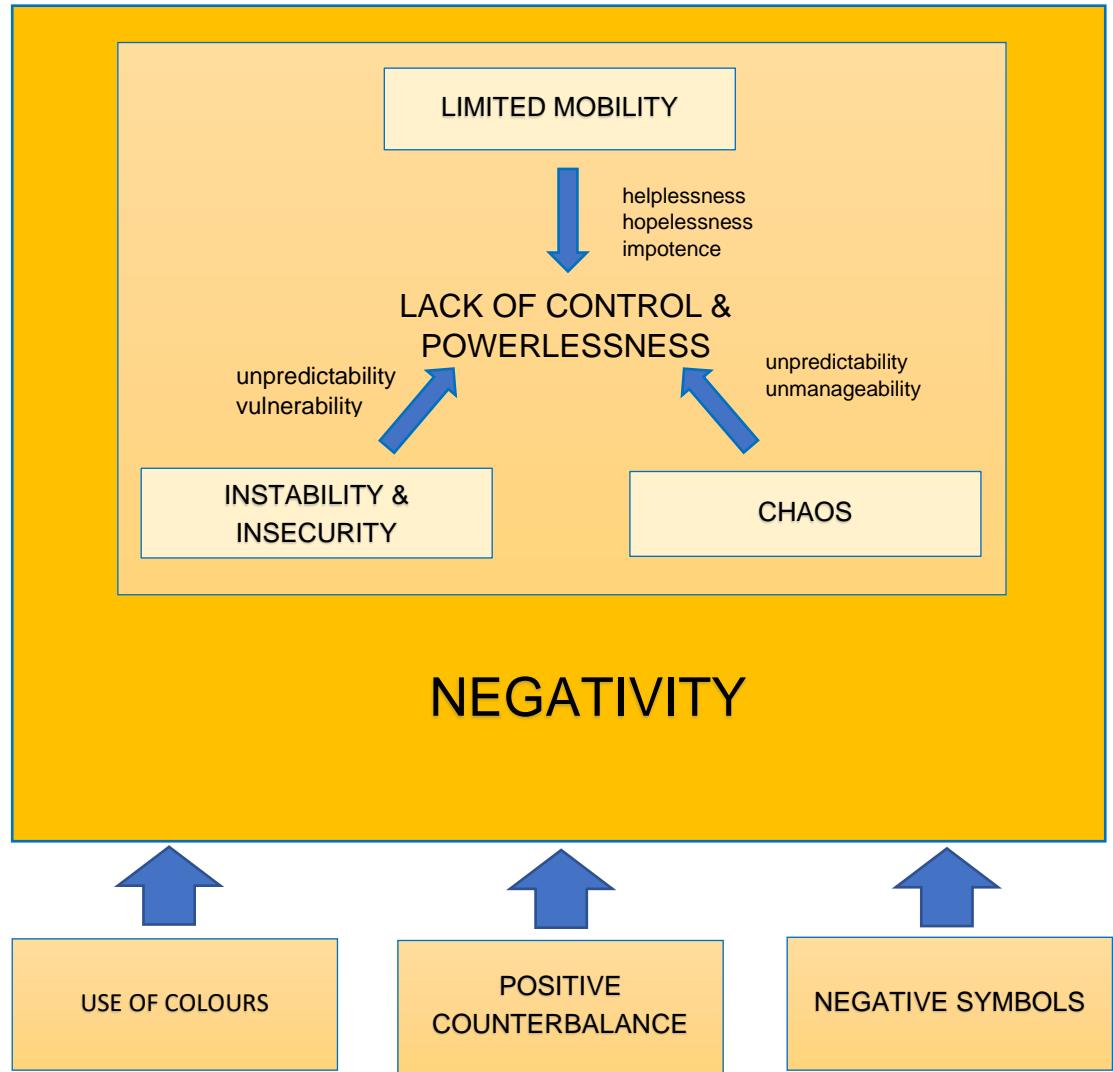
The six workshops resulted in 27 unique LEGO models; most participants created a single model, but three people built more than one model. Models differed in terms of complexity and abstractness. They focused on stressors (demands) and/or resources, stress experience and response (feelings and/or coping process), effects of stress, or a combination of any of these. LEGO ® is an interesting tool for generating data because it allows for building various constructions and scenes. It combines the potential of other visual aids such as photos and video clips because with LEGO one can build a more static structure or use it in a more dynamic way, moving bricks around to 'replay' processes, changes and actions. Many participants created static models similar to snapshot photography, representing stressors, coping strategies, or a state of stress as experienced by a person. However, a few developed models with movable parts or used LEGO figurines as 'living' protagonists to explain ideas such as how stress can build up or how it may feel. Even the more static structures represented changes and actions e.g. through changing colours or figurines arranged in a way suggesting movement.

Participants applied different metaphors using both visual and verbal modes (see Table 4). They depicted stress as negative even though at least some of them acknowledged its positive role. The metaphors were often embodied i.e. they were grounded in somatosensory experience and referred to the body's interactions with the environment (El Refaei, 2019; Littlemore, 2019). Commonly used source domains were: PHYSICAL FORCE often antagonistic and/or destructive (six models), RESTRICTED MOTION/ENTRAPMENT (15 models), JOURNEY (nine models) CLUTTERED SPACE (11 models), LACK OF ORDER (eight models) and LACK OF BALANCE (11 models). These were also often employed by participants in study 1 (see Appendix 15). Through linguistic metaphors, symbolic elements and features of the models, the conceptual metaphors informed three main,

interrelated themes: *Limited mobility* (section 6.3.1), *Instability and Insecurity* (section 6.3.2), and *Chaos* (section 6.3.3) with an overarching theme of *Lack of Control and Powerlessness*. This overarching theme is a part of the generally negative picture of stress (see Figure 5). Negativity was additionally emphasised in the models through the use of certain colours or symbolic bricks with negative connotations as well as “nice” or “pretty” – as participants put it – blocks which were applied to counterbalance the negativity of stress.

**Figure 5**

*Themes and features creating a negative picture of stress as represented in the LEGO® models*



**Table 4***LEGO® models of stress, their focus and metaphors applied*

Participant ID	Model Title	Focus	Source domains
W0P1	whipping dude	stressors/demands, effects	PHYSICAL FORCE, RESTRICTED MOTION/ENTRAPMENT
W0P2	trying to take back control	experience and response (feelings, coping)	RESTRICTED MOTION/ ENTRAPMENT, LACK OF BALANCE
W0P3	cyclical nature of stress	experience and response (feelings, coping)	LACK OF BALANCE
W1P1	trapped under a tonne of rubble	experience and response (feelings and coping)	RESTRICTED MOTION/ ENTRAPMENT, PHYSICAL FORCE, CLUTTERED SPACE, LACK OF ORDER
W1P2	squashed person and happy king	experience and response (feelings), effects	CLUTTERED SPACE, RESTRICTED MOTION/ENTRAPMENT, RESTRICTED VISION, PHYSICAL FORCE
W1P3	girl on a tower	stressors/demands, experience and response (coping)	CLUTTERED SPACE, LACK OF ORDER, JOURNEY
W2P1	demands-resources imbalance graph	stressors/demands, resources	LACK OF BALANCE, RESTRICTED MOTION/ENTRAPMENT
W2P2	colourful tower	stressors/demands, experience and response (coping)	CLUTTERED SPACE, LACK OF ORDER, LACK OF BALANCE
W2P3	hidden behind the façade	stressors/demands, experience and response (feelings)	RESTRICTED MOTION/ ENTRAPMENT, CLUTTERED SPACE, LACK OF ORDER
W2P4	accumulating stress	stressors/demands, resources, effects	LACK OF BALANCE, CLUTTERED SPACE, JOURNEY
W3P1	heads everywhere	stressors/demands, experience and response (feelings)	CLUTTERED SPACE, LACK OF ORDER
W3P2	visual headache	stressors/demands, experience and response (feelings)	CLUTTERED SPACE, LACK OF ORDER
W3P3	travelling through life	experience and response (coping)	JOURNEY, WAR/FIGHT

W3P4	headless person in bleakness	stressors/demands, experience and response (feelings)	CLUTTERED SPACE, LACK OF ORDER, RESTRICTED MOTION/ ENTRAPMENT, LACK OF BALANCE, PHYSICAL FORCE
W3P5	restricted by money	stressors/demands	RESTRICTED MOTION/ENTRAPMENT
	ladder and hole	stressors/demands, experience and response (feelings)	JOURNEY, RESTRICTED MOTION/ ENTRAPMENT
W4P1	high column	stressors/demands, experience and response (feelings)	LACK OF BALANCE, PHYSICAL FORCE
	balancing scale	stressors/demands, experience and response (feelings)	LACK OF BALANCE, PHYSICAL FORCE
W4P2	steps in life	stressors/demands, experience and response (feelings, coping)	JOURNEY, RESTRICTED MOTION/ ENTRAPMENT
W4P3	sources of stress	stressors/demands	LACK OF BALANCE
W4P4	blind trip	stressors/demands, experience and response (feelings)	RESTRICTED VISION
W4P5	hierarchy of stressors and resources	stressors/demands, resources	JOURNEY
W4P6	uphill struggle	stressors/demands, experience and response (feelings, coping)	JOURNEY, RESTRICTED MOTION/ ENTRAPMENT, CLUTTERED SPACE
W5P1	two bridges	stressors/demands, experience and response (feelings, coping)	JOURNEY, RESTRICTED MOTION/ENTRAPMENT,
	confusing line	experience and response (feelings)	CLUTTERED SPACE, LACK OF ORDER, LACK OF BALANCE LACK OF BALANCE, JOURNEY, RESTRICTED MOTION/ENTRAPMENT
W5P2	money and social life	stressors/demands	RESTRICTED MOTION/ENTRAPMENT
W5P3	ways of coping	experience and response (coping), effects	RESTRICTED MOTION/ ENTRAPMENT

### 6.3.1. Limited mobility

This theme comprised several conceptual metaphors: stress is restricted motion/entrainment, stress is restricted vision, stress is a physical force, stress is a war/fight, life is a journey, and coping is motion. The idea of limited mobility to represent stress is set in a broader framework of event structure metaphor, and a more specific but very common metaphor of (PURPOSEFUL) LIFE IS A JOURNEY which frames achieving goals as moving from one point to another (Lakoff, 1993). Several participants used the life is a journey as a metaphor to explain the context of their model e.g. **going through the days** (W2P4), **travelling through life** (W3P3), **taking steps in life** (W4P2), **going through challenges** (W4P6). One participant created a model imitating to an extent Maslow's hierarchy of needs (Maslow, 1943) and explained that a person works their way up to reach happiness, or down when they get stressed. This not only exemplifies the life is a journey metaphor but also refers to the orientational metaphors of good is up and bad is down (Lakoff & Johnson, 1980). Furthermore, this model showed that the same factors can contribute to both demands and resources which is consistent with the biopsychosocial model of challenge and threat (Blascovich, 2013).

**Figure 6**

*Model W5P1a "Two bridges"*



Life or achieving goals can be stressful if the journey is somehow hindered, e.g. when it requires moving up against gravity, or if a person encounters obstacles and barriers which limit

their vision (RESTRICTED VISION metaphor) or motion (RESTRICTED MOTION metaphor). This was clearly seen in several models. Three models (W3P5b, W4P2, W4P6 – see Appendices 16-21 for pictures and comprehensive notes on all the models) were based on the idea of moving up the stairs or a ladder to achieve one's goal (in one case (W4P6) with additional obstacles on the steps). Another model (reflecting also CHAOS and INSTABILITY/INSECURITY themes) included two bridges: one weak, uneven and cluttered with blocks, the other well-structured, symmetrical and levelled which represented respectively a stressful and a non-stressful way of accomplishing certain goals (Figure 6). RESTRICTED MOTION was also exemplified (although inadvertently) with a set of four wheels lying flat on a surface visualising a euphemism used by the police to describe a difficult situation or feeling stressed:

"[...] you might say to someone 'are you alright or **have your wheels fallen off?**' because it's easier to say that to a colleague than say 'are you stressed?' – [with indignation] 'I'm not stressed!'. But you know, you could say that and get more honest response." [W2P1]

Model W0P1 provided an interesting example of framing stress as RESTRICTED MOTION because the creator did not originally mean her model to represent this idea. She built a compact structure with four figurines to provide a visualisation of power imbalance and unequal distribution of resources (Figure 7). It included a crowned, skeleton figurine representing an overbearing mentor with a lot of money "whipping this guy on the computer" (a stressed person) who was working "a lot for not very much money," and had no "time to kind of do what you wanna do" as opposed to a smiling figurine on a bike, and who had to compete with an "ultra-confident and ultra-good at what they do and successful [...] dude in a top-hat" (W0P1). However, the collaborative interpretation included metaphorical expressions clearly referring to *Limited mobility*. One participant described the figurine in a bowler-hat, as being on:

"[...] the **fast-track** because the bike's on there? [...] He's already got an advantage over you by... because he can **move quicker.**" [W0P3]

The other participant summarised the model:

"Because you are the **less free** of... of the four that are there because you're **stationed**. You've got **something in front of you blocking you**, you're **sat into something keeping you** [...] They can all **move about.**" [W0P2]

Yet another participant, W4P4, built a cuboid vehicle with three figurines inside. There was only a small hole through which the driver could see their way. This obviously affected their motion as it made it difficult to get to a goal or destination quickly and safely epitomising the idea of limited mobility through a metaphor of RESTRICTED VISION.

Several models involved an extreme version of *Limited mobility* idea represented by the STRESS IS ENTRAPMENT metaphor which evokes a sense of hopelessness, helplessness and impotence. For example, one participant, W1P2, created a three-part model combining the ideas of *Limited Mobility* and *Chaos*. It included 1) a small platform cluttered with "lots of **rubble**" representing lots of stuff that needs to be dealt with", 2) a person "being **squashed**, like being **trapped** and **chained** that you **can't escape** from it", and 3) a happy king, i.e. crowned person on a column "sitting above all the stress and chaos, and... sitting proudly and happily. Being able

to see the nice things, benefit from pretty things." (Figure 8). The powerlessness of the squashed figurine representing a stressed person was emphasised by the fact that it was crushed under a transparent block and could see the tools, 'nice things' and its ideal (happy king) but could not reach them.

**Figure 7**

*Model WOP1 "Whipping dude"*



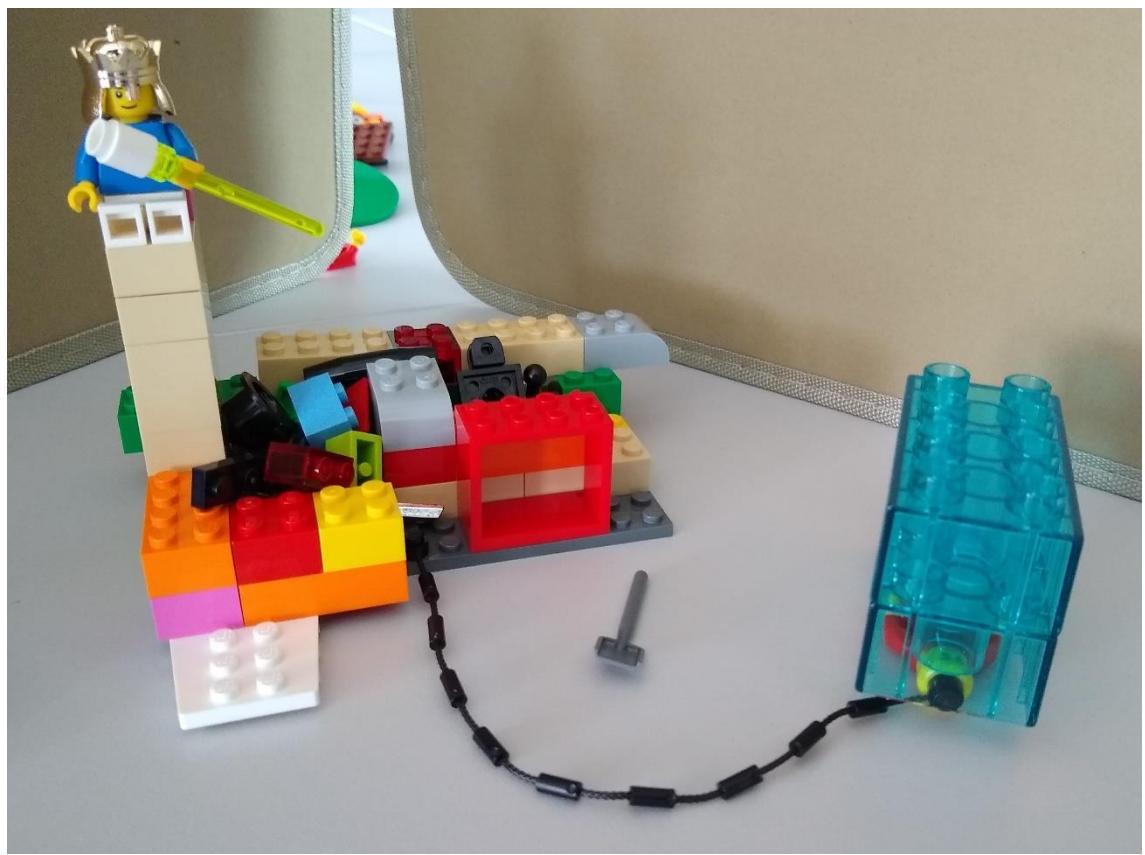
Other examples of ENTRAPMENT metaphor included (see Appendices 16-21 for the photos of all models):

- a figurine hanging over a precipice visualising feeling of hopelessness and helplessness [WOP2];

- a figurine “trapped under a tonne of rubble” with a “a cord around them so they are **constricted**” [W1P1];
- a figurine tied to “clump of stress” pulling back on the person’s head, and “it’s all at the back of their head” which was stopping and slowing them [W2P3];
- a figurine chained to a container full of gold bars and coins to represent money as the biggest stressor which restricts a person’s thoughts (“my thoughts on, uhm, sort of... **bolted** to the idea [of money]”) and behaviour (“I can’t spend things on myself, and you know, buy things I wanna buy, cos I’m worried about what happens”) [W3P5a];
- different figurines of which one “[is] completely **tied up** and can’t do anything”, another “**shuts himself away** from everything, from everyone”, yet another “[is] **trapped in his own bubble**” illustrating certain maladaptive ways of coping, and one “sort of **imprisoned**” skeleton representing “pretty much the end result if you don’t deal with those bits [*maladaptive behaviours*]” [W5P3].

**Figure 8**

*Model W1P3 “Crushed person and happy king”*



Furthermore, RESTRICTION/ENTRAPMENT metaphors within the *Limited mobility* theme were complemented with the metaphor ADAPTIVE/SUCCESSFUL COPING IS MOTION. As explained above, being stressed as well as maladaptive or unsuccessful coping was depicted as entrapment. On the other hand, achieving a goal was illustrated with a figurine arriving at a certain location (e.g.

getting to the top of the stairs). Even though the motion was restricted, it was still possible to cope with the demands i.e. **climb the ladder, get past the steps, reach a pinnacle**. Moreover, dealing with a demand requires moving in space toward it, as one participant aptly visualised through putting a figurine on a tower with a ladder, and LEGO blocks representing demands below. She commented:

“I’ve just got to be brave to **go** and do it. [...] it’s just that sort of **taking that leap**, just to **go** and organise it, and just to start tackling it, yeah.” [W1P3]

Participants also used other verbal expressions, framing coping as motion e.g. **taking steps, moving on, breezing through**.

In the models reflecting the idea of *Limited mobility*, free motion was restricted or impeded due to ties and chains, insufficient space (limited, cluttered space linking this theme to *Chaos*), precariousness (linking it to the theme of *Instability*, e.g. in W5P1a, the weakness of one bridge imposed quick motion because of the risk of the bridge collapsing) or implicit or explicit forces (gravity, pulling, being crushed or squashed). The latter obviously referred to the conceptual metaphor **STRESS IS A PHYSICAL FORCE**. Force can be restricting, destabilising or even destructive. Thus, as a metaphor it fits in with this theme as well as *Instability and insecurity* representing external factors which can disrupt balance. However, it can also be positive in some cases depending on the agent exerting force and the purpose for which it is used. One participant applied force-related terms in her model presentation to explain how to regain self-control and to help others:

“But, you know, if this person can help and **pull** then, you know, maybe they can, I don’t know, maybe they can climb down and **push it round**, or they can **pull it up** for the person. So... there’s hope.” [W1P2]

A few participants when referring to *Limited mobility*, used expressions related to **STRESS IS A WAR/FIGHT**, such as uphill **struggle, fight one’s way out, surrender, whipping, and beating**. These emphasised difficulty of the situation or powerlessness and vulnerability of the person. However, one participant employed the **WAR/FIGHT** metaphor in a more positive way, suggesting empowerment and agency of the person, to describe more active coping with demands encountered when travelling through life:

“And I’m trying to sort of... uhm, it’s a combination of, I’ve got some sort of things in my hands, and I’ll, I think it’s partially **defence**, and partially **attack** when needed. [W3P3]

This shows that although certain metaphors (e.g. violence or force) are likely to frame a phenomenon as negative, they cannot be indiscriminately discarded as unhelpful (Semino et al., 2017).

### 6.3.2. Instability and Insecurity

This theme was illustrated with the conceptual metaphor **STRESS IS A LACK OF BALANCE**, as well as a more general idea of instability and precariousness/weakness of the models combined with **DESTABILISING/DESTRUCTIVE FORCE** metaphor. One participant, W4P3, built a model which at a first glance looked like a labyrinth but turned out to be a complex balance. Various pieces

representing different demands or concerns (family, house, finances, university, health/aging) were located on each of several beams. On one of them there was a figurine with an unhappy face, trying to balance all the demands.

Another participant, W4P1, provided two clear examples of this conceptualisation (Figure 9). He visualised stress as being located in an insecure position on the top of a tall, unstable tower, close to the edge where there was a high risk of falling down. To further elaborate on the idea of being close to the edge, his second model was a balance with a figurine on each side, where again the lack of balance may result in falling off. These models combined the BALANCE metaphor with STRESS IS A PHYSICAL FORCE represented by a skeleton figurine on a bike epitomising an “outside influence on that, that it could come and disrupt [the balance] and cause you to fall off”. Remarkably, the participant regarded stress as both a result of imbalance, and a factor motivating to maintain balance. This also linked to the theme of *Chaos*, since balance is associated with structure and harmony as the participant explained:

“[...] without that stress motivating you to maintain the balance, you will probably just allow chaos to, to happen. [W4P1]

Interestingly, in some models, high position was associated with positivity and power (consistently with GOOD IS UP metaphor) as shown above in the “Crushed person and happy king” model by W1P2. Another participant, W0P2, included a hanging skeleton representing her emotional part, and located another figurine – embodying her more logical part trying to regain control – on a tower where they can look at the situation (get a better perspective) and rescue the hanging figurine by pulling them close, to safety. However, moving up as going against gravity is more active, intentional and requires effort while moving down is more passive, natural and easier (Sherman & Clore, 2014). Thus, even in these models, a high position can be seen as precarious i.e. hard to achieve and easy to lose especially if the space on top is limited and the base is unstable. This insecurity was clearly seen in W4P1 model presented above as well as discussed in the presentation of the “uphill struggle” model (which also referred to the FORCE metaphor):

That is very **precarious**. [...] you could **fall off**. You could be replaced by that person, and, you know somebody [...] could quite come in and **push you off your perch**. [...] they want to get to that position there. That, that's not, this **position is not set in stone**. So... yeah, trying to get to there, either to join that person, cos that's possible as well, or to have that position, **knock them off**. [W4P6]

Moreover, a high position was associated with detachment from a stressful situation which may prevent a person from dealing with it. On the other hand, approaching it may make an individual realise that “it's not as bad I thought it was gonna be” (W1P3).

Other models also employed the features of precariousness and flimsiness to represent stress. For instance, W0P3 used to describe her balancing between procrastination and productivity caused by stress. W0P2 included some long and thin LEGO pieces to illustrate that “the structure of your life can be quite **flimsy**” and explained people have “other, **stronger bits** which is like your **support networks**.” Two other participants created precarious structures to demonstrate how stress builds up (W2P2) and threatens to overwhelm and crush a person

(W3P4). All these models evoked a sense of vulnerability and unpredictability (not knowing if and when the structure may collapse) which exacerbates the feelings of powerlessness and lack of control.

**Figure 9**

*Models W4P1a “High column” and W4P1b “Balancing scale”*



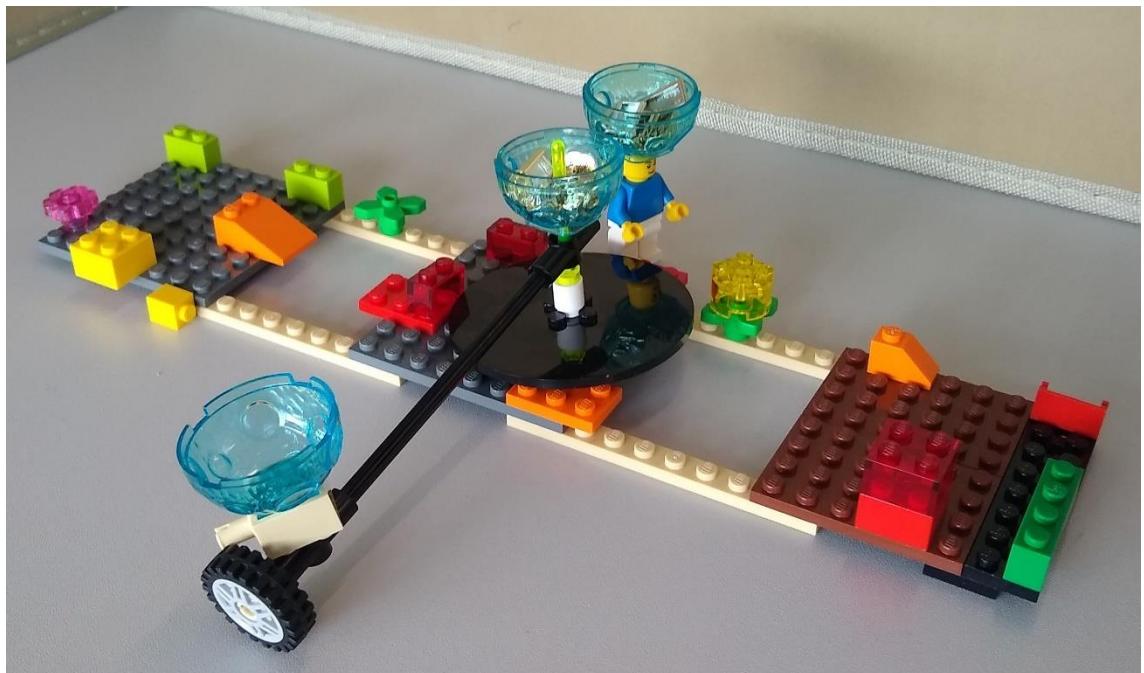
Interestingly, two participants visualised their idea of stress not through physical imbalance of their structure but referring to more abstract balance (as in accountancy). Both models highlighted the vulnerability of a stressed person and contributed to the overarching theme of powerlessness. Participant W2P2 illustrated a process of balancing demands and coping abilities: from the point where coping abilities exceed demands during holidays, to “regular” stress with equilibrium of demands and coping abilities, to “massive” stress of demands overbalancing coping abilities. Another participant, W2P4, built an interesting dynamic model (Figure 10) which combined metaphors of BALANCE and JOURNEY. There were three platforms representing three consecutive days each with various demands, and a figurine with two pools of resources (gold coins). These resources could be diminished when a person encountered a demand requiring a different amount of resources (green, yellow, orange, or red blocks), or replenished on specific occasions (flowers). When the first pool became empty a person could draw from the second pool i.e. their health:

[...] as they go through the day, they come across different things that happen and those things require you to, like, give something, whether it's like your energy, concentration [...] this green block is like nothing, and it's green, so it doesn't take much of you [...] then this red thing takes a lot, and before you know it [...] you've used up everything you've got. [...] you don't have enough to deal with these other things because you're worn out, you're tired, you've used all your resources. [...] This is when stress, like, affects your health, and you start giving parts of your stuff. [W2P4]

Actually, it was the only model which was created with the clear aim of explaining links between stress and health, i.e. how stress can affect health through unhealthy behaviour and self-neglect.

**Figure 10**

*Model W2P4 “Accumulating stress”*



### 6.3.3. Chaos

At the beginning of each workshops, LEGO® bricks were arranged into piles: one per each participant, and a big pile in the middle of the table for all participants to use. Interestingly, in the pilot workshop, one participant looked at the pile and exclaimed "This represents my stress. This is chaos!" (W0P2). In another workshop, when two participants came into the room and saw LEGO® piles they talked about how they looked chaotic and made them feel stressed when they looked at them.

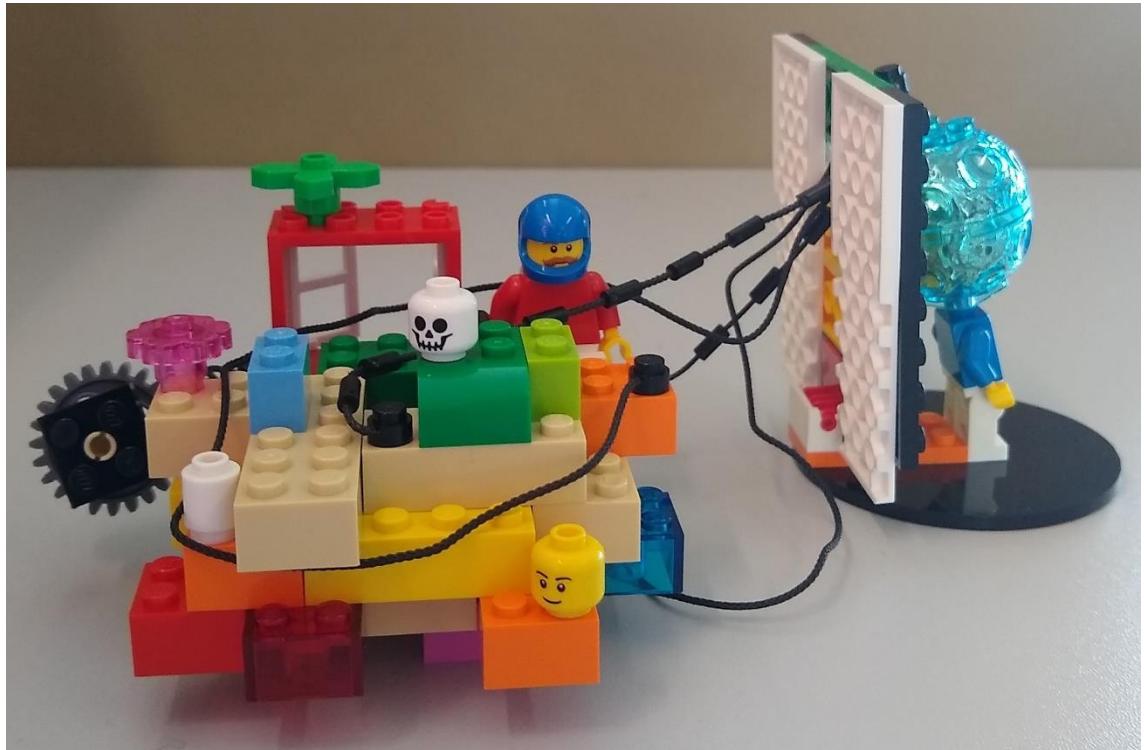
The idea of chaos was also often applied in the models through the metaphors of CLUTTERED SPACE and LACK OF ORDER. The physical nature of LEGO blocks was used to exemplify the STRESSORS ARE PHYSICAL OBJECTS metaphor (which is commonly employed in English language as shown in study 1 – see Appendix 15). As stress is associated with numerous demands, duties, commitments, and tasks which can be difficult to separate, several participants arranged various pieces in chaotic, non-symmetrical structures or scattered them around space.

For instance, one model involved a messy structure with layers of bricks representing various demands held together with only a couple of strands (Figure 11):

[...] they, they're all connected cos they're one **clump of stress**, sort of **accumulated**. And there's a **build-up**, and each little brick is an individual kind of task, or thing that's causing the stress. [W2P3]

**Figure 11**

*Model W2P3 "Hidden behind the façade"*



This model was also interesting because it depicted the idea of invisible stress. Other participants in the workshop appreciated the fact that:

[...] at the front it just looks normal, and that's really, uhm, important that, you know, you see people and you don't realise what sort of things they might actually be going through because they just look the same as everyone. Whereas behind there's all this stuff. [W2P1]

As the creator explained, his model showed that people may suppress stress which can affect their well-being negatively. It also suggests that people do not want to show they are stressed as it might be seen as a weakness, and that they have to deal with it on their own which emphasises individual responsibility for coping with stress.

CLUTTERED SPACE and LACK OF ORDER were also used to represent stressed people's thoughts. Stress was associated with countless thoughts about things and people's choices, perspectives, opinions and expectations of themselves, all of which create chaos in one's head as aptly depicted in W3P1 model:

[...] **heads everywhere, loads of different thoughts** all the time [...] just something with **no real order, or system** [...] I wanted it to be as.... Uhm, **unpredictable** and **illogical**.

So not, **not following any patterns**. [...] Not being able to make sense of it all at once. [W3P1]

Another participant, W3P2, called her model a “visual headache”. All the models representing *Chaos* highlighted unmanageability and – in some cases – unpredictability – contributing to the sense of powerlessness and lack of control. It was further emphasised through verbally presenting coping with stress as unscrambling and ordering i.e. trying to organise things, put them back into a logical sequence, plan, structure, or break down heap of rubble and move one brick at a time:

“[...] when you're seeing **the whole mass** you feel it's out of control, it's **too much to manage** whereas if you can try to see the individual elements then it's easier to figure out a plan [...] [W1P1]

This theme was often interlinked with the other two. For instance, one model included a blocked window as one of the pieces in the pile of blocks representing demands. It exemplified the *Limited mobility* theme (*RESTRICTED VISION*) as the participant explained:

“There's a window that's all blocked up. Because when I feel stressed, I feel like **I can't see a way out.**” [W1P2]

Another model (Figure 12) clearly illustrated the themes of *Chaos* and *Instability and insecurity*:

“I'm in the middle of it all with, with my head off [laugh] laid amongst all this **chaotic mess** that **could come tumbling down** around me [laugh].” [W3P4]

It also evoked a sense of *Limited mobility* – although not discussed by the participant – as it included a headless figurine lying flat among blocks not able to move (quite similar to a ‘trapped under a tonne of rubble’ model (W1P1)).

### 6.3.4. Negativity as the dominant characteristic of stress

In general, models portrayed stress as unpleasant and detrimental. They visualised undesirable situations of high demands and low resources and were used to talk about negative emotions (anxiety, anger, worry, fear) as well as unpleasant, dysfunctional states such as being overwhelmed, hopeless, helpless, depressed, or exhausted. The negative picture of stress was also compounded through participants using specific colours and negative symbols or including positive symbols as counterbalance for negativity.

#### 6.3.4.1. *The use of colours*

Colours have particular cultural connotations and can be used to convey certain meanings (Allan, 2009; Elliot & Maier, 2014). Several participants made deliberate decisions regarding what colours they would use and how. In general, they acknowledged negative connotations of redness and blackness. This is consistent with the existing literature on meaning of colours. In the English language, red is often associated with danger and negative emotions, while black is connected with death, anger, dirt, and sinisterness (Allan, 2009).

**Figure 12**

*Model W3P4 “Headless person in bleakness”*



In a couple of models, absence of stress or low “OK-stress” [W2P4] condition was represented with blue and green which participants related to the natural environment (water, greenery) and a positive state of feeling calm and relaxed. Moderate stress was visualised with yellow and orange blocks, and greater stress with red and similar colours. For instance, one participant created an abstract, tall structure using mainly blue, grey and green bricks at the bottom, followed by yellow and cream in the middle, changing into orange, pink, and red at the top to represent stress building up and becoming unmanageable (Figure 13). She justified her decision by associating redness with anger and discomfort. In another model, W2P1, red was used to denote physical symptoms of a chronic illness exacerbated by stress because in reality these symptoms involve redness (red lesions, bloodshot eyes):

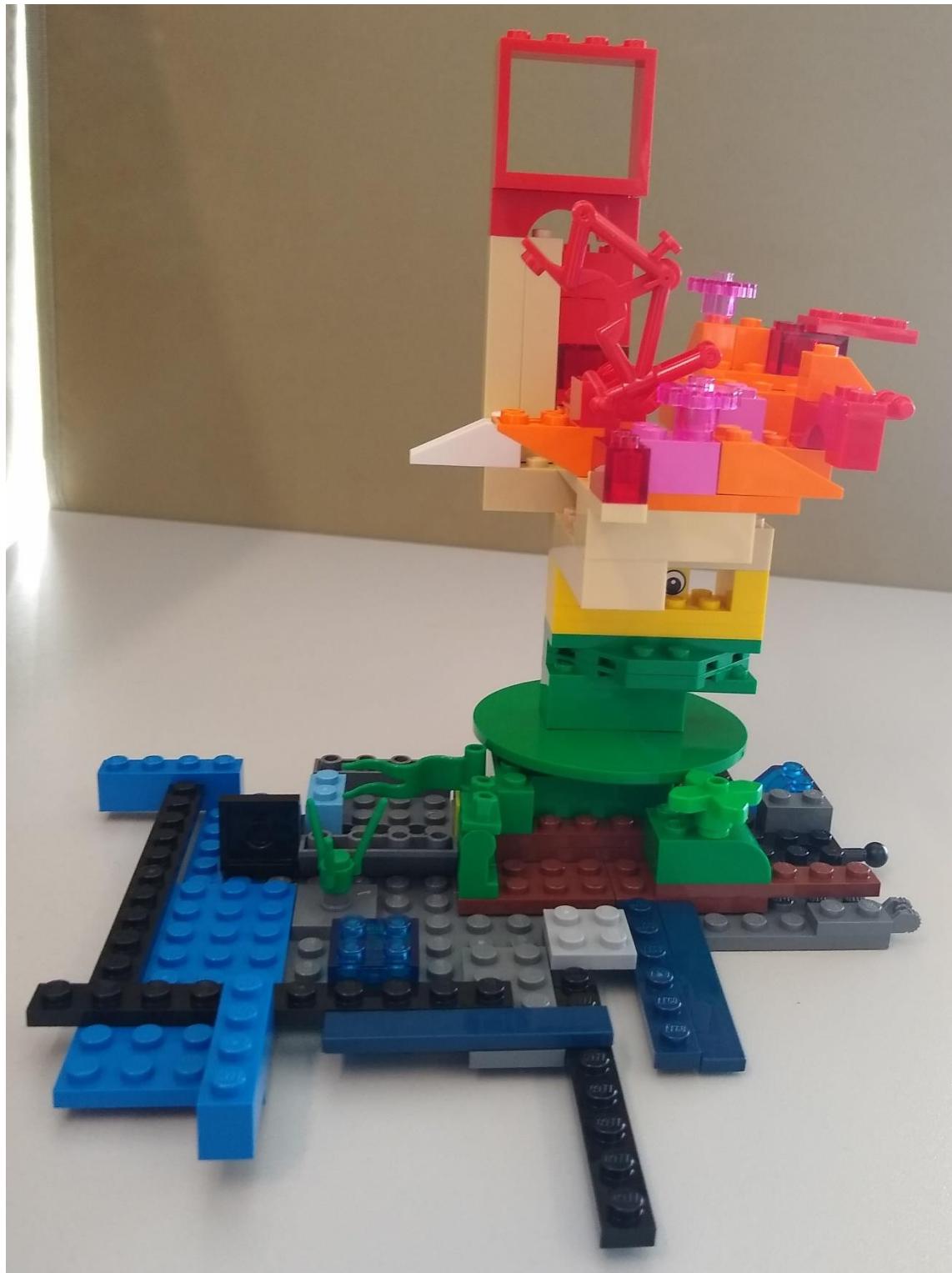
“And this also corresponds to like how my body responds to the stress. So, by this point everything is in a flair, and I associate red with having flairs because it often means that like my eyes will go red, bloodshot, or I’ll get red lesions, and all that kind of stuff. So red is like my illness colour as well.” [W2P1]

One participant in her model deliberately used only black and grey blocks (Figure 12), as she associated these colours with dullness, bleakness, and lack of happiness (Allan, 2009) which is also consistent with the conceptual metaphor BAD IS DARK (Forceville & Renckens, 2013). In one model, W1P3, the stressor was illustrated with mostly black and grey pieces, however, this might have been a deliberate choice of piece due to features other than colour. The participant explained that these blocks represented a broken car (possibly a current stressor). These

included wheels, tyres, cogs, a string, and an incomplete wheelchair which coincidentally LEGO® producers make black and grey.

**Figure 13**

*Model W2P2 “Colourful tower”*



Nonetheless, another participant declared that if she had more time she would have chosen only black and red blocks due to their negative connotations. As it was, her model also employed

colours to convey a specific meaning. She used various colourful pieces which illustrated her “visual headache” (Figure 14), highlighting the idea of chaos, unmanageability, and being attacked from different angles:

“[...] when you get through of like, like during stress... everything is too much. It is sort of like a **million different colours and tans**, and all this **coming at you at once.**” [W3P2]

**Figure 14**

*Model W3P2 “Visual headache”*



#### 6.3.4.2. Negative symbols

Participants also used certain symbols or blocks with specific features to convey the negative aspects of stress. Skulls and skeletons appeared in ten models, although in one case they did not represent anything negative. In other models they were employed as a symbol of danger or threat, aging and death, suicidal thoughts, procrastination and panic, negative thoughts and emotions, overbearing person, irrationality, hopelessness and helplessness, overthinking and depletion of health:

“But then I suppose there's also the skeleton, the... uhm...in some cases where stress results in uhm... where being overwhelmed results in things, uhm, ending quite suddenly.” [W1P1]

“Yeah, my little skeleton dude. He is... he was pretty much the end result if you don't deal with those bits [laugh]” [W5P3]

Furthermore, two models involved sharp and spiky pieces representing threat (W3P3) and punishment (W5P1a):

"[...] it's like a random mess as well as the spikiness is meant to be stressful as well." [W3P3]

In another, participant used a whip to visualise threat and the sense of oppression. All these were (coincidentally) black which only made them more sinister and disquieting.

Finally, a few participants included incomplete pieces in their models: a wheelchair without wheels, a bike without wheels, a headless person. The former reinforced the idea of chaos and mess. Headlessness most likely represented the inability to think clearly or logically, and evoked a sense of vulnerability and powerlessness:

"[...] he's [a *headless figurine*] just rushing through it without thinking too deeply. [W5P1]

#### 6.3.4.3. *Positive counterbalance*

Interestingly, several models included some "nice" or "pretty" pieces (as participants put it). They were not always described in the verbal presentation, possibly because they were not seen as a part of the individual's stress concept. When asked, a few participants declared they wanted to make their models attractive or to have something beautiful or positive in there. Without these positive accents, the model – focused solely on stress – could be ugly and unpleasant. Including them could be seen as a semi-conscious attempt at counterbalancing the negativity of stress.

Furthermore, in some cases, positive symbols were meaningful parts of the model. For example, flower-like bricks visualised relaxing time and recovery (W2P4), flowers and bushes illustrated a general idea of positive things a person can benefit from (W1P2), pink pieces (participant's favourite colour) represented the positive feelings when stress is gone (W1P3), a favourite animal (W4P5) was a symbol of happiness, while a transparent blue ball was described by the participant as a "lovely blue colour and it was very, very pretty" [W0P2] which epitomised hope. Specific blocks were also employed to visualise achievement and rewards or a positive/desirable state. These were: flags, gold bars or coins, crown.

A couple of participants decided to use colours they liked, e.g. pink (W1P3) or blue (W4P6). Another used only certain colours to ensure structure and order (W4P2). Importantly, colours have often both positive and negative connotations (Allan, 2009). While most participants chose red bricks to reflect unpleasantness, one (W4P2) used it to express positivity, as she associated it with passion and exciting danger.

In summary, to the best of my knowledge this was the first study to be conducted on visual metaphors of stress, and the first study applying LEGO® building to understand the lay perspective on stress. Three interrelated categories of metaphors were identified, framing stress as: limited mobility, instability and insecurity, and chaos. These findings are consistent with the few studies which looked at metaphors of stress (Brown, 1999; Helman, 1985, 2007; Verbytska, 2017). The metaphors used by workshop participants created a negative picture of stress and evoked a sense of powerlessness but have the potential to be used to promote agency and

empowerment (Demjén et al., 2019; Semino et al., 2017). Previous studies showed that metaphors can influence reasoning about health-related issues (e.g. Barry et al., 2009; Hendricks et al., 2018; Landau, Arndt, & Cameron, 2018). They can also be employed to translate scientific findings about psychosocial concepts (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018). However, metaphors by definition highlight certain aspects of a presented issue while backgrounding others (Kövecses, 2010; Lakoff & Johnson, 1980). Metaphorical framing may help understand particular aspects of an issue or experience. Yet, as research found, metaphors can sometimes have unintended and not necessarily beneficial effects (Hauser & Schwarz, 2015, 2019). This study aimed to identify conceptual metaphors employed by lay people to think and talk about stress. However, no conclusions could be made regarding the possible effects of these metaphors on reasoning about stress or coping behaviour. This required more empirical investigation. Therefore, based on study 2 findings, metaphorical descriptions were developed and tested in study 3 to establish if they can enhance lay understanding of stress.

## 7. Study 3. Empirical testing of metaphors

### 7.1. Introduction

Previous research showed that metaphors influence people's thinking about abstract issues such as crime or illness (Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018; Thibodeau & Boroditsky, 2011). Metaphors are commonly applied in psychotherapy (Killick et al., 2016; Witney, 2012) and have been successfully used in translating science to the public and promoting knowledge (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018).

The aim of study 3 was to evaluate metaphors as a tool for communicating scientific knowledge of stress to the lay public and bridging the gaps between scientific and lay understanding of stress. Taken together the review of the existing literature (see chapter 1 and 2) and the results of study 1 revealed three discrepancies between the two perspectives. Namely, the lay public (1) was less aware than the experts of a direct link between stress and physical health, (2) emphasised individual responsibility for stress and coping to a greater extent, and paid less attention to collective responsibility than the experts, and (3) highlighted the negativity of stress. Study 2 showed that to talk about stress people often use metaphors related to motion, chaos, and imbalance. Based on these findings, four metaphorical descriptions of stress were created: Sailing Ship, Steam-engine Train, Orchestra, and Building a House (see chapter 4). The objective was to explain three underlying concepts: (1) stress can affect health in a direct way through neuroendocrine changes and allostatic load, (2) stress can result from socio-economic circumstances and is not a person's own fault, and (3) stress can be positive. Using a pre-post assessment of the understanding of stress, it was tested whether metaphors can influence public perspective of stress. The primary research question addressed in this study was:

- 1) Can metaphors improve public understanding of stress?

Several hypotheses were formulated in relation to this research question. First, it was hypothesised that metaphorical descriptions would help present scientific knowledge in an entertaining and accessible way and thus improve lay understanding of stress. It was predicted that metaphors would work better than a text presenting information unrelated to stress and better than a more technical, non-metaphorical description of stress which involved more scientific terminology and so would be seen as less comprehensible and reader-friendly. More specifically, it was predicted that participants' knowledge regarding the direct link between stress and health would improve:

H1a: After reading a metaphorical description, participants will acknowledge the direct link between stress and health to a greater extent than after reading a control text unrelated to stress or a non-metaphorical description of stress.

Further, based on findings from study 1, it was hypothesised that people would demonstrate knowledge of the indirect path between stress and health through unhealthy behaviour and the

influence of stress on mental health. Understanding of these two issues would not be affected by the metaphors.

H1b: After reading a metaphorical description of stress, understanding of the indirect pathway between stress and health will not change

H1c: After reading a metaphorical description of stress, understanding of the link between stress and mental health will not change

It was also predicted that being exposed to metaphors would lead to a better understanding of social determinants and collective responsibility for stress, or a greater reduction of beliefs in individual responsibility for stress relative to a non-metaphorical description.

H2: After reading a metaphorical description, participants will acknowledge social determinants of stress and collective responsibility to a greater extent than after reading a control text unrelated to stress or a non-metaphorical description of stress

Further, it was hypothesised that reading a metaphorical description would result in a more positive perspective on stress than reading a non-metaphorical description.

H3: After reading a metaphorical description, participants will acknowledge the positive side of stress to a greater extent than after reading a control text unrelated to stress or a non-metaphorical description of stress

Finally, it was predicted that exposure to metaphors would lead to a better understanding of the need for self-care in times of stress:

H4: After reading a metaphorical description, participants will acknowledge the need for self-care to a greater extent than after reading a control text unrelated to stress or a non-metaphorical description of stress.

Metaphorical descriptions were constructed to target all three discrepancies between lay and scientific perspectives and the effectiveness of the four metaphors was assessed. With no grounds for formulating a specific hypothesis, a secondary research question was posed:

2) Which metaphor is the most effective to convey scientific knowledge of stress to the lay public?

## 7.2. Method

### 7.2.1. Design

In order to establish the effectiveness of metaphorical descriptions in modifying lay understanding of stress, a 6x2 (Condition x Time) mixed ANOVA was conducted. The between-participant independent factor was Condition. Each participant was randomly assigned one of the six descriptions to read: four of them were experimental, metaphorical descriptions of stress (Ship, Train, Orchestra, House), and two served as control descriptions (one, Comparison, was a non-metaphorical description of stress which used relatively simple language, the other one, Control,

involved a non-metaphorical text unrelated to stress). Time, with two levels (pre- and post-reading), was the independent, within-participant variable. There were seven dependent variables: Positivity, Physical Health, Health Behaviour, Mental Health, Individual Responsibility, Social Circumstances, and Self-care, each operationalised as a sum of scores obtained through responding to the relevant survey items.

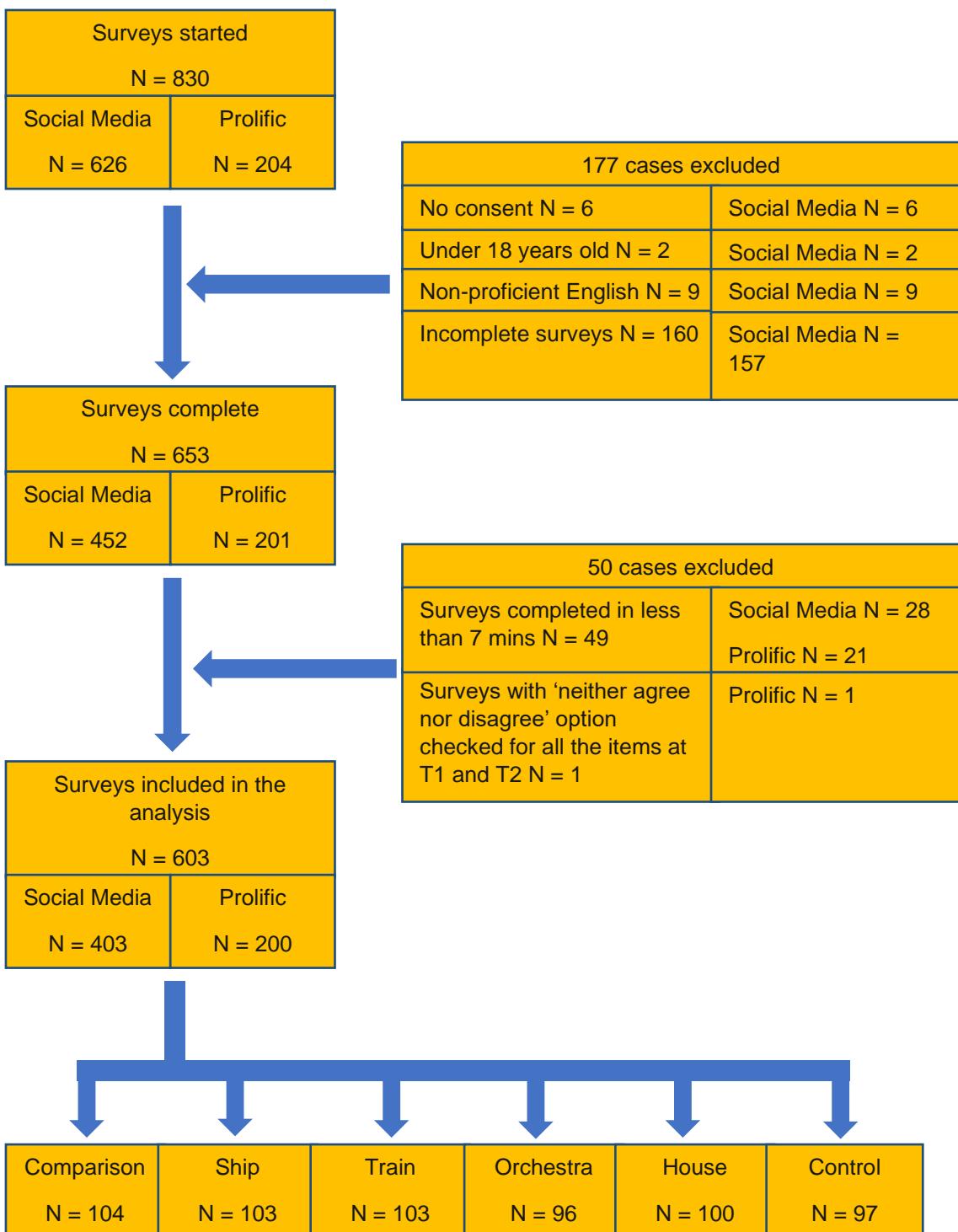
### 7.2.2. Participants

A random sample of 830 people started the online experiment. Six hundred and twenty-six of them were recruited through social media (Facebook, Twitter, LinkedIn, survey exchange platforms). As an incentive, they were offered a chance to win £20 Amazon voucher (one draw per 100 participants; 288 wished to take part in the draw). The remaining 204 participants were recruited through the on-line recruitment platform Prolific (<http://prolific.co>). As the ‘social media’ sample included almost twice as many women as men (65.74% and 33.07% respectively, out of the 505 participants who answered the question on gender), it was decided to use Prolific to redress the balance by recruiting in favour of male participants. Participants recruited via Prolific received £1.88 following study completion in accordance with Prolific’s Terms and Conditions. The study (with an amendment allowing for the use of Prolific) was approved by the Bournemouth University Ethics Research Committee (ref. id. 31505).

Out of the 830 participants, 6 did not sign the consent form, 160 provided incomplete surveys, nine did not meet the criterion of being proficient in English, and another two reported being aged below 18 years old. Thus, 177 cases were excluded from further analysis. Further, all participants who completed the survey in under seven minutes (N=49) were excluded, as this was deemed too short a time to fully engage with all of the questions and read the description carefully. Finally, one person who checked ‘neither agree nor disagree’ for all of the survey statements was also excluded (see Figure 15). As a result, the analysis was conducted on a sample of 603 participants (316 females, 296 males), aged 18 to 73 years ( $M = 31.03$ ,  $SD = 10.67$ ), the majority of whom (70.0%) were native English speakers (see Table 5 for more details). The number of males and females ( $\chi^2 (5, N = 598) = 0.29 p = .998$ ) as well as of native and non-native English speakers ( $\chi^2 (5, N = 603) = 2.52 p = .773$ ) were similar across conditions. No significant differences across conditions in terms of educational background ( $\chi^2 (20, N = 584) = 15.05 p = .774$ ), occupational status ( $\chi^2 (25, N = 603) = 21.51 p = .664$ ) or age ( $F (5, 597) = 0.62 p = .684$ ) were found.

**Figure 15**

*Participants flow diagram*



**Table 5***Sociodemographic characteristics of the study sample*

	Total	Comparison	Ship	Train	Orchestra	House	Control	
Gender	Total N (%)	603 (100.0)	104 (17.2)	103 (17.1)	103 (16.5)	96 (15.9)	100 (16.6)	97 (16.1)
	Female N (%)	316 (52.4)	53 (51.0)	55 (53.4)	54 (52.4)	51 (53.1)	54 (54.0)	49 (50.5)
	Male N (%)	282 (46.8)	49 (47.1)	48 (46.6)	48 (46.6)	45 (46.9)	45 (45.0)	47 (49.0)
	Other/PNS N (%)	5 (0.7)	2 (2.0)	0 (0.0)	1 (1.0)	0 (0.0)	1 (1.0)	1 (1.0)
Education	GCSE N (%)	16 (2.7)	2 (1.9)	4 (3.9)	3 (2.9)	4 (4.2)	1 (1.0)	2 (2.1)
	A-level N (%)	79 (13.1)	9 (8.7)	17 (16.5)	16 (15.5)	10 (10.4)	14 (14.0)	13 (13.4)
	Undergraduate N (%)	243 (40.3)	43 (41.3)	40 (38.8)	34 (33.0)	40 (41.7)	44 (44.0)	42 (43.3)
	Master's N (%)	199 (33.0)	39 (37.5)	33 (32.0)	38 (36.9)	29 (30.2)	33 (33.0)	27 (27.8)
	Doctoral N (%)	47 (7.8)	5 (4.8)	7 (6.8)	8 (7.8)	9 (9.4)	6 (6.0)	12 (12.4)
	Other N (%)	14 (2.3)	4 (3.8)	1 (1.0)	4 (3.9)	2 (2.1)	2 (2.0)	1 (1.0)
	PNS N (%)	5 (0.8)	2 (1.9)	1 (1.0)	0 (0.0)	2 (2.1)	0 (0.0)	0 (0.0)
Occupational status	Full-time N (%)	273 (45.3)	49 (47.1)	49 (47.6)	43 (41.7)	43 (44.8)	45 (45.0)	44 (45.3)
	Part-time N (%)	52 (8.6)	6 (5.8)	9 (8.7)	8 (7.8)	11 (11.5)	11 (11.0)	7 (7.2)
	Unemployed N (%)	56 (9.3)	6 (5.8)	10 (9.7)	11 (10.7)	6 (6.3)	10 (10.0)	13 (13.4)
	Retired N (%)	12 (2.0)	1 (1.0)	2 (1.9)	5 (4.9)	3 (3.1)	0 (0.0)	1 (1.0)
	Student non-working N (%)	113 (18.7)	22 (21.2)	13 (2.6)	18 (17.5)	20 (20.8)	20 (20.0)	20 (20.6)
	Student working N (%)	97 (16.1)	20 (19.2)	20 (19.4)	18 (17.5)	13 (13.5)	14 (14.0)	12 (12.4)
Native English	Yes N (%)	422 (70.0)	70 (67.3)	71 (68.9)	70 (68.0)	68 (70.8)	69 (69.0)	74 (76.3)
	No N (%)	181 (30.0)	34 (32.7)	32 (31.1)	33 (32.0)	28 (29.2)	31 (31.0)	23 (23.7)
Age	Mean (SD)	31.03 (10.67)	30.19 (9.56)	31.33 (11.05)	31.51 (12.25)	32.30 (11.14)	30.10 (9.05)	30.78 (10.76)

Note: Table presents % within condition. PNS – Prefer not to say

It was reasonable to expect a number of participants to drop out at an early stage of the survey (i.e. after opening the link and responding to a first few questions). The number reported as the total number of participants in the sample ( $N=830$ ) included 160 cases with incomplete surveys, 107 of which did not go beyond the consent form (second screen) stage. Hoerger (2010) showed that about 10% of participants in online survey-based psychology studies drop out at the beginning of the survey. Also, the longer the survey, the higher the drop-out rate is expected to be, particularly at the further stages of the survey. In this study the drop-out rate was also likely due to the way the online recruitment in the survey platform worked. The study was advertised on social media where only critical details were provided (eligibility criteria, i.e., being an adult and being proficient in English, topic of the study and the approximate time required to complete the survey, information about the lucky draw). If a person clicked the link included in the advert, the software (Qualtrics) registered it as a 'survey started' although the first page was actually a participant information sheet (PIS). Once a person had read PIS, they could either give their consent and continue to the screening questions, not give their consent which automatically terminated the session, or simply close the browser without continuing if they did not want to do the survey. A certain number of dropouts could have also been due to potential participants clicking the link in the advert by mistake. In a traditional pen-and-paper or laboratory-based study, a person who only read the PIS and decided not to take part would not be counted as a participant, and therefore not included as a dropout.

### 7.2.3. Materials

*Understanding of stress.* As described in section 4.4.2 a set of 23 statements pertaining to seven stress-related issues was developed and used to measure understanding of stress (see Appendix 23 for the full list of items). Each statement was answered on a 7-point Likert scale with a descriptor for each point, from 'Strongly disagree' (1) to 'Strongly agree'(7), with a middle point of 'Neither agree nor disagree' (4). In most cases, the statements reflected the scientific perspective on stress, and agreement with the statement was a sign that the participant's understanding of stress was similar to the scientific understanding. However, nine items were reverse scored. Before running any statistical analyses, the responses to these items were re-coded. Therefore, the higher the score in any given category and the whole survey, the closer an individual's belief to the scientific perspective on stress.

The six groups of statements were checked for reliability. The scores were not distributed normally. Cronbach's  $\alpha$  does not assume normality although it might be sensitive to the distribution of the test score (Sheng & Sheng, 2012). However, a simulation study has shown that accuracy improves with sample size. It has been suggested to use samples of  $N>100$  (Sheng & Sheng, 2012) and the current study sample consisted of 603 participants.

Responsibility-related items did not yield consistent responses. Thus, based on the Cronbach's alpha these items were re-categorised into two separate groups. Five statements regarding responsibility for stress and coping (e.g. "It is the person's own fault if they get stressed", "If someone gets stressed it is usually because they have not developed appropriate coping

skills") were grouped as Individual Responsibility, which was justified in the light of Lazarus and Folkman's (1984) theory that getting stressed hinges on perceptions of coping. If an individual feels responsible for coping with stress, they also feel responsible for getting stressed if they do not cope well enough. The three remaining items which more directly referred to social circumstances and their influence on stress and coping (e.g. "It is much more difficult to cope with stress if a person lives in poorer area or has difficult social circumstances") were categorised as Social Determinants and reflected more social/collective (as opposed to individual) responsibility. Cronbach's  $\alpha$  for the six groups of items at Time 1 ranged from .500 to .784 (Table 6). These were satisfactory given that the number of items per group was small (three to five items) and the means of inter-item correlations ranged from .25 to .48 (Pallant, 2016). At Time 2, Cronbach's  $\alpha$  were higher (except for Physical Health and Health Behaviour categories) which suggests that participants responded more consistently to the items from most groups.

*Experimental stimuli.* For the purposes of this study four metaphorical descriptions were developed (see section 4.4.1): Sailing Ship, Steam-engine Train, Building a House, Orchestra. In addition two control descriptions were developed: one, Comparison, involved a non-metaphorical description of stress, and one, Control, was a text unrelated to stress (a weather forecast composed of texts published on The Weather Outlook and BBC Weather websites). They matched the metaphorical descriptions in terms of the length and readability, and the Comparison description presented the information about stress in the same order as metaphorical ones. Descriptions were accompanied with a single photo (see Appendices 24-29): a sailing ship, a steam-engine train in mountain scenery, an symphony orchestra, a group of workers building a house, a weather map, and a handwritten word 'stress' (all photos were creative commons licensed (BY-NC-ND)). No minimum or maximum time for reading was set, thus participants could spend as much time on it as they liked.

**Table 6**

*Cronbach  $\alpha$  and inter-item correlation means of the six groups of items in the Understanding of stress measure*

Section	Number of items	Time 1		Time 2	
		Cronbach $\alpha$	Inter-item correlations mean	Cronbach $\alpha$	Inter-item correlations mean
Positivity	3	.59	.32	.66	.41
Physical Health	4	.69	.37	.65	.34
Health Behaviour	4	.78	.48	.78	.49
Individual Responsibility	5	.68	.31	.71	.34
Social Determinants	3	.50	.25	.59	.35
Self-Care	3	.62	.34	.72	.47

Kruskall-Wallis tests showed differences between the descriptions in terms of their characteristics i.e. being interesting informative, easy to read, enjoyable, easy to imagine as well as in terms of percentage of the information remembered (Table 7).

**Table 7**

*Rank differences in the characteristics of six descriptions as evaluated by the participants*

Variable	Comparison	Ship	Train	Orchestra	House	Control	Kruskall-Wallis H
Interesting	354.02	351.32	339.25	326.54	318.37	113.14	139.27**
Informative	392.87	331.25	280.18	273.16	272.56	255.58	45.32**
Easy to read	344.62	323.79	336.43	308.80	329.26	161.78	77.83**
Enjoyable	324.86	359.44	364.56	328.07	312.05	113.91	141.95**
Easy to imagine	276.08	372.64	368.78	303.36	339.30	144.08	119.29**
Remembered (%)	356.64	328.06	365.67	298.73	305.14	148.14	102.12**

Note: For each test df = 5; \*\*  $p < .001$

Pairwise comparisons with adjusted p-values showed that Control description was evaluated by the participants as significantly less interesting, enjoyable, easy to read and remembered to a significantly lower degree than other texts. The Comparison description was deemed as significantly more informative than others with the exception of the Ship description, which was also evaluated as more informative than the Control text. Furthermore, the Ship and Train descriptions were evaluated as significantly easier to imagine than the Comparison text.

#### 7.2.4. Procedure

The study was accessed through a link in an advert posted on social media (Twitter, Facebook, LinkedIn), survey exchange platforms (SurveyCircle, SurveySwap) or Prolific. Volunteers were presented with a Participant Information Sheet and then invited to give consent to participate. Consenting participants were asked to confirm they were native speakers of English or proficient in English, and to provide basic socio-demographic data (age, gender, educational background, occupational status; non-native speakers of English were also asked to report what their native language was). Then, they responded to 23 statements about stress. Afterwards, they were presented with a short text. Participants were randomly assigned to one of the six descriptions via Qualtrics inbuilt randomisation system. After reading, participants were asked to evaluate to what extent (0-100) they thought the text was ‘interesting’, ‘informative’, ‘easy to read’, ‘enjoyable’, ‘easy to imagine’, and what percentage of the text they ‘thought they remembered’. Next, they responded to the same 23 statements presented prior to reading the description.

#### 7.2.5. Statistical analysis

The assumption of the independence of observations was met as the study involved an online framing experiment and participants were required to respond independently. The assumption of normality was found to be violated since the Kolmogorov-Smirnov (K-S) test

showed that with some exceptions the distribution of scores in the specific subsections (categories) across conditions was significantly different from normal (see Appendix 30). Outliers were identified but removing them did not change K-S test results so they were kept in the sample. With the exception of Mental Health (single item), skewness and kurtosis were relatively small (from -1.34 to 0.16 and from -1.10 to 3.24 respectively) although still significantly different from normal distributions in several cases. Following Hy (2013) recommendation, an absolute Z-score of 3.29 was adopted as a cut-off point to reject the null hypothesis of the distribution not being significantly different from normal. At Time 1, Health Behaviour scores were negatively skewed in Comparison and Train condition, Mental Health scores in Comparison, Ship, Orchestra, and House conditions, while Individual Responsibility scores were negatively skewed in Ship and Control condition. At Time 2, Positivity scores in Comparison, Ship, and Train conditions, Physical Health scores in Comparison condition, Health Behaviour in Ship and Orchestra condition, Mental Health in Comparison and Orchestra conditions, and Social Circumstances in Train condition were all negatively skewed. As the intervention aimed to change people's beliefs about stress to be more consistent with scientific perspective, and this was operationalised as higher scores in the scales, the fact that the responses distributions at Time 2 were negatively skewed suggests that the intervention was at least to some extent successful. As regards kurtosis, it was significantly different from normal distribution in six cases: Individual Responsibility scores in Ship and Control condition, Mental Health scores in Comparison and House Condition at Time 1, as well as Physical Health scores in Comparison condition, and Mental Health scores in Orchestra condition at Time 2 were leptokurtic (positive kurtosis, the frequency distribution concentrated around the mean value). Based on ANOVA assumptions, skewness does not significantly impact power (Glass et al., 1972 as cited in Pituch & Stevens, 2016). Platykurtosis (negative kurtosis, a flatter frequency distribution) reduces power (Olson, 1973 as cited in Pituch & Stevens, 2016) but observations in this study where not mesokurtic were leptokurtic (not platykurtic). Data transformation (square rooting after reflecting the scores, logarithm) was attempted but did not lead to normalisation of the score distributions.

Given the non-normality of the data, a non-parametric test could have been considered to assess the differences in variance of seven different outcome variables between the six conditions over time: univariate analysis for Positivity and Social Determinants and multivariate for Physical Health, Mental Health, and Health Behaviour, as well as for Individual Responsibility, and Self-Care, as these were moderately to strongly correlated (see Tables 8 and 9). However, there is no non-parametric equivalent for mixed univariate or mixed multiple analysis of variance available in SPSS 26.0.

As the study samples were relatively large (from 96 to 104 cases for each description), normality was assumed (Pituch & Stevens, 2016). Means and medians for all the scales across conditions were very similar (see Appendix 30). Analysis of variance (ANOVA) is considered robust especially if the samples sizes are similar (Hy, 2013). Therefore, even though the assumption of normality was not formally met, it was decided to conduct parametric tests of mixed ANOVA for each of the seven outcomes. Since some of the dependent variables correlated with

each other, a corrected level of significance (Bonferroni correction which involves dividing  $\alpha$  by the number of analyses which would be run instead of MANOVA) was applied for Physical Health, Mental Health, and Health Behaviour ( $\alpha=.017$ ), as well as for Individual Responsibility, and Self-Care ( $\alpha=.025$ ) to avoid inflating the risk of Type I error in the ANOVA.

Box's test showed that the assumption of equality variance-covariance matrices of difference scores between groups was violated in the case of all DVs. However, multivariate tests results are considered robust to violation of this assumption if the samples sizes are approximately equal i.e. the largest group is less than 1.5 times bigger than the smallest group (Pituch & Stevens, 2016). Levene's test showed the assumption of homogeneity of variances for the between-group comparisons was met (see Appendix 31)

### 7.3. Results

A series of 6x2 mixed ANOVA revealed differences across conditions and times of measurement in different aspects of the lay understanding of stress. The results of the ANOVA tests are presented in sections 7.3.1 to 7.3.8. Table 10 displays means and standard deviations of the seven dependent variables in each condition before and after reading a metaphorical or non-metaphorical text, along with the results of ANOVAs.

**Table 8**

*Correlations between dependent variables at Time 1 (Spearman's  $\rho$  coefficients)*

Variable	1	2	3	4	5	6	7
1. Positivity	-						
2. Health Behaviour	-.28**	-					
3. Physical Health	-.07	.48**	-				
4. Mental Health	-.19**	.47**	.49**	-			
5. Individual Responsibility	.08*	.05	.11**	.07	-		
6. Social Determinants	-.07	.17**	.20**	.16**	-.01	-	
7. Self-care	.08	.16**	.27**	.21**	.45**	.09*	-

\* $p < .05$ , \*\* $p < .01$

**Table 9**

*Correlations between dependent variables at Time 2 (Spearman's  $\rho$  coefficients)*

Variable	1	2	3	4	5	6	7
1. Positivity	-						
2. Health Behaviour	-.09*	-					
3. Physical Health	-.09*	.41*	-				
4. Mental Health	-0.03	.53**	.49**	-			

5. Individual Responsibility	.10*	.08	.25**	.14**	-	
6. Social Determinants	.03	.22**	.30**	.27**	.02	-
7. Self-care	.07	.20**	.38**	.24**	.55**	.19**

\*p < .05, \*\*p < .01

### 7.3.1. Positivity of stress

The main effect of time on Positivity was significant (see Table 10) and as expected the averaged scores were higher at Time 2 ( $M_{dif} = 0.64$ ,  $p < .001$ ). The main effect of condition on Positivity was also significant. The averaged scores were higher in the Train group as compared to the Control group ( $M_{dif} = 1.25$ ,  $p = .031$ ). These effects were qualified by a significant time\*condition interaction effect. Pairwise comparisons with Bonferroni correction (see Appendix 32) showed that Positivity scores increased statistically significantly over time in the Train ( $M_{dif} = 1.24$ ,  $p < .001$ ), Comparison ( $M_{dif} = 1.23$ ,  $p < .001$ ), and Ship ( $M_{dif} = 1.09$ ,  $p < .001$ ) conditions. No statistically significant changes were noted for Orchestra, House or Control condition. Furthermore, while there were no between-condition differences at Time 1, at Time 2 the Control group's Positivity scores were statistically significantly lower than the Train ( $M_{dif} = 1.99$ ,  $p < .001$ ), Comparison ( $M_{dif} = 1.62$ ,  $p = .005$ ), and Ship ( $M_{dif} = 1.58$ ,  $p = .006$ ) groups' scores.

**Table 10.***Means, standard deviations and two-factor mixed ANOVA results*

Variable	Comparison		Ship		Train		Orchestra		House		Control		ANOVA				
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	Effect	F ratio	df	p	$\eta_p^2$
<b>Positivity</b>																	
Time 1	14.38	2.82	14.50	3.29	14.75	3.30	14.69	3.25	15.11	3.09	14.25	3.23	T	33.15	1,597	< .001	.05
Time 2	15.62	3.11	15.58	3.18	15.99	3.14	15.09	2.91	15.25	3.23	14.00	3.31	C	2.42	5,597	.049	.02
													TxC	5.40	1,597	< .001	.04
<b>Physical health</b>																	
Time 1	22.01	3.60	22.32	3.06	22.15	3.36	21.43	3.32	21.28	3.89	22.66	3.26	T	69.71	1,597	< .001	.11
Time 2	23.63	3.44	22.85	3.09	22.97	3.09	22.74	3.02	22.96	3.66	22.72	3.10	C	1.04	5,597	.396	
													TxC	4.59	1,597	< .001	.04
<b>Health behaviour</b>																	
Time 1	22.37	3.93	22.32	3.50	21.83	4.54	21.28	3.79	21.19	3.95	23.20	3.48	T	0.87	1,597	.351	
Time 2	22.33	3.05	22.41	3.28	22.02	4.14	21.74	3.63	21.46	3.54	22.88	3.62	C	3.29	5,597	.006	.03
													TxC	0.86	1,597	.507	
<b>Mental Health</b>																	
Time 1	6.08	0.92	6.14	0.89	5.99	0.88	5.86	0.99	5.92	1.11	6.30	0.72	T	0.05	1,597	.825	
Time 2	6.06	0.83	6.13	0.76	6.03	0.88	5.88	0.99	6.03	0.89	6.22	0.71	C	2.95	5,597	.012	.02
													TxC	0.52	1,597	.761	
<b>Individual Responsibility</b>																	
Time 1	25.05	4.49	25.32	4.09	24.77	4.38	24.61	4.70	25.37	4.00	25.66	4.65	T	34.02	1,597	< .001	.05
Time 2	25.29	5.07	26.12	5.14	26.11	4.93	25.32	5.65	26.31	3.92	26.58	5.12	C	0.96	5,597	.443	
													TxC	5.00	1,597	.356	

Variable	Comparison		Ship		Train		Orchestra		House		Control		ANOVA				
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	Effect	F ratio	df	$\eta_p^2$	
<b>Social Determinants</b>																	
Time 1	13.61	2.77	13.18	2.59	13.12	2.62	12.96	3.22	13.17	2.80	12.97	2.82	T	338.77	1,597	<.001	.36
Time 2	16.16	2.79	14.79	2.76	15.47	2.87	15.13	3.34	14.74	3.18	13.84	3.13	C	3.42	5,597	.005	.03
													TxC	6.41	1,597	.001	.05
<b>Self-care</b>																	
Time 1	15.69	2.92	16.16	2.64	16.26	2.75	15.98	2.81	16.07	2.64	16.19	3.04	T	0.14	1,597	.905	
Time 2	15.99	3.23	15.64	3.07	16.75	3.08	15.99	3.31	15.77	3.08	16.14	3.14	C	0.81	5,597	.540	
													TxC	3.09	1,597	.009	.03

Note:  $\eta_p^2 < 0.01$  – small effect,  $\eta_p^2 (0.01, 0.06)$  – medium effect,  $\eta_p^2 > 0.06$  – large effect

### 7.3.2. Physical Health

ANOVA revealed a statistically significant main effect of time but not condition on the Physical Health scores (see Table 10). The averaged scores increased over time ( $M_{dif} = 1.00$   $p < .001$ ). The time\*condition interaction effect was significant. Pairwise comparisons with Bonferroni correction showed that Physical Health scores increased statistically significantly over time in the House ( $M_{dif} = 1.68$ ,  $p < .001$ ), Comparison ( $M_{dif} = 1.62$ ,  $p < .001$ ), Orchestra ( $M_{dif} = 1.31$ ,  $p = .005$ ), and Train ( $M_{dif} = .825$ ,  $p = .005$ ) conditions, but not in the Ship or Control condition. None of the differences between conditions at Time 1 or Time 2 were statistically significant (see Appendix 33).

### 7.3.3. Health Behaviour

The main effect of condition on the Health Behaviour scores was significant (see Table 10). Post-hoc Tukey's test with Bonferroni correction (see Appendix 34) showed that averaged health behaviour scores were lower in the House group than the Control group ( $M_{dif} = 1.71$   $p = .007$ ). However, neither the main effect of time, nor time\*condition interaction effect were statistically significant.

### 7.3.4. Mental Health

There was a statistically significant main effect of condition on Mental Health scores (see Table 10). Post-hoc Tukey's test with Bonferroni correction applied showed Orchestra group averaged scores were lower than Control group ( $M_{dif} = -.39$   $p = .007$ ). Other between-condition differences were not significant (see Appendix 35). However, neither the main effect of time, nor time\*condition interaction effect were statistically significant.

### 7.3.5. Individual Responsibility

ANOVA showed a statistically significant effect of time on Individual Responsibility scores (see Table 10). Averaged scores increased over time ( $M_{dif} = 0.82$ ,  $p < .001$ ). The main effect of condition and the condition\*time interaction effect were not significant. However, pairwise comparisons with Bonferroni correction (see Appendix 36) were run to look closer at the time-related changes. It was found that Individual Responsibility scores increased in Ship ( $M_{dif} = 0.80$ ,  $p = .020$ ), Train ( $M_{dif} = 1.34$ ,  $p < .001$ ), House ( $M_{dif} = 0.94$ ,  $p = .007$ ), and Control ( $M_{dif} = 0.92$ ,  $p = .009$ ) groups but did not change statistically significantly in the Orchestra ( $M_{dif} = 0.71$   $p = .046$ ) or Comparison group ( $M_{dif} = 0.24$   $p = .480$ ). These results are of purely exploratory nature and should be treated with caution.

### 7.3.6. Social Determinants

The main effect of time on Social Determinants was significant (see Table 10). As expected, the scores were higher at Time 2 ( $M_{dif} = 1.85$ ,  $p < .001$ ). There was also a significant effect of condition. Tukey's test with Bonferroni correction showed that the averaged scores in Comparison group were higher than in the Control group ( $M_{dif} = 1.48$   $p = .001$ ). Furthermore, there was a

significant interaction time\*condition effect. Pairwise comparisons revealed that Social Determinants scores increased in all groups. The biggest change was noted in the Comparison group ( $M_{dif} = 2.56$   $p < .001$ ), followed by Train ( $M_{dif} = 2.35$   $p < .001$ ), Orchestra ( $M_{dif} = 2.17$   $p < .001$ ), Ship ( $M_{dif} = 1.60$   $p < .001$ ), and House ( $M_{dif} = 1.57$   $p < .001$ ) groups, with the smallest change in the Control group ( $M_{dif} = .87$   $p = .001$ ). Moreover, there were no differences between conditions at Time 1, but at Time 2 the Comparison group scored higher than Control ( $M_{dif} = 2.33$   $p < .001$ ), House ( $M_{dif} = 1.42$   $p = .012$ ), and Ship ( $M_{dif} = 1.38$   $p = .016$ ) groups. The Control group also scored lower than Train ( $M_{dif} = -1.63$   $p = .002$ ), and Orchestra groups ( $M_{dif} = -1.29$   $p = .046$ ) (see Appendix 37).

### 7.3.7. Self-Care

The main effects of time and condition on Self-Care scores were not significant (see Table 10). However, there was a significant condition\*time interaction effect. Pairwise comparisons with Bonferroni correction showed that Self-Care scores increased significantly over time in the Train group ( $M_{dif} = .49$   $p = .021$ ), decreased in the Ship group ( $M_{dif} = -.52$   $p = .014$ ) and did not change in the remaining four groups. No significant differences between conditions at Time 1 or Time 2 were identified (see Appendix 38).

## 7.4. Discussion

This exploratory study was designed to examine the effectiveness of metaphors as a science communication tool. Specifically, it was predicted that exposure to a metaphorical description would lead to enhanced understanding of the direct pathway between stress and physical health, collective responsibility for stress, and social determinants of stress. It was also hypothesised that metaphors would facilitate acknowledgement of the positivity of stress, as well as the need for self-care. These hypotheses were partially confirmed. Overall, reading metaphorical descriptions improved participant understanding of at least some of the targeted aspects of stress. This is consistent with previous research which showed that metaphors can influence reasoning about social, medical, and psychological issues (Barry et al., 2009; Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018; Thibodeau & Boroditsky, 2011) and can improve public understanding of these issues (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018).

The metaphorical description of the Steam-engine Train was found to be the most effective metaphor in improving understanding of stress. Participants who read this particular description answered more consistently with the scientific perspective in respect to positivity of stress, a direct link between stress and physical health, individual responsibility for stress, social circumstances influencing stress, and self-care attitude. These effects were all statistically significant, however, the results regarding individual responsibility needs to be treated with caution given the non-significant interaction between time and condition. The Ship, Orchestra, and House metaphors were also effective. Reading these metaphors statistically significantly improved participants understanding of stress as measured by the changes in responses to specific sections of the

survey. However, they were not so successful as the Train metaphor which led to the greatest changes in four out of five targeted aspects of the understanding of stress. The only exception was the link between stress and physical health where House metaphor worked best, followed by Comparison, Orchestra, and Train metaphors.

With regard to understanding of the specific aspects of stress, only the Train and Ship metaphors helped participants to acknowledge more positive side of stress. This suggests that metaphors referring to motion or journey may help people understand the positive aspects of stress better than chaos-related metaphors. That might be because a journey (arriving at a destination) represents achieving goals (Lakoff, 1993) – a process that is possibly stressful but at the same gives meaning to life and may elicit positive emotions. The Comparison description also statistically significantly improved respondents' understanding of positive aspects of stress. Whilst all the descriptions involved similar information about the positivity of stress, the Comparison text provided more specific and direct information on the occurrence of positive emotions and mood in response to a stressful situation. It can be concluded that the information about positive side of stress can be conveyed effectively using both metaphorical and simplified technical (scientific) language. Acquiring and processing these two types of information might involve different cognitive processes, however, the explanation of these is beyond the scope of this work and might require further research.

Metaphors improved participants' knowledge about the direct links between stress and physical health. However, those who read the House or Orchestra description reported more positive change than those who read the Train metaphor and there was no significant change in the Ship group. This suggests that chaos-related metaphors may work better when addressing this particular aspect of the knowledge of stress. It can be interpreted that it was easier for the participants to see the body and its systems in terms of different sections of an orchestra or members of the building team, rather than an engine or a ship. While mechanistic metaphors are common in stress discourse (e.g. switch off, shut down, coping mechanism, trigger for stress, downtime) as observed in study 1 and study 2 (see also Brown, 1999; Helman, 2007; Mulhall, 1996), the complex systems of a steam engine or the construction of a ship might be less familiar to the lay public, and therefore less useful to explain the abstract issue of stress. Again, the Comparison description also helped people improve their knowledge about stress and physical health, most likely because it provided this information directly.

As expected, the intervention did not change participants' perspectives on the links between stress and health through unhealthy behaviour or the influence of stress on mental health. Studies 1 and 2 showed that people have a good understanding of these ideas, which was confirmed by the high scores in this study at Time 1. As a gap in lay understanding of these aspects of stress was not identified in the previous studies, the description did not target this issue. However, there was a risk that metaphors might improve the understanding of the direct path between stress and health at the cost of downplaying the role of unhealthy behaviour in stress-related health effects. Therefore, a few items pertaining to the indirect pathway between

stress and health were included in the survey to check if reading a metaphor did not lead to unexpected changes in the lay perspective on stress and health. This study showed that being exposed to a metaphorical description of stress did not affect participants' understanding of the indirect links between stress and health.

After reading the Train, House, and Ship metaphors, people improved their knowledge regarding individual responsibility for stress. While participants scored relatively highly at time 1 on individual responsibility for stress, these three metaphors led to the expected changes and heightened participants' disagreement with the idea of individual responsibility for stress. The same applied to the Comparison description. These results need to be treated as exploratory, though, because the interaction effect was not significant in this case.

All groups obtained higher scores in relation to the influence of social circumstances on stress when answering for the second time. The Comparison, Train, and Orchestra descriptions led to the greatest change in this case. One of the three items on the influence of social circumstances stood out in terms of the responses. In the first survey most participants (80.60%) did not agree with the statement "If a person gets too stressed it is usually because they live in a poor area with difficult social conditions." While this statement is consistent with the scientific perspective which highlights the importance of socio-economic conditions (see e.g. Avison, 2016), people may have associated stress with more specific issues such as too much work, exams, or poor relationships as found in study 1. The intervention improved the understanding of the role of socio-economic determinants and collective action in coping with stress. Surprisingly, even the Control group who read a weather forecast acknowledged the role of socio-economic determinants in the second survey to a greater extent than in the first measurement, however the effect was much smaller than for the other conditions. It might be that reading the survey items for the second time prompted the participants to re-think their first response.

Finally, attitude to self-care did not change over time except for two conditions. Participants who read the Train metaphor reported even greater agreement with the idea of self-care. Surprisingly, those who read the Ship metaphor reported lower agreement. However, in both cases these effects were very small. In the case of the positive change after Train metaphor it could have been due to relatively high agreement with the need for self-care even before the intervention. Nonetheless, the fact that participants to an extent disregarded the need for self-care after reading the Ship metaphor suggests that this metaphor should not be used to convey knowledge about this particular stress-related issue.

#### 7.4.1. Strengths, limitations and further research

As compared to previous studies in the field (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018), this study had an important strength in its design. Previous research applied between-groups designs only, comparing the effectiveness of different metaphors. Also, only one (Kendall-Taylor & Haydon, 2016) out of three used a non-metaphorical control condition. This study employed a mixed design to check how effective metaphorical

descriptions are as compared to a non-metaphorical description of stress as well as to a control condition where participants were offered no information about stress. Also, given that the understanding of stress was measured pre and post reading activity, the study allowed for concluding that the different changes in the level of stress understanding across conditions can be attributed to the exposure to the specific type of information participants read.

Based on the findings from study 3, metaphors appear to be a good tool to communicate scientific knowledge about stress. Participants who had read a metaphorical description, responded to the statements more consistently with the scientific perspective. This was not observed in the group who read a text unrelated to stress. Metaphors were comparable in their effectiveness to the Comparison condition, which worked surprisingly well overall. Based on previous research (Kendall-Taylor & Haydon, 2016), it was expected that the Comparison description would be less accessible due to involving jargon, and would not lead to much change in lay understanding of stress. However, efforts were made to ensure that the Comparison description was comparable in terms of difficulty and complexity to the other descriptions. Although it contained some more technical terms such as “endocrine system”, “physiological reactions”, “self-compassion” or “long-term impairment” these were not particularly complex or unknown to the wider public. Moreover, participants were well-educated (81.1% held a higher education diploma). Thus, understanding more scientific language might not pose any problem to them. In fact, respondents evaluated the Comparison condition as more informative than the others. In future, it would be interesting to see how metaphors work as compared to more scientific description, and in less educated groups, children or pre-university adolescents. Importantly, other studies exploring the effectiveness of metaphor as a science communication tool did not include any control condition (Kendall-Taylor et al., 2013), or the control condition involved simple priming of the topic in question without presenting any information about it (Kendall-Taylor & Stanley, 2018). Thus, it was not possible to infer any conclusions about the effectiveness of metaphors as opposed to non-metaphorical description. This study showed that simple technical description can be an effective way of communicating science which is a novel finding with practical implications. Various metaphors may be required to explain different aspects of complex issues or experiences well (Hommerberg et al., 2020) which was also shown in this study as different metaphors improved understanding of different aspects of stress. However, a non-metaphorical description may also provide a viable alternative or complement to a metaphor, particularly if a metaphor does not effectively explain all the important aspects of an issue.

The main limitation of this study was the lack of control over the time participants spent reading the descriptions. While this issue was addressed by excluding participants who took relatively little time to complete the study, it might be that participants did not engage sufficiently in the study and skimmed through the descriptions. To address such issues in future studies, it would be important to set a specific time for reading, which must be completed prior to moving to the next part of the study, to ensure that participants engage more with the descriptions.

Another issue in this study was that participants had a good understanding of stress even before the intervention, leaving little room for improvement. Studies 1 and 2 showed certain discrepancies between lay and scientific perspectives. However, this might not mean that people do not know the scientific perspective at all, but rather that it is less salient in their minds. Responding to specific statements in the survey might have prompted participants to think about stress in a different way. For instance, an individual may not think of particular aspects of stress when asked an open-ended question on stress and health. Yet, if asked a more specific question on the relationship between stress and physical health as in the survey, a person may remember more specific or scientific facts. In future, more conscious targeting of people who have a less developed understanding of stress is required to find out if metaphors can help improve it.

In summary, this study was the first to apply metaphorical descriptions to enhance the lay perspective on stress. It confirmed that metaphors can be successfully used as a science communication tool. The comparison of participants responses pre and post-intervention showed that metaphorical framing can (1) improve knowledge of the links between stress and physical health, help people (2) recognise the positivity of stress, and (3) acknowledge social determinants of stress, (4) reduce the emphasis on individual responsibility for stress and coping, and (5) convey the need for self-care. Better understanding of these issues may contribute to individual health and well-being through individual actions, but also lead to development of policies and programmes ensuring more effective stress management interventions at different levels.

However, stress is a complex issue and – as shown in this study – different metaphors can be more suitable to communicate particular information about stress. This has practical implications for designing educational materials to help people interpret research findings about stress. The Train metaphor was found to be most effective in improving lay perspective on stress in that people who read it responded more consistently with scientific perspective on all targeted aspects of stress. This description referred to several source domains (motion/journey, physical force, machine, imbalance) which might have activated various concepts and enabled better understanding of different aspects of stress. However, House and Orchestra metaphors worked better in enhancing understanding of the links between stress and physical health. This suggests that, although mechanistic language is often applied to body and health, chaos and imbalance-related concepts might be more suitable to explain the idea of dysregulation and malfunctioning of body systems which underlies the direct links between stress and health. Thus, these metaphors are recommended as primary choices if an intervention aimed to enhance lay people's knowledge about this particular issue. Finally, the description presenting the information about stress in a non-metaphorical way was also shown to be an effective intervention enhancing lay understanding of specific stress-related issues. Thus, using technical but not very difficult terminology might also help to improve lay understanding of stress at least in a well-educated public.

## 8. General discussion

This research programme was of an exploratory nature. It aimed to examine the effectiveness of metaphors as a tool for communicating scientific knowledge about stress. Two research questions were formulated:

- 1) How does the lay perspective on stress and its links with health differ from the scientific perspective?
- 2) Can metaphors improve lay understanding of stress?

Three studies were designed to answer the above questions. Study 1 identified certain discrepancies between the lay and scientific perspective on stress which could be addressed via a metaphor-based educational intervention. Study 2 explored the metaphors lay people apply to think and talk about stress and provided some ideas as to what metaphors could be used to minimise the differences between the two perspectives. Study 3 involved empirical testing of the metaphors and provided evidence that metaphors can be successfully employed as a science communication tool. Together these three studies formed a coherent whole, leading to a test of the emerging components in study 3. However, each of the three studies had their own theoretical, methodological or practical implications. In this final chapter of the thesis, following a discussion of study findings and their implications, limitations and suggestions for further research are offered and final conclusions are drawn.

### 8.1. Discussion and implications of the three studies

#### 8.1.1. Stress concept

The findings from this research project provide confirmation that stress is a broad and abstract term. 'Stress' as a concept is not a single, unified construct, but encompasses a wide range of issues which people – both members of the lay public and scholars – label as 'stress' suggesting a general, shared understanding of stress. In this project, lay participants were able to discuss the idea of stress with the researcher-interviewer (study 1 and 2) and other participants (study 2). They provided meaningful accounts of what they believed to be stress, which were validated by other lay participants. At the same time, in both studies lay participants clearly acknowledged idiosyncrasy and variation in what stress could actually mean. Also, as expected, the experts (study 1) quoted similar definitions of stress underpinned by the transactional theory of stress (Lazarus & Folkman, 1984) which confirms that this theory is widely accepted in the contemporary psychology. Yet, they highlighted the need to precisely explain what 'stress' stands for in a particular context. From this, it can be concluded that in discourse, 'stress' can refer to a variety of experiences, stressors, responses to these stressors, as well as short and long-term effects of those experiences, stressors and responses. This multitude of meanings poses a risk of misunderstanding when discussing 'stress' which can denote a different thing in a given moment to each of the parties involved in the discussion. Study 2 provided evidence that using

visual aids, in this case LEGO® bricks, enables people to create multimodal metaphors which can make the vague, multifaceted notion of stress more tangible and clearer. Study 3 revealed that verbal metaphors can improve the lay understanding of stress. Overall, the studies presented demonstrated that the conceptualisation of stress can be of a multisensory nature. Metaphors can elicit visual, haptic, somatosensory, and kinaesthetic mental images (Ureña & Faber, 2010) as well as possibly activate auditory senses. Thus, both metaphors and visual or other tangible aids have the potential to enhance the communication process, as well as the understanding of both personal experiences and abstract knowledge of stress.

### 8.1.2. Importance of the lay perspective on stress

Study 1 revealed that the lay and scientific perspectives on stress overlap to a great extent, partly because stress serves as an umbrella term which covers a wide range of issues. Both groups saw stress as an individual, subjective, most often unpleasant experience with multiple causes and a wide range of outcomes. This confirms previous suggestions that lay and scientific understanding of stress inform and reinforce each other (Furnham, 1997; Pollock, 1988; Rydstedt et al., 2004). Lay people learn about health and well-being issues from others (medical and paramedical professionals, those with an experience of a specific illness, self-help groups) (Helman, 2007) as well as from impersonal sources such as media, books, newspapers, and magazines (Elliott-Binns, 1986). Stress, however defined, is a topic commonly covered on the Internet and in self-help books. A basic Google search on the term “stress” yielded more than one million results, and there are over thirty thousand books available on Amazon.co.uk within the category of ‘self-help stress management’ (as checked on 21/09/2020). Thus, lay people have access to a wide range of information about stress, including scientific research and evidence-based guidelines. Nonetheless, three specific discrepancies between the two perspectives were identified in this research project. Firstly, whilst the lay public discussed links between stress, unhealthy behaviour, and health, they showed limited awareness of a direct path between stress and physical health. Experts, on the other hand, talked to a greater extent about the physiological mechanisms underlying stress-related health problems. Secondly, lay discourse highlighted individual responsibility for experiencing stress and coping, whereas social determinants were much less salient. The experts acknowledged the role of individual coping skills but also emphasised collective responsibility for stress management. Finally, the lay public regarded stress as unavoidable but primarily negative. Even when they talked about some positives, these often highlighted the unpleasantness of the stress experience. The interviewed experts discussed positive aspects of stress only briefly, however, the review of recent literature showed that positive stress (eustress) is an important concept, and thinking about stress in a more positive way is beneficial to well-being and productivity (Crum et al., 2017; Crum et al., 2013; Heathcote et al., 2018; Jamieson et al., 2018; Keller et al., 2012; Park et al., 2018; E. N. Smith et al., 2020). To date, only one study (Souza-Talarico et al., 2016) has looked specifically at the discrepancies between the lay and scientific perspective which offered somewhat dubious claims (see chapter 5). This research programme extended this previous work, contributed to the development of understanding of the lay perspective on stress and identified areas for intervention.

The main aim of study 1 was to identify the differences between the two perspectives, and thus provide background for metaphor testing. The findings served as a basis for development of the survey and metaphorical descriptions of stress applied in study 3. In addition, study 1 contributed to the development of understanding of the lay perspective on stress in general which, as discussed in chapter 2, has been understudied. Only a few studies looked specifically at the lay understanding or conceptualisation of stress, and most of them focused on job stress (Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010). Lay beliefs about stress (similarly to lay beliefs about health and illness (Furnham, 1997, 2017; Furnham & Henley, 1988)) may have implications for individual appraisal of the situation and coping behaviour. It is important to consider the lay perspective when designing stress management interventions and policies, e.g. in the work context (e.g. Bhui et al., 2016; Kinman & Jones, 2005).

The findings from the lay interviews were to some extent consistent with previous research. Participants discussed stress as an individual, complex experience and accepted it as a part of life, placing the responsibility for getting stressed and coping with it on themselves. They described stress, particularly excessive stress, primarily in negative terms. Even when talking about positive aspects of stress, in many cases they pointed to the negativity of it. Also, they discussed the stress-relax dichotomy in relation to civilisation-nature. Previous research on lay beliefs about stress, although focused for the most part on job-related stress, also found that people see stress as a multifaceted experience (Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010), inevitable (Brown, 1996; Kinman & Jones, 2005; Pollock, 1988; Whittaker & Connor, 1998), commonly associated with negative emotions (Flores et al., 2009; Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005) and detrimental to well-being, productivity and social relationships (Dewe & O'Driscoll, 2002; Furnham, 1997; Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010; Sharpley & Gardner, 2001). The lay perspective provided support for the transactional theory of stress (Lazarus & Folkman, 1984) in that lay interviewees highlighted the role of individual appraisal as well as the idea of stress being experienced when the demands exceed a person's resources and thus their ability to cope.

Lay interviewees in study 1 acknowledged the links between stress and health. However, in most cases they related stress to minor psychosomatic issues such as tiredness, headaches, unhealthy behaviour, and mental health problems, but not to serious physical health issues, which is consistent with studies on the lay perspective on stress from the last decade (Idris et al., 2010; Kilby et al., 2020; Kinman & Jones, 2005; Le Fevre & Kolt, 2010; Styhre et al., 2002). Research from the 1980s and 1990s (J. D. Parker et al., 1993; Pollock, 1988; Whittaker & Connor, 1998) showed that in the past people related stress to more severe, particularly cardiovascular health problems. Whilst this link between stress and cardiovascular health is consistent with the current scientific perspective (Kivimäki & Steptoe, 2018), study 1 found less awareness of it among lay participants. On the other hand, research on patients showed that they often view stress as one of the multiple causes of their condition (Clark, 2003; Hunt et al., 1990; Pohlman & Becker, 2006; Schoenberg et al., 2005). Possibly, the complexity of neurophysiological mechanisms underlying the links between stress and health might be difficult to grasp for lay people but those who already

have a health condition may develop broader knowledge about its causes and contributors. Furthermore, being exposed to a stressor (even a major stressful life event) does not mean that a person will develop an illness (Cohen et al., 2019). This potentially renders it harder for lay people to make causal inferences about stress and health. Previous research suggested that a first-hand experience of an illness or knowing someone who experienced it may lead to a better understanding of this illness among children (Myant & Williams, 2005), and this may apply to adults as well. Furthermore, because stress is such a broad, ambiguous concept which encompasses various factors and experiences, it might be easier to infer a causal link between an incident of illness and a specific event or more general experience labelled ‘stress’ post-factum. However, in previous studies (Clark, 2003; Hunt et al., 1990; Pohlman & Becker, 2006; Schoenberg et al., 2005) patients in most cases did not explain their reasoning about the mechanisms linking stress and illness. Thus, the fact that they associated their condition with what they considered stress did not necessarily mean that they understood the direct pathways between stress and health. It has been suggested that if an individual perceives stress as a cause of or a factor exacerbating their existing condition, then stress reduction and management serves as an illness management strategy (Hunt et al., 1990; Pohlman & Becker, 2006). Therefore, relating one’s illness to stress could be seen as a specific coping mechanism which allows a person to regain control over the illness, rather than a sign of a greater understanding of the biological mechanisms underpinning stress. Furnham (2017) reported that lay beliefs about health and illness tend to be psychosocial (focused on psychological and environmental factors) rather than biological or medical (focused on the underlying biological mechanisms and pathology). This may explain why study 1 participants would readily include stress and stress-related behaviour (psychosocial causes) in an illness aetiology but were less aware of neurophysiological stress mechanisms leading to ill-health. What is more, previous research showed that some patients were opposed to the idea of stress causing their illness as they felt this belittled their health problems (Pohlman & Becker, 2006; Stenner et al., 2000). ‘Stress’ is a term used to describe a wide range of experiences from unpleasant, demanding situations to severe, life-threatening events and circumstances. In study 1, participants acknowledged major life events as stressors but most of them experienced stress from daily hassles and demands. Previous studies also showed that lay people regarded stress as related to everyday problems, pressures and difficulties in private and working life (e.g. Brown, 1996; Clark, 2003; Kilby et al., 2020; Kinman & Jones, 2005; Okihiro et al., 2017; Wu et al., 2018). Consequently, if people most commonly get stressed about daily issues, they might not consider stress as they experienced it to be a justified cause of or contributor to a serious illness. Testing this hypothesis, however, requires further research.

Study 1 findings have also important implications for stress management interventions. Lay interviewees discussed various causes of stress and different types of coping behaviour. The majority of participants suggested that a person is responsible for the fact that they get stressed and for coping with it. This is consistent with the idea of “healthism”, particularly common among middle class in the industrialised countries, which puts the responsibility for maintaining a healthy

lifestyle on the individual (Crawford, 1980, p. 368). Helman (2007) also noted that in the Western industrialised world, people tend to see ill-health as originating from within the individual, their carelessness and not leading a healthy lifestyle. He commented that while this has certain advantages, it may lead to ignoring social determinants of well-being such as poverty, inequality, or living conditions.

The fact that participants acknowledged individual responsibility for stress and coping with it provides grounds for developing interventions which will help individuals to acquire and master coping skills. Focusing on the demands and resources at the individual level can be empowering and promote individual agency in dealing with everyday issues. At the same time, it potentially makes it harder to acknowledge the wider economic, political and socio-cultural context of stress (cf Kendall-Taylor & Stanley, 2018) limiting the range of solutions which could be applied to manage stress and health. Furthermore, placing too much responsibility on the individual may reinforce stigma around stress which can be seen as a weakness and a sign of incapability to work in a specific profession (e.g. medical, ) as reported in previous studies (e.g. Harkness et al., 2005; Thunman & Persson, 2015; Verdonk et al., 2014). This may lead to hiding stress and unwillingness to use support services, and experiencing excessive stress which has been shown to negatively affect both physical and mental health (e.g. Kivimäki & Steptoe, 2018; Madsen et al., 2017; Nyberg et al., 2014; Palumbo et al., 2020; Pedersen et al., 2010). Findings from this research programme imply that people need to be informed about the role of the environment in causing stress and the importance of collective actions aiming to reduce stress. As found in study 3, metaphors can help improve understanding of stress and its links with health, and promote thinking about more collective responsibility for stress and coping. All together, these findings have practical implications for policy-making and stress management interventions which could be designed to not only equip people with individual coping skills (e.g. time management or assertiveness) but also aim to prevent unnecessary stress and alleviate stigma around stress. This, in turn, may facilitate early diagnosis and treatment of mental and physical health problems related to stress.

Interestingly, lay interviewees associated stress with civilisation and technology, and relaxation with nature. This dichotomy did not appear in the interviews with experts. Previous research found that lay people attributed stress to the quick pace characteristic to modern life (Brown, 1996; Pollock, 1988; Whittaker & Connor, 1998), and the presence of information technologies (Barley et al., 2011). Technostress (stress related to information and communication technologies (ICTs)) has been suggested to negatively affect well-being and performance (Nimrod, 2018; Riedl, 2013). Studies also found that spending time in green spaces (Chawla et al., 2014; Hansmann et al., 2007) or even exposure to visual and olfactory stimuli related to green space (as opposed to urban space) (Hedblom et al., 2019) can help reduce psychological and physiological stress. The fact that lay participants but not experts discussed this civilisation-nature aspect of stress suggests that more research is needed on these topics. People's perspective and the fact they highly value spending time outdoors as a way of stress prevention and reduction

could be taken into account in designing work environments and organising working time, as well as urban planning and landscape design to improve working and living conditions.

### 8.1.3. Metaphors as a part of conceptualising of stress

Metaphors play an important role as conceptual tools and enable people to talk about complex and difficult experiences such as pain and serious physical or mental illness (Appleton & Flynn, 2014; Boylstein et al., 2007; Bullo & Hearn, 2020; Demjén et al., 2019; Gibbs & Franks, 2002; Littlemore, 2019; Munday et al., 2020; Semino, 2010). They have been found to influence understanding of and reasoning about different issues and are likely to motivate specific behaviour (Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018; Thibodeau & Boroditsky, 2011). As expected, this research programme confirmed that people commonly use metaphors to describe the concept of stress in general as well as personal experiences of stress. In study 2, when building LEGO® models, participants employed a range of conceptual and corresponding linguistic metaphors. They referred to several source domains which constituted three main themes often co-occurring within one representation: limited mobility (PHYSICAL FORCE, RESTRICTED VISION, RESTRICTED MOTION/ENTRAPMENT, JOURNEY/MOTION, WAR/FIGHT), chaos (CLUTTERED SPACE, LACK OF ORDER), and instability (LACK OF BALANCE, PHYSICAL FORCE). To an extent, these findings confirm the results of previous studies on stress metaphors (Brown, 1999; Helman, 1985; Mulhall, 1996). The metaphors conveyed a negative picture of stress, highlighting (or perhaps even creating) a sense of lack of control and powerlessness which is consistent with the transactional stress theory (Lazarus & Folkman, 1984). It is possible that this negative perception/conceptualisation of stress may reinforce the ‘stress-is-debilitating’ mindset which was found to be related to negative outcomes in terms of well-being and productivity (Crum et al., 2013; Park et al., 2018). This does not mean, though, that these metaphors are necessarily harmful or non-adaptive; different metaphors – even those often seen as detrimental such as war-related metaphors of cancer – might help externalise personal, subjective experience and be employed to the person’s benefit, as has been shown in research on metaphors of cancer (Semino et al., 2017). However, further research is required to determine whether such metaphors could be used in a constructive way in the context of stress.

Studies on metaphors and their framing effects are often carried out with the aim of developing recommendations regarding the language that should or should not be used in a specific context e.g. healthcare (Semino et al., 2018). This project had a similar goal but was of a more exploratory nature due to limited knowledge about what language would be most suitable to use when talking about stress. There have been studies on metaphors of cancer (Hauser & Schwarz, 2015, 2019; Hendricks et al., 2018) which could possibly inform guidelines as to what metaphors should or should not be applied to talk about cancer. However, whether a metaphor is beneficial may depend on the context (e.g. Spina et al., 2018) and so indiscriminate use (or avoidance) of any single metaphor may lead to more harm than good (Semino et al., 2017). Nonetheless, it is impossible to say whether this applies to stress metaphors because no studies have addressed the effects of specific metaphors of stress on how people think about and

experience stress. Further research is thus required to establish the effects of particular metaphors on the appraisal and re-appraisal of stressors, the feelings and symptoms experienced in a situation appraised as stressful, and the choice of coping strategies. A previous study showed that metaphorical restructuring of problems activated brain networks responsible for problem solving (Yu et al., 2019). Another study revealed that re-framing stress as excitement (however not with metaphors) improved participants' performance in different tasks (Brooks, 2014). It was also suggested that a change in metaphors reflects a change in how psychotherapy clients experience depression. Levitt et al. (2000) in a case study of two client-therapist dyads analysed the use of PHYSICAL WEIGHT metaphor and found that a dyad with good therapy outcomes switched from more negative ('being burdened') to more positive ('unloading burden') metaphors over the course of therapy. This effect was not present in the poor outcome dyad. This study did not offer an explanation as to whether the change in metaphors resulted from the change in the client's experience or whether their experience had changed because applying a different metaphor allowed them to re-appraise and experience their condition in a different way. Given the embodied nature of the metaphors and their framing potential, it is likely that metaphors shaped their experience and vice versa. Metaphors are often used in psychotherapy to help clients gain a new perspective which in turn facilitates therapeutic change (Killick et al., 2016). However, it remains to be seen if and how metaphors used to describe a stressful experience change over time, and how this might be related to the appraisal of demands and resources. Further research could also investigate if metaphorical framing can play a role in the re-appraisal of a situation, and thus lead to different psycho-physiological responses and protect against allostatic overload/stress-related health issues.

Study 2 participants often employed RESTRICTED MOTION/ENTRAPMENT metaphors to describe stress. The word 'stress' (as well as 'strain') has its roots in the Latin verb *stringere* which means 'to draw tight', and its past participle *strictus* meaning 'tight, compressed, drawn together'. From these an Old French word *estresse*, i.e. 'narrowness, oppression' and the English 'distress' derived, both of which contributed to the etymology of 'stress'. In fact, the meaning of these French and English predecessors of the term 'stress' seem to be still present in the lay conceptualisation of stress through the use of metaphors describing confinement, entrapment, or limited mobility. These kinds of metaphors are also commonly used in reference to depression (Charteris-Black, 2012; El Refaei, 2019). According to embodied cognition theory (Barsalou, 2008; Fincher-Kiefer, 2019), cognition involves sensorimotor simulation or re-enactment. It has been suggested that depressive symptoms may result from or be reinforced due to conceptualising a situation in terms of limited mobility e.g. as being trapped, restrained, burdened, or paralysed. This conceptualisation involves mental simulation of the experience of motor incapacity which, in turn, may lead to subjective feelings of immobility and lethargy, and peripheral physiological changes characteristic to physical motor incapacity (Lindeman & Abramson, 2008). It is likely that thinking about stress as entrapment, re-living (simulating) the experience of immobility may influence coping behaviour in a specific situation and attitude toward possibly stressful situations in general. Further research could examine how describing a stressor in a way

which primes ENTRAPMENT conceptualisation affects people's perception of themselves and the situation, as well as the choice of coping strategies, compared to a description priming another conceptualisation e.g. FIGHT/WAR or LACK OF BALANCE.

#### 8.1.4. Metaphors as a stress science communication tool

As expected, study 3 found metaphorical descriptions to be effective science communication tools which confirms findings from previous studies (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018). Participants who read metaphors, as compared to those who read a text unrelated to stress, responded to the post-intervention survey statements in a way more consistent with the scientific perspective. Train metaphor was particularly effective in comparison to other metaphors as well as two control conditions. However, the effect sizes in study 3 were relatively small. This was most likely because the participants' knowledge about stress before the intervention was mainly consistent with the scientific perspective, meaning there was not much room for improvement. Furthermore, stress is a very complex concept with potentially positive and negative effects. In this research project relatively short metaphorical descriptions were used which tried to cover somewhat conflicting aspects of stress such as positivity/eustress and negativity/negative effects of stress on health. This might have led to more cautious responses to the relevant survey questions after reading the description, and less prominent differences between the pre and post measurements. In study 3, while the Train metaphor yielded the greatest positive change in the lay perspective, other metaphors were more effective in explaining specific stress issues (e.g. House and Orchestra led to a greater change in understanding the links between stress and physical health). Thus, in future studies, it might be beneficial to test if different metaphors enhance the understanding of particular aspects of stress science separately. Choosing the best metaphors to convey specific knowledge might improve the effectiveness of educational interventions.

Notwithstanding, after reading metaphorical descriptions, participants provided responses which were more consistent with the scientific perspective. Statistically significant improvements in the lay understanding of different aspects of stress (and general understanding of stress) were found in study 3. There was only one case where the intervention led to a negative change. Those who read the Ship description provided post-intervention answers regarding Self-care which were less consistent with the scientific perspective. However, this metaphor also led to positive changes in understanding of the positivity of stress, responsibility for stress and social determinants of stress. In all other cases the metaphors either enhanced the lay perspective or yielded no significant change in any direction. Based on the findings from this research programme, it can be suggested that the Train metaphor can be used to improve the lay public's knowledge about stress. However, it cannot be deemed as the only effective or the best metaphor to convey the scientific knowledge about stress. Other metaphors tested in study 3 worked equally well or even better when it came to specific information about stress (House and Orchestra metaphors and the direct links between stress and physical health). All the metaphorical descriptions were evaluated as equally highly interesting and enjoyable, and as interesting and

enjoyable as the simplified technical control description which was also found to be a good way of communicating stress science to the public. Thus, study 3 provided evidence that Train, Ship, House and Orchestra metaphors can be used in education to communicate certain elements of stress science, particularly given that beyond explanatory or pedagogical function, metaphors can also have an entertaining or social function (Berger, 2016).

### 8.1.5. LEGO models as a source of data

This research programme applied a novel and creative method of data collection through LEGO® building and thus contributed to the still somewhat limited body of psychological research employing creative methods. Previous studies (Hayes & Graham, 2020; Nerantzi & McCusker, 2014; Peabody, 2015; Peabody & Noyes, 2017) looked at the application of LEGO® building as a means for facilitating communication, reflection, and self-awareness in the context of higher education and consulting. Only one other research project (Gauntlett, 2007) treated LEGO® models as a source of data and analysed the content of the models to explore the subject of identity.

The LEGO® workshops (study 2) allowed for exploring the lay conceptualisation of stress in an unconventional, creative, and entertaining way. They provided interesting, multi-modal data which helped to identify conceptual metaphors used to talk and think about stress and thus enrich the understanding of people's beliefs and experiences of stress in everyday life. The same results could be achieved with other methods of data collection, particularly other types of creative methods such as collaging, drawing, or photo-elicitation. Nonetheless, LEGO® turned out to be an effective tool for externalising participants' thoughts about stress and eliciting metaphors which was a crucial part of study 2. Participants responded very positively to the workshops. They were engaged, eager to play with LEGO® and share their thoughts about their models and stress in general. Even the participant who had no previous experience with Lego was able to build a meaningful structure after the warm-up. This showed that playing with LEGO for research purposes does not require high-level skills or experience (Ackermann et al., 2009). Interestingly, participants acknowledged the therapeutic and relaxing effects of playing and doing creative tasks (Stuckey & Nobel, 2010), which was particularly relevant to the topic of the workshops (stress). They appreciated the opportunity to use LEGO to talk about stress, which worked for them as a stress-reliever. Furthermore, a few participants openly declared that it was LEGO® which attracted them to take part in the study. While this method will not be suitable for all research questions and might not appeal to all researchers, it might be a good way to improve public engagement. Participants felt ownership of their models; many took photos to share what they had created with friends and family. This often happens in projects where creative methods are used (Buckley, 2015). Participants were also genuinely interested in how their models would be used further in the project. Importantly, here, LEGO® was used in group workshops. However, research has showed that it is useful in individual sessions of therapist supervision (Peabody, 2015). Thus, it could be applied successfully for data collection in one-to-one interactions.

## 8.2. Limitations and further research

This research project has a number of limitations that would need to be addressed in future research. The main issue was limited access to lay participants of low socioeconomic status and with low levels of education. Study 1 found small and rather specific discrepancies between the lay and scientific perspective. Similarly, baseline scores in the study 3 survey suggested that participants possessed a good level of knowledge about stress. This might be partly due to the fact that information about stress is widespread in the media (particularly the Internet) and self-help books. However, it may also be characteristic of relatively well-educated, middle class people who have access to such sources of information. This research programme provided insights as to how relatively young (age ranges of the lay participants in study 1 and study 2 were 18-61 and 18-53 respectively, and the mean age in study 3 equalled to 31.03, with 81% of the sample below 40 years old), with at least an undergraduate degree in most cases (or continuing education at the university if not having a degree), native speakers of English (in study 1 and 2) as well as people proficient in English as a second language which could be seen as an indicator of good educational background (in study 3). Based on these findings, it is not possible to infer how people from other backgrounds, particularly those of lower socio-economic status, conceptualise stress or if and how their knowledge about stress differs from the scientific perspective. It is likely that the discrepancies will be greater in this case. Furthermore, this research programme cannot answer the question of whether metaphors would work effectively for this specific group. Therefore, future research should focus more on the perspective of people with lower education or lower socio-economic status. Also, investigating understanding of stress and its links with health in children and adolescents as well as elderly people is necessary to ensure better-tailored interventions to promote better understanding of stress in those groups. It is likely that dominant sources of stress will be evident at different ages and stages of the life course. In study 1, lay participants provided examples of how their priorities had changed over time e.g. they became less concerned with their appearance. This resulted in different situations being stressful for them at different stages of life. Considering the age factor might benefit future research on stress conceptualisation. Notably, the data on lay understanding of stress was collected pre-pandemic. It is very likely that should the study be conducted now, different ideas of stressors, stress experience and factors influencing it would come up in the interviews. Covid-19 pandemic was an unprecedented experience for the majority of the UK population and this could have greatly altered people's conceptualisation of stress and its links with health. It would be beneficial to run a follow-up study exploring these possible changes.

As mentioned, this research programme looked specifically at native or proficient (near-native) speakers of English. This was a strength of this research as it allowed us to obtain a consistent perspective of stress in people with a similar cultural background. On the other hand, the lay perspective on stress as well as the metaphors identified might not be easily transferred to interventions in other languages and cultures. Previous research found certain culture-related differences in lay understanding of stress (Idris et al., 2010; Kinman & Jones, 2005). Also, both

experts and lay participants in study 1 agreed that stress is individual in that different situations might be stressful to different people, and the same situation may not be seen as equally stressful for everyone and experienced in the same way. For instance, some lay participants discussed how people may care more about certain things or values (e.g. appearance, performance at work) which would not be that important to others. Metaphors, particularly those referring to more universal sensorimotor experience (such as e.g. physical force exerted on the body, having a restricted vision, or feeling entrapped) may provide a common ground, a reference to an experience that many people could relate to, and promote better understanding of an individual's experience as well as their needs for different types of support (Bullo & Hearn, 2020; Demjén & Semino, 2017; Hommerberg et al., 2020; Semino, 2010; Semino et al., 2017). However, although people may refer to universal bodily experiences, the conceptual metaphors and linguistic metaphors actually used in discourse can differ across cultures (Kövecses, 2020). Furthermore, previous research found that metaphorical framing works more effectively if it is consistent with participants' cultural values (Spina et al., 2018). Therefore, future studies could explore cultural variations of metaphors applied to think and talk about psychological stress. As these metaphors constitute a part of the lay understanding of stress, recognising what stress metaphors people from different cultures use may have practical implications for example in the development, validation and cultural adaptation of self-reported stress measures (questionnaires), psychotherapy, and education. Also, different source domains may be more relevant or familiar to different age groups and thus work better when translating stress science to a particular target group.

Furthermore, previous research provided evidence that producing, processing, and responding to metaphors might be influenced by individual characteristics such as cognitive style, analogical reasoning ability, personality traits, and creativity (Littlemore, 2019). It has also been found that recipients are more likely to systematically process information in communication if a metaphor uses a source domain which is of personal interest to the recipient (Ottati et al., 1999). Anecdotal evidence (E. Semino, personal communication, August 25, 2020) implied that people may show preferences for specific source domains, and some source domains might be particularly relevant to a person due to their life experience. In study 1, one of the lay participants, who was very keen on keeping fit and exercising, provided a metaphor where he compared stress to getting stuck in a position when holding a barbell. Another interviewee, an IT specialist by education, often referred to machine/computer-related terminology when talking about stress. This suggests that people may respond better to certain metaphors than others and perceive them as more apt because they hold more meaning for them personally. In study 3, participants rated the description they read in terms of how interesting, informative, and enjoyable it was. However, each person read only one description and it was not possible to determine if any of the metaphors would be preferred over others. The ratings were relatively high on average, but there was a number of participants in each condition who provided low ratings. This might suggest that they did not find the metaphors meaningful which could have affected their level of engagement with the description and rendered the intervention less effective. Future studies

could explore possible differences in metaphor effectiveness due to variables such as personality, personal preferences, or cognitive style. Importantly, while metaphors can be a useful tool for neurotypical individuals, people with Autistic Spectrum Disorders may have difficulty in producing and comprehending metaphors (particularly novel, creative ones) (Littlemore, 2019). It is possible that not all participants in study 3 were neurotypical adults and this could have made metaphorical descriptions less effective in these cases.

Another issue was a relatively low number of expert participants, all of whom had quite a specific background, i.e. psychology, behavioural medicine and mental health nursing which are to some extent overlapping in their perspective of stress. While the experts presented a consistent view on stress which was an asset of this research, in future studies it would be beneficial to examine how individuals with expertise in other fields e.g. pedagogists, sociologists, human resources and management specialists, and psychiatrists conceptualise stress. What is more, metaphors and metaphorical descriptions in this research were generated by a single researcher, and further developed and refined in consultation with two other researchers. All three researchers had a background in psychology. In further research, a team including experts in communication, journalism and media, public relations, pedagogy and andragogy could be engaged in the process of developing metaphors, as was done in Kendall-Taylor and Stanley (2018) study. This would help ensure the best quality of the intervention materials.

A further issue with the metaphor testing procedure in this research programme is the number of metaphorical descriptions evaluated in study 3. Because metaphors highlight certain features of an issue and hide others, multiple metaphors are used in practice to think and talk about the same subject (Barry et al., 2009; Hauser et al., 2017; Lakoff & Johnson, 1980). This might be particularly important in the case of complex concepts such as stress which is a biopsychosocial phenomenon. This project aimed to explore if any of the four metaphorical framings could help clarify a number of aspects of stress. Including multiple linguistic metaphors related to a specific source domain should lead to a stronger framing effect (Ottati et al., 2014). However, given that stress is a complex issue, using different metaphors in separate descriptions of different stress-related issues, or describing some issues with a metaphor and others with a non-metaphorical simplified description might work better. Only four metaphors were tested in study 3 and it is possible that some other metaphorical descriptions would be better to communicate stress science. Previous research (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018) involved generating a large number of candidate metaphors, “winnowing” and refining them through a multi-staged evaluation procedure. In future research a range of metaphors could be initially brainstormed and consulted with both experts and the lay public, to choose the most promising ones to be tested in a framing experiment. In study 2, participants applied PHYSICAL FORCE and WAR/FIGHT metaphors which could be examined in future research. Also, the descriptions in study 3 referred to somewhat old-fashioned and complex inventions of a sailing ship and steam engine train which might not be particularly familiar to people now. While journey-related metaphors may work effectively for translating stress

science, referring to vehicles that are more commonly used such as cars or motorcycles might make it easier for people to make correspondences between the two domains.

Finally, this research programme looked at the immediate effects of a metaphorical intervention on the understanding of stress. Participants in study 3 provided baseline responses, read a metaphorical control description, and again responded to the survey questions straightaway. Thus, it is impossible to say if any of the improvements in lay understanding of stress would be long-lasting. Future research is needed to examine long-term effects of the intervention with the use of metaphor, particularly since previous research also looked mainly at the short-term effects (Kendall-Taylor et al., 2013; Kendall-Taylor & Haydon, 2016; Kendall-Taylor & Stanley, 2018). However, one study found that the effects of a metaphor-based educational intervention persisted three months later (Naik et al., 2011) which provides some grounds for the long-lasting positive effects of using metaphor in education and science communication.

### 8.3. Conclusions

Stress is a complex biopsychosocial issue which can have both positive and negative effects on people's well-being and productivity. This research programme adopted a mixed-method approach to identify the possible discrepancies between the lay and scientific perspectives of stress, explore the metaphors lay people apply to think and talk about stress, and examine the effectiveness of a metaphor-based intervention which aimed to improve lay understanding of stress. The findings have both theoretical and practical implications for stress science in terms of defining stress and designing stress management interventions. To my knowledge, this was the first programme which juxtaposed the lay and scientific conceptualisation about stress beyond comparing the lay perspective to the existing scientific literature. It provided evidence for the existence of specific differences between the scientific and lay perspective of stress, even though the lay participants were relatively well-educated. This suggests that educational interventions to communicate stress sciences are necessary, and this need might be even more prominent among less educated people. Additionally, the project has contributed to the development of creative methods of data collection through building LEGO® models. What is more, study 3 was the first to evaluate the application of metaphors to conveying the scientific knowledge of stress. Metaphors were found to be an effective tool; however, it remains to be seen if these effects are long-lasting.

Importantly, this research programme has made a significant contribution in its attempt to clarify the concept of stress and articulate the complexity of stress experience. Overall, the findings highlight that 'stress' is a very broad, internally inconsistent term which may cover both causes and outcomes of stress, as well as the experience itself. This indiscriminate, generalised used of the term may translate into confusion and hamper both research and public understanding of stress and health. This research programme showed that people when asked about stress instinctively think about distress. However, they may also see stress as positive as long as it is manageable and not excessive. Furthermore, participants talked about lack of control as a constitutional characteristic of stress as such. Yet, they also described positive stress as a

situation when a person feels in control. Not only does this highlight that stress is a broad and internally inconsistent concept but it also begs the question of whether the situation can be termed stressful (using Lazarus and Folkman's 1984 definition) if it is manageable. Perhaps, a new definition of stress is necessary to accommodate the difference between negative and positive stress. Alternatively, as lay people seem to associate stress mainly with distress, positive stress should be treated as a separate construct with a label which clearly distinguishes it from negative stress. Reflecting upon this, it must be noted that 'stress' is not alone in the need for revisiting its definition. This applies to a range of psychological concepts (e.g. mindfulness, resilience, quality of life, job satisfaction), many of which had been originally colloquial terms or were borrowed from other disciplines. Then, they re-entered lay discourse having a new or changed 'scientific' meaning not necessarily acknowledged by the public who attached their own meaning to the concept. As psychology is interested in people's experiences and understanding of the world, researchers should recognise that lay people are, in fact, co-creators of psychological concepts under study.

There is a plethora of evidence that stress influences well-being. However, the multitude of meanings of the term "stress" makes it potentially difficult to compare different studies and arrive at systematic, consistent conclusions about stress and health. This may also reduce the effectiveness of communicating scientific findings about stress to the public. Both scientific and public discourse require a careful operationalisation and explanation of what 'stress' means in a given context. However, this programme of research showed that conceptualisation of stress has potentially a multisensory nature and thus using metaphors and visual tools to describe and explain stress may contribute to public understanding of this important health topic. It has also highlighted the need for evidence-based science communication interventions. Metaphors are widespread in everyday language, but their effects may not be easily predictable. While they are often used in educational context and have been found to influence reasoning about various issues, this research programme has showed that different metaphors might be more suitable than others to convey specific information. For instance, Train metaphor seemed to be most effective in that it improved understanding of all the targeted aspects of stress but chaos-related metaphors yielded better results than other metaphors in terms of understanding the direct links between stress and physical health. Also, whilst reading a Ship metaphor led to acknowledging positivity of stress, as well as collective responsibility and social determinants of stress, it led to reduced endorsement of self-care in times of stress. This suggests that to ensure effective communication and education, careful research and consideration of the possible effects of metaphors are necessary before applying them in educational materials.

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## Appendix 1. Study 1a. Lay interviews. Theme table

Table 1.11

*Study 1a. Lay interviews. Theme table*

Theme	Subtheme	Description	Sample quotes
Part of life	Commonness and inevitability	Stress-free life was deemed impossible because there had been and always would be some worries, problems, and difficulties. In most cases these would be minor stressors, everyday hassles but everyone would experience stress at some point of their life.	<p>There will always be, I mean if all those things went away and we didn't have wars, and we didn't have terrorism, then we might not have stress, so we might be stressed about something completely different, maybe we focus on different things like all the ice melting in North Pole and South Pole. [P1]</p> <p>Sort of, yeah. I mean, I don't know how to not feel stressed. I, it's sort of within me [...] [P3]</p> <p>[...] [stress] it's not... a rare thing. You know, it happens to lots of people [...] [P11]</p> <p>But I don't think, I think it would be impossible to remove stress entirely, uhm, you know, because I would be stressed about that I wasn't, I didn't have anything to be stressed about [laugh] [P17]</p>

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		[...] I don't think anyone goes through their life without, without having some sort of stress at some point. [P25]
Natural part of life	Stress was seen as a normal thing to experience, a normal and expected response in certain situations. It was described as a natural mechanism and something that makes a person a human. For some, being stressed was a normal state while being relaxed was not really desirable or possible.	I think so I think, I think being stressed [by] family, is a natural thing to have [...] [P1]  I don't know, I'd just see it as part of life. [P4]  [...] so, yeah, I'd definitely say it's a part of life, everyday life. [P8]  [...] yeah, that's, uh, you know, the certain edge of... there's, yeah, kind of about being alive... [...] a bit of... I don't know, something just makes, makes kind of human, in a way. [P21]  Uhm... but yeah, I know definitely people have, you know, I mean, ultimately, you know, all of that said, people have legitimate reasons to be stressful, of course, and then... [...] because I know they're stressful for everyone, and it's legitimate stress, and I'm telling myself it's fine, it's fine [P26]
Individual, complex experience	Individual experience	According to interviewees, stress can be caused by a wide range of issues, both minor and
		Well to her it might be a big thing but to anyone else looking at it, it doesn't seem like a big issue. [P2]

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major, in most cases unpleasant and/or undesirable. People differ in terms of what they get stressed about because different issues are important to them - the same situation might be stressful to one person but not another. Also, people can cope better with certain things but not the others, and they perceive as stressful the things that are more difficult for them to cope with. A response to a stressful situation may involve a range of emotional, physiological, cognitive and behavioural symptoms (often unpleasant,

It just depends on what stress, how stressed I am. And... yeah, it just depends on how I am. [...] Like this weekend I didn't do anything [laugh] [...] Uhm... but another time I might... I don't know. [P4]

It's such a big range of the things you can do [when you are stressed]... [P7]

[...] that's a different type of stress, and I think it's difficult for people to understand other people's types of stress because obviously everybody will stress differently, and everybody has different life [...] [P8]

So she's stressed out about her body image, I mean. So that's quite different to my, my view of stress [...] [P12]

You know, we've sort of talked about different people experiencing stress in different ways, and having different... so therefore they probably would need a different approach to deal with it. [P17]

No, if, you know, but it's a different, different, my friends [...] there's four of us. Uhm... and one of them, they're all particularly, they're quite different in how they deal with their, their stresses, and with their relationships [...] [P20]

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causing discomfort) and different people respond to stressful situations in a different way. They may display or hide their stress suggesting that stress is possibly seen as a weakness. Also, people use various coping strategies and there is no universally effective strategy. These different strategies are informed by the specific understanding of stress e.g. stress is a state of high arousal and negative valence; thus, it requires arousal and emotion regulation. All this

Uhm, I mean, yeah, I know some people who with time pressure, they actually don't care so much to be getting something done in a particular time. [...] and so maybe don't feel that pressure. Or they maybe... would, would regard a particular situation, uhm, as, yeah, not, not being so, uhm, important maybe [P24]

[...] stress is, is a difficult thing to quantify, to, to fathom because it's an internal, you know, mechanism, isn't it, that's probably different from one person to the next, very much [...] [P26]

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	makes stress an individual, personalised experience.
Individual context	<p>From what interviewees said, people differ in terms of their need for stimulation and so in their threshold of getting stress and/or tolerance for stress – what is an acceptable level of demands for one person may be definitely too much or not enough for someone else. The appraisal of a specific situation depends on the current level of demands and current access to resources. Things that used to be seen as stressful may not be stressful anymore, or some</p> <p>Some people are really good at absorbing stress and, and thrive on stress [...] she would be comfortable having stress, whereas someone else that maybe doesn't like stress so much [...] [P1]</p> <p>So if I had a lot of stress like moving, for example... [...] I won't stress about small things, but then like I said when I'm really stressed with money, moving like we have been, uhm, the fact that [Ben] hasn't done the dishwasher when I get home makes me far more upset than I would then if we had nothing going on. [P22]</p> <p>Because, uhm, it could be like, you know, one time where, you know, I may not have much money, but it's all right because I've still got food in the fridge, and I've still, I'm able to concentrate on what's important. [P4]</p> <p>[...] I didn't want to keep, I think, that level of pressure through... you know, it's alright for when I was young but didn't want to, I couldn't see myself working in Kensington when I was 65, just didn't, didn't want this for myself. [P16]</p>

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things can become stressful because of changes in values, importance of certain issues as well as because of changes in demands or resources (e.g. gaining knowledge or skills). Individual reactivity i.e. a general tendency to get stressed about things stems partly from an individual's nature (genes, the way people are, in-born characteristics, personality) and partly from nurture (previous experiences of stress, modelling, learning and developing skills, acquired mental health problems). In many cases participants

[...] some people are just like born whingers, aren't they? They seem, the born whingers, it's like all of them, they seem to get more stress, more easily, but maybe that's because they've been negative. [P14]

Uhm, I think it's something that you learn. Like, I used to be like a very, very, like, stressed kid. Like, uh, like for every single thing mattered when I started secondary school [...] I think you learn it, and then over time, like things just, some things just didn't matter anymore to me, I guess. Obviously, still important things matter, but little things, uhm, like forgetting one thing here and there, so I'm like, I'm sorry, like, I forgot. [P10]

Uhm, I think, I guess if there's quite, they feel there's quite a lot of news, then... oh, I don't know, I think people just don't, and also people don't feel like they deserve to feel OK over time, and I think a lot of people just put too much pressure on themselves [...] [P8]

[...] but, yeah, I think it's, I just get myself all worked up, and... I try and deal with it myself instead of, perhaps, sometimes getting help that I need. Uhm, and talking to people, I just think no, I can deal with it, you know, you don't want to

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	highlighted individual responsibility for getting stressed and coping with it.	burden your parents, they aren't very well, or your sister that's trying to work and look after you, you know. [P25]
Oppression – limited autonomy and feeling of being oppressed, powerlessness	<p>Stress was associated with a limited freedom (literally and metaphorically), unmanageability, lack of control, and lack of self-control.</p> <p>Stress, the feeling of oppression was suggested to be created or exacerbated by high demands (expectations, pressures, tasks, responsibilities) and low resources (time, money, social support) – discussed mostly at an individual's level – which limit</p>	<p>It feels, uhm... as if, as if things are constricting, life is constricting to the set of, uh, challenges, or to these, this job, or this expectation on you, or, uhm, life stops being broad, and yes, it is, it's just like a, like a heart attack, you know, when the arteries sort of, you know, they can get tightened, it's like that, everything just gets squeezed down. [P19]</p> <p>It's... I tend to become stressed... when I feel I have a lack of control. [P18]</p> <p>Yes, because it's, yeah, in fact it's, that's just one aspect of how stress, things make it stressful, because there's so many bits of things, it's sort of, you know, I'm, I'm trying to get that finished and that's one priority, and then I'm teaching on one unit, teaching on another unit, uhm, marking projects, it's such a, you know, and then there are, there are my academic advisor students, so lots of little bits, and, you know, I'm not particularly important, I don't have any important roles within the department and I still get a load of e-mails, then I know there are people who get way more than me, but it's sort of, things are</p>

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one's choices and freedom and leads to a sense of unmanageability. Also, stress may involve not being able to stop thinking about a stressor and/or coping, suggesting that an individual's freedom is limited, not being able to get free from thinking about stressor/stress. No/low stress, relax, and positive stress (if mentioned) were related to freedom, control and decision latitude.

coming in from all over about, you know, it's sort of, you know, a student's stressing about something and I've got questions, or it's something on one unit, or another, or it's a bit of marking, or it's a bit of, a bit of admin I've got to do, filling in some forms, completing reports on things, and there's... every time, every time you think you sort of cleared the gap of all the bits you know you were going to do, you've got space to do the next bit, but there are always little things there popping up, enquiries about from project students and all sorts of, it's very, very bitty. [P21]

[...] knowing you could do it if you really tried, but not having enough time to do it [...] [P3]

I think, I think it, the financial stress for us does. So there's always in the back of our minds, uhm, the fact that we would feel much happier in different accommodation. [...] And that's always in your, in the back of your mind a little bit. [P24]

And also no... no one knew us [laugh]. You could do what you wanted. I'm not saying we did that, but like nobody knew you, or no one, I don't know, it was nice! [...] Uhm... I don't know, I just, you just felt free. [P14]

Negativity	Unpleasantness	Stress was commonly associated with unpleasant, undesirable, unsettling situations such as difficulties, problems, obstacles, unpleasant or uncomfortable social interactions, unexpected and or unfamiliar events and circumstances, as well as any situation out of individual's comfort zone. Also stress was seen to result from different types of threats (real, anticipated, imagined) including a situation when a person's goals or values are threatened, when a person is exposed to a social-evaluative threat, if a	Uh... so... I think of work mainly, if you're stressed at work, things are not going your way, and everything just get into you, the little things that are building up [...] [P13]  Uhm, I think she found it stressful in social situations, so just speaking to people, I don't think she... she finds it comfortable [...] [P9]  But then you'd also... the fear of the unknown, isn't it? [...] when something happens like that, you suddenly think, you don't, you're not expecting, you don't think about it, uhm, and even afterwards it's like well... [...] Uhm... I think sometimes it's just, it's that fear of the unknown [...] [P18]  [...] that might be outside your comfort zone a little bit, that did make you stressed [...] [P1]  [...] where you, where you, where, for example, something gets in the way, and I'm not able to meet that goal, of what I expect. [P4]  Uhm... it's like, I guess, actually, yeah, so it's like going up on a, on the stage in front of ten thousand people and having to give a speech [...] Or, or... uhm... or just everyone, everyone's just looking at you. [P13]
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person's life of health in danger, or when someone close to the individual is under threat. Unpleasantness also refers to a range of psychological (negative emotions and cognitive symptoms) and physical discomfort (physiological changes) experienced in a stressful situation, as described by the participants.

[...] fear of your life, somebody, somebody, guerrilla building with a gun and you're hiding somewhere or, you know, somebody's chasing you, or you're, you know, you're in a war-torn bit of the world and there's a, somebody, you know, you're in a battle going on outside and you're hiding in the house. Things like that, I suppose. Imminent death [laugh] [P19]

[...] I think being a parent is very stressful because there is the, the endless worry about your children, you never stop worrying about them. [P19]

Uhm, frustrated, uhm... I wouldn't say angry, some people might say angry, but I wouldn't say... Just frustrated more than anything, just not happy, not, maybe not wanting to, to see people, or do social things. [P13]

What it mean, uhm, I'd say increased heart rate, general feeling of anxiety, uhm, maybe hot flushes, just generally feeling absolutely horrible. [P22]

[...] I'd feel knotted. Do, do you know, I'd feel knotted, and like... tense, then become like tense. [...] And that's what like all my neck feels knotted [...] [P25]

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Negative effects	<p>Stress was reported to have all sorts of negative effects: on health, social interactions, and performance. Participants mainly linked stress mental health issues (not necessarily clinical), fatigue and sleep problems, and unhealthy behaviour which in turn may affect health. The knowledge about direct pathway between stress and physical health was rather limited. Interviewees discussed how stress can lead to social withdrawal, isolation or conflicts in a direct or indirect way (e.g. through tiredness, or lack of time). They also linked</p>	<p>I think it can be, manifest itself in all sorts of ways. [...] mental health probably.</p> <p>I don't feel that, uhm... I have mental health issues at all, but I could imagine why some people do. [P16]</p> <p>I don't, I don't, I wouldn't, I don't sleep very well if I, you know, like I feel under pressure, or slightly stressed [...] [P5]</p> <p>[...] you don't eat because you're so stressed, and you've got so much work to do, and so many responsibilities, or you just, or it'll maybe, or you'll maybe choose not, like, a great thing. [...] The only way I can think of it directly, like, or indirectly like, correlating it through like your behaviour, like what you eat, or maybe if you, what you drink, or if you smoke, etc. [P10]</p> <p>And if you can't handle stress, you get ill. Either physically, or mentally ill. [P12]</p> <p>[...] and it's just uncomfortable thing and maybe there are butterflies in your stomach or uhm just a headache, a tension headache, this kinds of things so these are normally the triggers that, uhm... [...] [P1]</p> <p>I think it's, uhm, long term it's horrible for health, also, potentially the relationships, it's not... uhm, not least because if you've got that closing in, and</p>
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	<p>stress to low effectiveness, low motivation, and problems with concentration.</p>	<p>simplifying the things then you're not gonna go out, socialise with people so regularly. Or if you are, you might be quite prickly, you might be quite literal like me, not realise that you're stressed because it's, you know, uhm... [P21]</p> <p>So, uhm... yeah, I guess it would either, sometimes it can make you, uhm, not want to put 100% in, so I guess, if you, yeah, maybe the motivation thing again. Uhm, it can make you not want to be there, so... you'll just do the bare minimum, perhaps you're not giving, giving, uh... [P13]</p> <p>Uhm, I guess when your brain is so overpowered that it can't focus on one thing. I think that's like...in my head I know that I'm stressed when I'm like just trying to do too many things at once, and I can't focus in on something. [...] Uhm, yeah, I think it's just a bit of kind of a brain confusion [...] [P8]</p>
Non-normality	<p>Stress was described as normal and natural but at the same time it was perceived to disrupt 'normal' state and result in a non-normal way of functioning.</p>	<p>And basically, like you're, like, I guess, personality becomes deteriorated, yeah, deteriorated to certain extent, and you start behaving like, I guess, not like the person like you truly are. [P10]</p> <p>I think if you're stressed you can react differently to how you would do normally, and that would mean that you're, you're changed [...] [P16]</p>

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Positive outcomes	<p>Participants discussed a range of possible positive effects of stress (particularly if it was a low-level stress). Stress was seen as motivator (often because it was so unpleasant that people would work to get rid of it), energiser, a point of comparison, a sign that something required action, or that a person cared about something. Positively resolved stressful situations were perceived as rewarding (elicited a sense of achievement) while having no stress was associated with boredom.</p> <p>Stressful experiences were also</p> <p>I think, I think... I need a certain amount of stress to be able to get anything done. [P3]</p> <p>I mean, yes this is a stressful scenario but just push all your energies into doing something positive out of it, you know. [P26]</p> <p>So, having, having stress in some situations is quite useful because you can...</p> <p>So stressful, stress can be useful because it can help direct your mind. [P23]</p> <p>Uhm, I think, you know, it makes people aware of if they like their jobs, or if they like their lives, or they have, uh, spending their time, uhm, how they're simply feeling. [P8]</p> <p>Uhm... I, I've, I think people that are completely relaxed are bad, I don't know, like I think like they've been sunbathing all day, or like they, they'd, they'd just, they don't care, they don't care enough, they don't value what they're doing enough to invest their time, or mental energy, or space to that thing. [P3]</p> <p>[...] and then, when I'm not working like that, I mean, I really enjoy my work, but it's not the same sense of 'wow, I've achieved so much', I think stress is</p>
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seen as opportunity to co-operate and support others, learn, develop resilience and coping skills, take care of one's health, and come up with new solutions to a problem.

definitely a contributing factor to have, feeling good at the end of doing something stressful. [P8]

*It keeps me like not bored, because if I wasn't stressed, I do, I think I would be bored [...] [P10]*

[...] because without that you're probably not gonna move forward. You're not gonna learn, and so on. [P7]

Yeah, I think if you, if you put yourself in a stressful environment regularly you become, you know, able to deal with that particularly stressful scenario [...] [P1]

And you want to reduce it, and... well that's my nature anyway. If I can do something to reduce someone's stress or pressure, I would do it. [P15]

[...] it can have the opposite effect for some people, it can actually make them more determined to get rid of stress by exercising properly, and physically look after themselves better. [P19]

[...] else it's gonna be stressful for you for the rest of the time. You know, because you've never found the solution. Or else, you'll have to get creative thinking what the solution might be. [P12]

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Positivity	Positive state	<p>Sometimes the experience of stress was described as enjoyable itself. Participants talked about certain people thriving when being busy, under pressure or stress. This positive state was associated with adrenaline rush.</p>	<p>Some people enjoy being under the pressure, like, I know for me, I do enjoy an element of stress, so like I couldn't do a job maybe that I was just working in Tesco on a shop counter, or something like that. [P15]</p> <p>[Laugh] uh... yeah, I think it is because there's still, you're still, you still, uhm, feel the adrenaline, you still... yeah, I think it is... so from a physiological..., may, maybe it's more excitement? But not really, you know, like uh-hu, or anything like that, but, uhm... yeah, I think yeah, I think it is still stress because you're performing, you're feeling the adrenaline, [...] [P24]</p> <p>It's, it's on news, some things, so [...] So, I've, I've seen something and I transferred it's gonna happen to me, it's negativity, really. [P12]</p> <p>Uhm... I know it myself that if I'm stressed sometime, sometimes, I could have a job that would take me an hour in any of the day, but then I wouldn't finish it that afternoon because I'm thinking, well, I'll look at my emails, because I'm waiting for that reply, oh god, I've looked at me emails, looked at me emails, and I've got distracted because I've got on LinkedIn, I've got on Twitter [...] [P18]</p>
	Media and social media	<p>Media was seen as a source of bad news which may result in people being worried about things happening to them. Social media and communication technologies may lead to information overload, and they were considered to create new</p>	

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		<p>demands (responding to e-mails, specific expectations of oneself) and make it more difficult to detach from unpleasant experiences e.g. bullying.</p>	<p>I think as good as social media is, I think it's taken away children's their childhood, they, they're too alert to what's going on-line, the bullying goes on-line, it's, uhm... [P25]</p>
Nature-civilisation	Relax in nature	<p>Relax was often described as being close to the nature and getting some 'fresh air'. People associated natural environment with slow pace of life, peacefulness which helped them relax. Sometimes 'nature' referred to having no people or no civilisation (technology etc.) around.</p>	<p>It's interesting. [inaudible 01:03:40]. It doesn't, I was thinking, you know, utter, perfect relaxation is falling asleep in the deckchair in the summer house in warm, but not too hot sun. There is nothing quite like sleeping in warm sun [...] [P21]</p> <p>They're getting fresh air which is always good [...] [P23]</p> <p>Uhm... well, I mean, I suppose you'd have to... become a monk and live in the Himalayan hill, mountains, uh... a stress-free life would probably be... I don't know maybe it's achievable for even me, I don't know. [P26]</p>

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## Appendix 2. Study 1a. Lay interviews. Quotes representing Commonness and inevitability subtheme (Theme: Part of life)

There will always be, I mean if all those things went away and we didn't have wars, and we didn't have terrorism, then we might not have stress, so we might be stressed about something completely different, maybe we focus on different things like all the ice melting in North Pole and South Pole. [P1]

[...] [going for holiday] that's a nice thing, but it has stresses if you go along. [P1]

I think, you, you try to [prevent stress] uhm... it's not always possible. [P1]

I think people suffering from stress, and anxiety, worry, and depression are becoming more and more. [P1]

I don't, I don't think that there could be life without any degree of stress. I think that no matter who you are there's always gonna be some problems or something that you've got to overcome that would stress you out at some point [...] [P2]

Sort of, yeah. I mean, I don't know how to not to feel stressed. I, it's sort of within me [...] [P3]

There is a part of me that is always concerned [...] And I guess that will never go away. [P3]

I appreciate the times when I have little stress, uhm, everybody has stress like bills and stuff [...] [P3]

Because I've had it as long as I can remember [laugh]. [...]and I would think that everyone has stress. [P4]

Uhm... I think... I think everyone sort of experiences stress, whether it's positively, or negatively, but I don't know how else I'd describe it if I'm honest [laugh] [P4]

Because if, if I said, you know, like, that as I've said, that everyone experiences a small amount [of stress] [...] [P4]

I think there's always gonna be an element of it [...] I think you're always gonna have worries, I think... Probably it's I find that you're always gonna have slight worries about your family. [P5]

Huh, no I don't really think I can [imagine life without stress]. Maybe that's just me. [P5]

Uhm, so... I don't really know what, uhm, a stress-free life would look like. [P6]

There's always gonna be a level of stress [...] [P6]

Uhm, not, not totally without stress, no. Uhm... [cough] because there'll always be factors that come along that, that disturb that process. [...] there will always be factors that come along and interrupt there. [P6]

I think, generally people aren't feeling stress at level that's negative to them. But I think everybody is feeling it to an extent [...] [P8]

[...] everybody must have felt stress at some point, so whatever shape that takes, it must have an influence on their lives. [P8]

Not really. I don't think the [stress-free life]... I don't think that's possible. In a sense. Because although at time you may feel like you have no stress there would be, at some point something will happen. So I can't, I can't imagine that. [P9]

No [laugh]. I don't think, I don't think it [stress-free life] is possible. [P10]

Like, there's always a tiny bit of stress, so like relaxed to me is just literally having, like, no roles or responsibilities, having, like, no, any, like I guess, nothing in your life that's going wrong, and that is like a state of just like complete stress-free relaxation. [P10]

Everything's stress. You could, you, you know, let everything be stress. Every day is stress [...] It could be if you let it. You know, getting up early, getting up, like what you gonna wear, what you gonna have for breakfast, phone, you've got two phone calls in a day. [P11]

So, I suppose you could say 'don't go into a stressful situation', you know, that's stupid. Because you don't know what the stressful situation is. It could be long queue at the supermarket or a line out [laugh], so, you know... [P11]

Everything is stressful, everything could be stressful. So you can put yourself in stress, you can think about if it's gonna be stressful, if you want to, or you just go and do it. [...] Uhm... so anything could be stressful, nothing could be stressful, really [P11]

And then you've been able to convince you it's not... a rare thing. You know, it happens to lots of people [...] [P11]

I can imagine it [stress-free life], yes. [...] I think not for a, not long-term. I think short-term, I'm imaging it as a holiday rather than a big change in living, like my, my life from here to there. I'd say like holiday it's, yeah. [P13]

I don't, like, thing, things that are stressful happen all the time, and being stressed about them isn't gonna stop them from happening again or change anything. [P13]

P14: I am stressed.

I: All the time?

P14: Uhm... probably, I think that's got something to do with kids, to be honest [...] [P14]

Uhm, and... no, I don't know how I could imagine [stress-free life], I think it's... [laugh] [P15]

But I don't think, I think it would be impossible to remove stress entirely, uhm, you know, because I would be stressed about that I wasn't, I didn't have anything to be stressed about [laugh] [P17]

I just think that a lot of people in a lot of situations it's not possible to walk away from the stressful situation [...] [P17]

And I think everyone gets stressed but different people have ways of coping with their stressful situations [...] [P18]

Uhm, probably not [laugh]. I'm sure there's always be something that, that niggles at you [...] [P20]

I, I don't believe anyone can walk through life, and never get stressed about anything [...] [P20]

There's a... so, yeah, completely without angry, yeah, I can't just imagine us all without it a bit [laugh] [P21]

[...] is that level of reaction to a minor, quite a lot of, you know, every day involves some minor setbacks, or obstacles, or annoyances, right? [P21]

[...] things are, things are stressful everywhere [...] So that happens everywhere, there's no perfect workplace. [P21]

Say, work can be stressful, personal life can be stressful, money can be stressful. Uhm, most things can have stress attached to it, really. [P22]

Uhm... hm, most lives are stressful in some way, in some capacity, uhm, and everyone has different levels of stress regardless of what role they do. [P22]

Uhm... but I wouldn't say anyone specifically because I just think it doesn't matter where you are or what you're doing, whether you're, you know, working on a checkout, or whether you're high management, whether you're a solicitor, or a lawyer, or a judge, or a... there always be components of stress. [P22]

Because every, stress affects everyone in some way. [P22]

Uhm, would be very nice if there was no stress, uhm, in life but I don't think it's very realistic. [...] there's always gonna be stress. There'll always be stress with the car breaking down, or, you know. No, I don't believe anyone can float their life, can oh, oh, whatever [P22]

Uhm... I, I like the idea of moving in a slight, in the middle of the forest, and just having a hut, and then, you know, and not complying with society, and grow vegetables, and removing that stress, but then I'd still find stress somewhere. I think, you know, we're just doers, as humans. [P22]

I don't think there would ever be a world without stress. Because I think there's too much going on in the world. [P25]

[...] I don't think anyone goes through their life without, without having some sort of stress at some point. [P25]

Stress-free life, I think it'd be a bit selfish in a way to be completely stress-free because, you know, even just from being alive in this world you're gonna be stressed only by looking at... just being empathetic, I suppose, aren't you? [P26]

Or no, put it in other way, I had stress around most of me teens, and as I said, into my twenties. And it was like a constant stress really. In and out being stressed [...] [P26]

### Appendix 3. Study 1a. Lay interviews. Quotes representing *Natural part of life* subtheme (Theme: Part of life)

I'm gonna start a new job at some point in the next 4-5 weeks, working in a place I've never worked in before. Uhm... it's natural to feel a little bit stress [...] [P1]

I think so I think, I think being stressed [by] family, is a natural thing to have [...] [P1]

...so yeah I think those are all natural things, I think that you'd be very, a very strange person to not get stressed by job hunting, or family worries... [P1]

[...] the role will be new to me, uhm, and until I've been prepared and coached by my management team, [...] it's natural to feel stressed about something [...] [P1]

Uhm... I can't say, I feel like is some, I feel that opposite of stressed is relaxed, and I don't ever feel relaxed. But I don't like to feel, I feel guilty when I feel relaxed because I feel like I should be stressed. [P3]

I don't know, I'd just see it as part of life. [P4]

[...] and it would nice to be lovely and chilled all the time, but I think sometime you do, you need that little bit of uhm, a normal day just to think 'oh, yeah, so I, I need to sort that out'. [P5]

Yeah, I mean, in everybody there is that survival... it's just natural, the amount of adrenaline kicking, uhm... As human, well, uhm, if you bang a gun, all the birds will fly off. Correct. [...] Uhm... yes, so that's why people differ, I think, it's, it's human... not so much human nature, there's definitely adrenaline kicks in in everybody, and this is like all the chemistry in that department [P7]

No, I think you'll be a robot [without stress]. [...] [Laugh] I've got an image of being like a cabbage, you know, yeah, because, I know theoretically it's not possible, that... becoming a robot. [P7]

[...] so, yeah, I'd definitely say it's a part of life, everyday life. [P8]

I mean in the way that I, I work, the stress is just a part of it, and you sort of, like when you start the job you know that it's gonna be stressful [...] But I'd well, I'd say people often go to work to do something that may be stressful, and they know that's gonna happen. [P8]

So it's, even, so it's always that as well, I guess. So it's like, I guess, being in, in between where you're like a little bit stressed, like, and like be able to, like, with everyday life, and lead, lead a normal life, I guess. [P10]

[I am] Medium-stressed [...] It's like normal then. Yeah, then sometimes really stressed [...] [P14]

So that would be a good life for me because I don't think you can go through life without being... generally without being stressed about something. [P16]

You'll just drop dead. I'd have no, not be able to stand up properly. [...] I couldn't imagine life without stress at all. [P19]

What sort of life, I mean all sorts of life have stresses, don't they, I mean it's just part of [life], with no stress we'll all be dead [...] [P19]

[...] yeah, that's, uh, you know, the certain edge of... there's, yeah, kind of about being alive... [...] a bit of... I don't know, something just makes, makes kind of human, in a way. [P21]

Uhm... but yeah, I know definitely people have, you know, I mean, ultimately, you know, all of that said, people have legitimate reasons to be stressful, of course, and then... [...] because I know they're stressful for everyone, and it's legitimate stress, and I'm telling myself it's fine, it's fine [P26]

[...] letting yourself be stressed when you know you should be, and that's fine [...] [P26]

[...] as I get older, I feel like the levels of stress that I feel now are normal. [P26]

Uhm... well, exactly that, I suppose, it's knowing the, the, the scenario that you're in is something that, you know, is... not is one, you know, that a human shouldn't be in but when, when a human, and emotional kind of creature is in, in a scenario that is similar to a stressful, you know, in a, in a situation that can cause stress in that emotional creature, then it's, it's fine for you to feel that way. [P26]

It's survival, survival technique, isn't it? It's what it was down to, I think what we know now is, you know, an evolution of our past, and stresses are means to, you know, just heightened, more heightened aware of your environment, and of any threats, physical, or, you know. [...] It's a protection thing, isn't it? Some kind of survival techniques [...] [P26]

It's, you know, I suppose, yeah, it's just we age that you realise that stress is just a part of life to a degree. [P26]

## Appendix 4. Study 1a. Lay interviews. Quotes representing *Individual experience* subtheme (Theme: Complex, individual experience)

[...] jumping out of planes, and doing bungee jumps which probably would give a big adrenaline wash to some people, whereas for me or you, obviously from a parachute jumping, it would be a stressful event. [P1]

Yeah, because I, I think, a lot of, you might sometimes have to do a presentation, which for me would be quite a stressful thing to do [...] [P1]

Well to her it might be a big thing but to anyone else looking at it, it doesn't seem like a big issue. [P2]

Uhm... yeah, I mean, if... it will be different to every single person, but I mean, on the individual basis, what they would class as more difficult will be stressful. Uhm... hmm, I'm trying to think of, like, my friends [...] I wouldn't class that as stress [laugh] what they would class as stress [P4]

So, like, me and my brother are completely different people. Like, what his, his job day-to-day would stress me out [laugh] but, uhm, he manages it so well, and it's, it's bad because his, he is his own boss, but a lot of people in his team get really stressed out, and respond to it in ways that he doesn't understand, because to him it's not stressful. [P4]

[...] something that I may have gone through it could be very stressful for someone else. [P4]

Uhm... sometimes, uhm, if I share with, like, my friends something I'm going through, and, you know, they, they tend to say 'oh, it must be so stressful', and stuff like that, and I'm like 'no' [laugh] [P4]

To some people [grandson's name] perhaps not coming home at the right time straight away wouldn't be a problem, yeah, they wouldn't think of that as a problem [...] [P5]

I can sometimes feel myself, when, especially, when the boys were younger, and they were mess, fighting, or, or messing about, or being... I'd feel myself getting worked up, uhm, and then somebody else would just sit there, you know, perhaps, somebody else would not be feeling like that. [P5]

You might have different ways of dealing, thinking about, worrying about things, so you may have worries about something completely different perhaps, you know [husband's name] might worry about something completely different to what I would [...] [P5]

Now for me it, it doesn't matter, if I get my redundant this time [...] So I would be quite happy to keep working, but we don't have as a, as husband and wife, we don't have to worry too much about, about my job. [P5]

Other people would most probably look at it, and think 'you've got nothing to be stressful about' [laugh] [P5]

Uhm... but that in itself can be a stressful situation, when you're going out somewhere [...] Now, he... he can talk to anybody. [...] Now, if I would go with him, I would always find that really difficult. [P5]

You've got to get your essays in, you've got to get your viva prepared, you've got to do your research, yeah, absolutely. [P6]

Uhm... she gets very, uhm, she gets very stressed about a lot of things, uhm... and I don't so much. [P9]

Uhm... I guess because some things matter more to people. [...] some people like very single kind of thing matters. And if little things go wrong then they'll [...] get upset, get sad over certain thing. [P10]

Uhm, it's only if it's something like, I guess, the people close to me, or something very personal to me happens. [...] It's only the things that matter to me. If they happen then yeah, I will be stressed [...] [P10]

Uhm... do... it's like... why do some people, you know, some things are more stressful to some, that same incident can be stressful to some people, exciting to someone else, and just totally boring to someone else. They don't even know there's a situation to be anything of... [P11]

And she was so laid-back about it, I said 'don't that stress you out?' I actually used that word 'doesn't it stress you out, going up in a plane?'. [P12]

I don't know, it's very personal, when it's stress. [P12]

So she's stressed out about her body image, I mean. So that's quite different to my, my view of stress [...] [P12]

Some people can manage it better. [...] I mean, I couldn't cope with all that stressful environment, it's very high-powered, and everything. So she can cope with that but she can't cope with, uh, you know, a personal remark, you know. [P12]

So, you know, some people de-stress pulling weeds out of the garden like I would, and some people don't want to see the weeds because it stresses them out in the first place. You know, really, people... so I say stress is different for different people. [P12]

Like my mum, she's stressed that she can't turn the light on, but for me is water and electricity burn the house down, we're gonna, you know.[...] she didn't mind the connection between the water leak and the light going on [...] So some people can see that way, and some people can see a bit further. [P12]

I'm sure there are elements they've found stressful because obviously everyone's life is different [...] [P14]

[...] I know that, for me, like the house always has to be like a show home, and if it doesn't, like it wouldn't bother some people, I fully get that ..] [P15]

[...] children at an earlier stage they manage things in a different way, and a thing that would bother one child, doesn't bother another child. [P15]

Because it's, it's, it must be quite personal because what stresses one person out, or stressed them, stresses, stressing you out, stresses them out might not be the same, you know, somebody else may not be affected by it. [P16]

[...] [without resilience] maybe you'll be unable to cope with, uhm, quite day-to-day situations that other people wouldn't find stressful at all. [P17]

[...] work is not his main priority anymore, family is his main priority. He is at the stage of the career where the work is what he does. For me at the moment work is pretty much my life, as sad as it sounds [...] [P18]

Some people, it's, uhm, well, different things will cause stress for different people [...] [P19]

[...] it depends on what the, their trigger is. And that for me is probably the, the tick-box. I'm a bit, people who don't do the tick-box exercise – that stresses me out [laugh] whereas, uhm... [...] someone else's, just when they have exams, the pressure of exams, for them that's their one thing that's the trigger point for them. [P20]

[...] I'd stress about the operation because there's that, a lot of people will take 1% risk is, you know, nothing. Uhm... whereas for me that 1% is like the end of the world sort of thing, and... uhm, so that for me is stressful. [P20]

[...] yeah, it's a... it's a lot about personal thing. These, these are not thing that... necessarily have to matter, you know, something that not always seems to matter to other people. [P21]

[...] in some cases it's just going to be there, just not being so bothered about stuff. [P21]

But I don't know that everybody, anybody does either... I mean, I suppose there are some people that stress all the time over every little thing, I just pick my battles, so... [P22]

I think it would be... unless, unless people didn't care enough about the problem, so I, I like to try and do the best I possibly can everything I do. [...] And if I must do a job, and I can't solve it, that's when the stress comes, but for other people if they asked to do a job and they can't solve it then they may decide 'oh, I don't care'. But because I can, I want to get that result, that, I guess, maybe why I get stressed, but some other people may not get stressed. [P23]

But I think stress is caused by caring. [P23]

Particularly, I think, in my, in my career, and that really can feel like pressure, uhm, because I take work quite seriously. Uhm... and so, yeah, I want to achieve in my job, it's important for, for my job to have meaning, so... I think that's really important. Yeah, so I think those two things are the main things that might make me stressed. [P24]

Uhm, I mean, yeah, I know some people who with time pressure, they actually don't care so much to be getting something done in a particular time. [...] and so maybe don't feel that pressure. Or they maybe... would, would regard a particular situation, uhm, as, yeah, not, not being so, uhm, important maybe [P24]

I feel pressure to develop my career, and to... even if I can't go to a higher grade or a higher salary, then to do a better job. So, so that's important for me, yeah. [P24]

[...] I think it would be a life where somebody doesn't have control over, over their situation, but I think that, that, for different people would be different thing. [P24]

[...] she couldn't cope with that, even though she wasn't displaying stress, you know, in other activities. So I think it can be quite specific for some people. [P24]

I don't know, I think it's culture, I think, uhm... You know, for me it's important to meet people on time. [P24]

But some people are sort of like, they, they really like the sea, you know, water, and then others like, don't like that, do they. And that would stress perhaps someone that's scared of water, or old drowning, or something like that. [P25]

Like I said some people go to, go to Alton Towers and have the time of their life, whereas that would just, all the way there, the night before I'd feel sick, I get emotional [...] so I just think it depends on different situations and different people, and some people just... [P25]

I think it's just some people are more, I do think some people are just, can handle certain things, this can't, this, what won't stress one person out would certainly stress, you know, another person now. [P25]

[...] an office job that I absolutely hated, it was so stressful, uhm, and, you know, I didn't wish that upon anyone who didn't want to be in that environment. Obviously, some people thrive but it really wasn't for me at all. [P26]

[...] sometimes small things cause stress, uhm, and agitate people but it's like, I think it's more because I suppose I know it's, deep down, it's not stress in the way that I would describe stress internally, like internally, for me. [P26]

[...] I wouldn't say no to sort of doing like a performance of some sort now [...] and I know for a lot of people that would be really super stressful. [P26]

[...] whole host of different reasons than it was for me, so all of these different triggers, I suppose, for different people [...] [P26]

And maybe something they are quite good at covering stuff. [...] I think sometimes people are just better at hiding it. [P1]

[...] when someone wants to say that they're stressed, to them the perceived feeling of stress might be different to someone else's perceived feeling of stress. [P2]

[...] they'll just say 'I feel really stressed, I've got this and that going on', uhm... some people hide it really well, I think. But I don't think anybody shows it as much as I show it. [P3]

[...] it doesn't mean to say they're not stressed [...] I've known people who'd been like that, and, surprisingly, you, you hear on a subject, and they, they surprise you with saying that actually, inside, I'm stressed, and it's all of the front. And you, you're shocked, you think 'oh! you're so happy' and yeah, it can be difficult, if impossible to [laugh] to read. [P7]

[...] that's a different type of stress, and I think it's difficult for people to understand other people's types of stress because obviously everybody will stress differently, and everybody has different life [...] [P8]

Because comparing my sister you would find out she don't, she says she don't do stress, she's very laid back but I think it comes out different ways [...] [P11]

So it comes out in different forms, some people are better at it than others. [P11]

[recognising that someone is stressed] Uhm... not brilliantly, no. Because stress is different to lots of people [...] [P11]

[...] he was a musician, and, uhm, his stress used to be in his music. We could tell, you know, his music was all like that. [...] So people have, might be other ways of expressing them, uhm feelings like that. [P12]

People feel it differently. [P13]

I wouldn't say angry, some people might say angry, but I wouldn't say... Just frustrated more than anything [...] [P13]

Maybe... uhm... well, it's different to everyone, isn't it, what it is to be stressed. [P13]

That is just one, she's, she's so placid. I said 'you ever feel stress?', she's like 'yeah', it just doesn't ever come out, literally never see it, just the robot. [P14]

[...] you know, feeling what you're feeling right now is right for you, so there's nothing wrong with that. [P16]

You know, we've sort of talked about different people experiencing stress in different ways, and having different... so therefore they probably would need a different approach to deal with it. [P17]

Yes, people are different, people have different personalities, uhm... but I also think some people who are more hot-headed and more rush probably get stressed in different ways, because unlike someone like me they're not deliberating as much. [P18]

[...] everyone's very different, uhm, and you wouldn't, wouldn't necessary know, I don't think, that someone is stressed. I think a lot of people are very good at hiding it, or, uhm, staying, you know, staying quiet about it. [...] they, they may come and tell you, they may, they may be quite vocal about it. [P20]

But minor, over little silly things, not, not emotional, I don't get emotionally stressed so much. Mine's more factual. [...] For me, uhm, stress where, like I'm gonna go and cry in the corner, for example, I, I don't get that sort of stress. I'd probably made more of, like we talked about the anger stress. It's like the frustration stress. Uhm... it's probably more, I'm more, uhm, frustration stress than, uhm, sit down and cry, and get stressed that way. [P20]

[...] the problem is when you have that red ball inside... you may not think as clearly as... [...] that's me being extreme, and not everybody's the same way, and... [P20]

And the I've got the third friend, she just keeps everything to her, so she doesn't get, never comments on anything, or, or whatever [...] [P20] weakness?

[...] they'll be less cheerful, for example, and... less... well, it does depend on person, a few cases, just less forthcoming with things, less likely to initiate anything. [...] some people vary, they've got, some could go quite grey, oddly, and some, yeah, some, yeah, just kind of drawn and [...] it depends on how it is, but, you know, just kind of a... it's not, not just being this cheerful, but just more, kind of a sadder, resting face, you know, or not even sadder, no, more... more neutral, almost more expressionless than sad, actually, just, uh... [P21]

I don't know if they are more or less stressed, or just showing it more or less. [P21]

[...] there are probably also people who kind of they plough on through regardless, don't they [...] so people who are gonna create that sort of persona. [P21]

Uhm, for me, as well things like eye contact can be very important. But again it depends on the person [...] [P24]

[...] when people, yeah, so they might change their thinking, so some people would do that more than others [...] it's very difficult for people to tell when I'm stressed because I don't change my behaviour star that much, whereas for some other people it is extremely pronounced. [P24]

[...] so the certain situations, uhm, they might be, or certain things that might trigger varying stress, and so, yeah, sometimes it's important to know that. [P24]

You know, I did feel quite emotional through that. Uhm, I don't know it was responsibility, or I was just tired [...] [P25]

So I tend to sort of... my mum's always said if my sister was angry or upset, she'd just go off and sit in her room, and be quiet whereas I'll scream and shout, get it all out of my system, but then I'll sit and have a cup of tea. [P25]

So, some people you just can't talk to, so I just tend to bottle it all up [...] [P25]

[...] stress is, is a difficult thing to quantify, to, to fathom because it's an internal, you know, mechanism, isn't it, that's probably different from one person to the next, very much [...] [P26]

[...] who am I to say what, who, what is and what isn't but, you know, yeah, definitely people feel differently about stress, yeah. [P26]

I think because for me personally it's just the way the stress is, has been for me over the years is a very internal, internal thing. So I kind of just keep it all bottled up, uhm, and I am really good at sort of just alluding to other people that everything's fine [...] [P26]

#### Individual coping

Different people deal with things in a different way [P1]

[...] they have different mechanism for dealing with stress as well. [P1]

[...] last night I had some chocolate and two glasses of wine, so it does... that, that was a particular environment. You're at home and you're stressed, so it might be slightly different to being in work, being stressed. [P1]

I do think it is, yeah. The way we manage things, and manage stress is definitely individual. [P4]

Or they might say, uhm, like, like I've got a few friends that say like 'you handle things so well', and like 'I could never be so calm', and I'd say, I just, it makes me feel like I could handle things a lot better than some people. I mean, there's probably people that can handle things better than me, but [laugh] I don't, I don't know. [P4]

It just depends on what stress, how stressed I am. And... yeah, it just depends on how I am. [...] Like this weekend I didn't do anything [laugh] [...] Uhm... but another time I might... I don't know. [P4]

Uhm, now with me, I'd most probably just sit and cry if I didn't feel all right, but that's maybe not something he would do. [...] Uhm, now me, I'd just blub , you know, I'd start crying, and I might want to, you know, and I wouldn't necessarily tell people [P5]

Uhm, he, he, I think he sleeps when he is under stress, so he sleeps a lot. Uhm, and I'm the opposite because I'd be awake [laugh] [P5]

You just, you create the coping mechanism not to stare at them, because, you know, 15-year-old boys would be getting up and saying, uhm, making faces... [P6]

[...] strongest people are the last ones to suffer from stress, because they've internalised it, they cope with it until something goes [snapping fingers] and they can't do any more. Whereas people who have got less of that fight, uhm... drive in them will probably just withdraw much sooner in the process [...] [P6]

Unless you've taught yourself what the coping mechanisms are that work best for you, uhm [...] [P6]

But... it is finding those coping mechanisms along the journey of life, really. Whatever they might well be. [P6]

It's such a big range of the things you can do [when you are stressed]... [P7]

[...] you know there are different things that people do to handle stress that aren't necessarily stopping work. [P8]

Well, mindfulness seems to be very trendy these days. [...] I'm not really into that, but people seem to like it. [P8]

I mean, from personal experience, me and my sister both, uh, I would say we, we deal with stress very, very differently. [P9]

[...] you either kind of, you deal with the problem, or you just try and avoid it. Uhm, so it kind of depends on what kind of a person you are. [P9]

I think different people have different coping mechanisms [...] yeah, I think it's, uh, a very personal thing of what people do when they have stress. So there's, there's a really wide variety of what it could be... [P9]

I mean, different people do different things [when they are stressed]. [P11]

So, you think you're de-stressing them, but actually you're making them annoyed and stressed out, as well. [P12]

And people handle it in different ways. [...] I don't mind going and doing the weeds. Whereas my cousin, any sort of garden that's, that can't be controlled, she's got a rather plastic football pitch on it, you know [...] [P12]

Uhm, I think it's just the way people deal with it differently. [P13]

They might not, the thought of these other ways to deal with things. [...] They might just not know one, about certain ways they've, they've done it like that. Perhaps for as long as they can remember that's how they deal with things. [P13]

I think, yeah, I think there's all sorts of people that, you know, some people seem to take things very much in their stride. You know, it's like oh, whatever I can just, you know, do when I need to, or pull it out the bag, you know, whereas other people tend to think about things, worry about things, and get anxious about whatever it is that they're doing. [P16]

Be it by doing things, doing things like I've said that, you know, but I mean, I, I think that's very personal to the person to try and encourage them to keep trying, I guess. [P16]

Uhm... I suppose it would depend on, uhm, what they are stressed about it in some ways, but, uhm, I think that it's difficult to impose a kind of, you know, one-size-fits-all solution, really. [P17]

You know, we've sort of talked about different people experiencing stress in different ways, and having different... so therefore they probably would need a different approach to deal with it. [...]

Yeah, so trying to come up with the solution that works for the person, really [P17]

[...] and that behaviour, behavioural therapy, or... mindfulness, whatever you want to say, there's different words for it, for whatever you have in your armoury. [P18]

You know what it's like yourself when you're doing work, sometimes it's nice to have music on, other time you don't want anything. [P18]

You see, I'd hate to sit down and write, that wouldn't work for me, so I'd, I would recommend it just because I know lot people are, writing helps, you know, but, uhm... So, it might be a friend I knew, I could say take your dog for a walk, or going to have a bath, or, you know, you give different advise to anyone, what, what you know. [P19]

What do they do? Uhm...? I think it depends on the person, how stressed they are, and what they're stressed about... [P20]

[...] it's all very well saying 'go and speak to someone', but some people aren't comfortable speaking, speaking to other people. They wanna deal with their own way. [P20]

No, if, you know, but it's a different, different, my friends [...] there's four of us. Uhm... and one of them, they're all particularly, they're quite different in how they deal with their, their stresses, and with their relationships [...] [P20]

Again I think there's things people do in the short term, and in the long term. [P24]

You know, everyone else in my work, oh, can I do a to-do list, things. I was the only person who didn't use it. You know, it's like I don't like routine... I do, I deal with things as an, as when and how they affect, you know, your work. [P25]

So I tend to put myself in whatever situation they mean, and I sort of react to that. But my sister is, is like opposite extreme, so she is like miss tidy freak, you know, really like has routines. But I don't like, I can't. [P25]

Routine, I'm not, I just, I have to do what the mood takes me. So I have to deal with things as, as they come and how I'm feeling, that's how I... [laugh] [P25]

Just some people think that that's, you know, that the universal way. And I've got my way, you, you know... [P25]

Yeah. Uhm... well, I suppose, it could be just the way that you deal with the certain, like, scenarios [P26]

Uhm... well, I mean there's so many different ways to deal with stress, uhm... [P26]

I normally just brainstorm, because I feel like if it's all in my head it's so much more stressful. If I write it down it can seem less stressful. [...] Uhm, I feel like if I can't see it, it seems like more... more, more stress, more worries. Whereas if I write it down, or like I brainstorm it, and I see exactly what I need to do, I can work on one thing at a time. Whereas I can't separate it in my head [P4]

[...] I'd prefer if all the wires I could individually see where they're going then it wouldn't look so messy... [P4]

I think it wasn't until yesterday that I wrote a list of all the food that I might need, and then I wrote a list of, uhm, like a kind of, like it has, I had to write down OK, well I have the study tomorrow, that's 10 pounds, and then I've got my money coming in on Thursday, that 60 pounds, and I had to work out that case, if I save that, then I can do that. I started to make sense of it more, and then I thought OK, you know, if I focus on just buying the basics then, and then I could buy more then, like, because I, like I said by organising it, if I organise it, it seems less stressful. [P4]

So I think it was until last night, when my son went to bed, and I thought that, I need to sit down, and then put pen to paper. That's when I felt a lot more calm

[...] or I read a list if I'm stressed out, and I'm like I'll get everything so OK, these are all the things I need to do, uhm, this is what I aim to achieve in this time, uhm... yeah. [P8]

So it's, it's just wondering whether, what, trying to work out what's gonna happen. [P9]

I mean, young people say 'oh, I'm so stressed, so stressed with my exams coming along, and...' And I'd say 'well, make a plan, and then it would be better than... [P12]

No. But what I did do, because I've got quite a big..., uh, like, I created a steering group in the end. [P14] external help?

I broke it down to smaller chunks in the end. [P14]

To try and unpick the problem, and even if it was, in whatever way worked for them, so you'd need a big piece of paper and draw a big spider diagram, or list of things, or whatever way it worked for them to actually try and unpick it. Sort of causes, and how you could eliminate them, and basically tick things off the list, to say right let's get going with that one, we're going with that, and I think it's sort of action-planning approach [laugh] [P15]

And I listened to, uhm... podcasts how to manage money, and, amongst other podcasts. [P16]

[...] uhm, so, and before the game... uhm... talk to the other umpire because there are two umpires with netball, uhm... I think I did actually establish where the teams were in the league [laugh] because I did the game, or just before I did the game. Because one team I wasn't familiar with [...] [P16]

I've structured tomorrow [...] I'm meeting a professor who I'm doing it with at lunchtime today, and we're gonna talk through, we're gonna set out a bit of a strategy of what to do. [P18]

I prepare myself. I think 'right, OK. What can I use in my armoury to, what have I got?' [P18]

And I think that's the same what, I suppose, I'm getting at is... have an understanding, it comes back to my planning as well, and I had, I find if I can plan for the day, I can plan for what stressful situations might arise in that day. I mean I don't scrutinise my calendar that much, but I think, right, I'm meeting her to agree dissertations, that's probably gonna be quite stressful, so I'm gonna make sure I'm not laid over [inaudible 01:03:31] to it, I'm going to have it on my ground, yadda, yadda, yadda [P18]

After this I'm gonna go to admin and find out what I have to do for the dissertation marking this year because it's probably different [...] I've then got to print off my tickets to Brazil on the 9th, and make sure I need to do everything I do for that [...] – bang! That's done. Uhm... meet my prof at whatever time, half twelve or whatever. If I do that for the day, it's fine. [P18]

[...] I do a little bit of teaching [...] I went, the first class I had to do, I wasn't terribly worried about it and I got it all prepared [...] [P19]

[...] maybe write things down, maybe write down what they're, uhm, what were they stressed about, what were they, just write everything down, and then trying order them, trying to say what's the most stressful, then what's the next most stressful, and then, then just a sort of pick the top two, or three, and just say what can I actually do now about that. What, what steps could I take [...] [P19]

Practice [...] I do it now to sort of get some, just very important things to get the feel of it, get the timing straight and, and make sure I'm in sync with my slides, I know what I'm doing. [P21]

Now it's sort of I'm not gonna do that, I'm gonna do this other thing. Either this other thing that I enjoy, or this other thing that's been, that's important [inaudible 1:29:44] and has been put to one side. [P21]

[...] so I'd ask them to... list what all they things were, uhm, so they've got a picture of it, because sometimes it's sort of... sometimes it feels like it's one thing but there's something else behind it that's really... yeah, that's just made harder by something else. [P21]

[...] ask them questions about, you know, what is it about that? And, well, can we change that? So... sort of... you know, because not all of it can be, but if you change some of it then... or, or which one is worst, and... so some, some way of prioritising it, whether it's by what's achievable, or what turns out to be the biggest thing. [P21]

So, yeah, really, you know, yeah, I am quite, quite an analytical approach to it. Just sort of, just to get my ducks in a row, you know, I thought straight on it. [P21]

[...] which meant that I just made my meetings very structured, so I would script myself, so I couldn't lose my way, uhm, or it'd just end, uhm, so it was really, it was about, uhm [...] [P22]

[...] which is why I would spend hours and hours preparing for every meeting, making sure that I knew what every single penny was, so I couldn't put myself into that situation. [P22]

[...] I just go 'well, prioritise it'. Pick the thing that's easy, or, you know, pick the thing that needs to be done first, do that, work your way through. [P23]

But then, that's where I can break it down and go 'OK, what's due first? What's gonna be my biggest challenges in each of these? And that's then how I stop myself, not stop myself being stressed [...] [P23]

[...] I know that if I, it's just start trying to break it down, then at least I'll only be able to do the best I can do, and that helps me [laugh]. [P23]

Uhm, and then... when I'd be OK again, I'd then be able to face it, and try to think about it a bit more, a bit more methodically. [P23]

I had time to break it down into the individual elements, which bits and things I'm actually annoyed about. [P23]

But if, say, you know, there's someone else coming along, or, you know, it used to be the scenario where I would have to sort of plan out everything that I would say, what they might say, and it was just this, real kind of not understand, you know, not going with the flow of things, I suppose, when I was younger. [P26]

And that could end up ultimately with the worst kinds of thing happening for that person as well. You know, I think, it's important when something is stressful and keeps going wrong to try getting some help or input on to hang if you change it, and then the outcome more positive next time. [P1]

Now I just gonna get on with it. [P2]

And I need to, sometimes taking that five minutes so as to just think 'stop! what are you doing? why are you doing it? what do you need to get to today? what do you need to reach today? [P3]

Yeah. I just... I mean, I... yeah, I mean, I find it hard to focus for a long time, so I like flip between different tasks that I have to do. That kind of helps me. Because I'm still getting stuff done, just not in big chunks. [P3]

[...], I was extremely stressed over the weekend, trying to sell stuff, and trying to make money. [P4]

[...] I will keep trying to phone him, and in the end I'll, because he, the school is near to where we live, so it's quite good, uhm, I would quite often go out and walk around looking for him. And that would be may way of having to, having to cope with it. [P5]

Uhm, I don't know, I suppose they're trying... change the situation if they can. [P5]

Uhm... but then it's about those coping mechanisms that will kick in, and allow you to resolve those questions in your mind because all sorts of little things, like, uh, which direction you want to go in first, uhm, are quite easily satisfied, uhm... [P6]

Just by delaying actually having to resolve the problem is not sorting out the problem. So you, you gonna have to come back and still find the answer. [P6]

A rational solution is probably gonna be the best one. [P6]

[...] you want it to go away, so you have to... bring in to yourself what is the right procedure. Do I recommend this, do I recommend that? How can I help, uhm, to get rid of it. [P7]

On the bad side, with me, I'd say I'm talking about me I feel like I've got to take action. I've got to nip it in the bud [...] [P7]

I go to Google, look it up, tap on a few things, and see what... that's the beauty of the Internet now, you can get other people just, uhm, comments, experiences, things like that. Well, that's, that's how I actually, I tackled it. [P7]

[...] some might google on 'how do I get over this?' [P7]

[...] I would think about it through my mind first. [...] I'd google it. [P7]

Yeah. If, if I'm, if I know for a fact that right, this is what's gonna happen, and is, it's, for example I'm not gonna be able to meet this deadline because I've been given this way too late and it's far too much work, and it's literally impossible then, obviously I'll try to find the, a solution to it, and would say 'look, this is what's happened' [...] [P9]

I think, also, if I'm not able to do something I'll say 'OK, this isn't working, I need an extra person on this, or we need to change something rather than letting it all weigh down. [P9]

And, uh, it's like just a step back, calm, and look what's happening, assess the situation, then deal with it [...] [P9]

[...] she would just go in and then start confusing herself with getting, you know, uh, getting stressed out about trying to do different things at once, while I would rather go and do this, what I've got to do, what I've got to do. [P9]

I would be able to just get it right and I'd do this, and then done. [P9]

Uhm, I think it's kind of, it's the fight or flight idea, you either kind of, you deal with the problem, or you just try and avoid it. [P9]

More... fight, yeah. I'm just trying to get rid of that stress as quickly as possible. [P9]

Uh... and wait till I can deal with it, and then once I, I have the opportunity, I'll just try and get rid of that situation. [P9]

Because I know, it's again like I'll kind of goal thing. I guess I want to do this thing, and then I want move over to the next thing and do that. [P10]

Yeah, I just... uhm, I guess, about the feeling itself I literally just like I, I took action, and then that feeling kind of surpassed. So I literally as soon as they sat at home, I went home, sorted out, apologised, and then that feeling had passed. So like my interpretation, it's like basically is sort it out and make it right as soon as like, maybe you've done it wrong. [P10]

So I'm going back to the point it's just like is there something I can do about it? Yes? Then why am I getting stressed, why, just do it. [P10]

The, mantra when it first came, if it bothers you – deal with it. [P11]

[...] or you just go and do it. You jump in and sink or swim sort of thing. [P11]

Well, what I've done about stress... You have to talk yourself out of it either by doing, get, overcoming the actual physical whatever has caused you the stress, or talk yourself out of it. [P11]

[...] I spent a lot of time trying to analyse where was like, I'm not like that anymore, you see. You can think a way around it. [P12]

I tried to lift it back up to put where I'm gonna, and I can't do it. And I think, well, I lifted it to put down, but I can't put it back. And I'm thinking, oh, that was easier, I used to be able to do that, why I can't I do anymore? [...] and I thought well, what I do, I'll empty some of the box, put half the box up there, and then I'll put the things in the box, and then put the lid on. [P12]

They either give up, and don't go there again, so they can't do it. Unless they think of a way around it like I just did with the box. I can't do it, but I can think of a way of doing it. [P12]

Well, actually, imagine it comes from your, uh, your strategies, you know, this is me now, the fight-or-flight mechanism, you're gonna run away, or you're gonna fight. You know, if you were an animal, you either gonna have a fight, or else you can run as fast as you can, can't you. And I'm probably the animal that changes their position rather than stands the ground and fight, do you know what I mean? [P12]

And I don't think about it at night, I'll come back and deal with it in the morning, I can't deal with it while I'm at home if it's an actual work thing. Uhm, I'm just trying to deal with things as soon as possible [...] [P13]

But then, I was like that for a few minutes, and then I was like OK, right, what you're gonna do? Kind of stand here and feel, feel like this. Start thinking about what, what you could do, things like that. OK. So, uhm... I was, I thought about how far away I was, how long I had, I can't remember how long I had... Uhm, I wasn't on the main road, so like first thing, I just move to get the car into like somewhere where you can just park it. [...] And then I tried to find the number of, uhm, a

place that I was meeting that person, and I said 'when this person turns up, can you let them know that I've just had few issues, and I'll be there about fifteen minutes late?' [P13]

[...] I'd maybe just go for a walk or something, think of solutions to things that are causing the stress. [P13]

I think I feel like one of the reasons I don't get stressed a lot is because I know that, it's just, what's, what's the point, it's not gonna achieve anything. I don't, like, thing, things that are stressful happen all the time, and being stressed about them isn't gonna stop them from happening again or change anything, so you just deal with it. [P13]

Or if it's your own, like, might be disorganisation... what can you do to fix that. [P13]

And sometimes you think, well, it's not like that. Obviously we can always absolutely try and change something but some things can't be... changed immediately, haven't for years changed it, so just get on multitasking, right? [laugh] [P14]

But then I'm, I'm a really methodical list-maker, and in my head I can mentally get right from this on to that, and I multitask, so... [P15]

[...] and you'd be perhaps dealing with thoughts, more things internally. [P15]

Get straight on with it. I'm not someone that leave things for last minute, so as soon as something comes up I think, is it niggle for me and is likely to make me get arrrgh. Let's get straight on with it. [P15]

And I... kind of try and plan my way forward, uhm... yeah, I would say I'm just trying... get on with it, really, uhm... [P15]

So she stomped off to her room, and she's got like a visual guide to grammar and textbook, so she found a page on commas and she just copied the whole thing out and the presented it to me 'I know what the comma is!' and so... for her it's kind of that, she, she turns to the books, and just to... but then I can see myself in that. Because I see that, when I talked about my interview that I just did, it was for me needing to get straight to the PowerPoint and like get nitty-gritty there to feel in control of it. [P15]

I can take bull by the horns and go right 'now what?' You know, and if I've got, if I want to achieve something in my life and 'now what?' [P15]

[...] that's for sure [laugh] that you, that you're tense, that you're, uhm... kind... not confused, but, you know, wondering what to do next [...] [P16]

[...] but then, I've given myself a talking to, because I've tried to think of ways that I can encourage a response... as, through what I'm saying to them, messages that I'm leaving, emails that I'm writing, that kind of thing. [P16]

I, well, I've also been in touch with other businesses to prepare them to see, and, and I've been thinking about which ones, the next ones to move on [...] I've also established the fact that from

a, from a robustness and, and, uhm, PhD being OK, I can move the same pilot study into a different area [...] [P16]

I made sure that I was in touch with the right people who knew what I was going to be doing, and... when I, uhm, so I told the company that was going to receive the funds when they were gonna get it. I made sure that the people who were sending the funds were repeated three times the account that it was going to, to make sure it was all gonna happen. [P16]

Yeah, and, and I'm out and about , and I'm trying, I'm trying to lengthen the day to resolve what it is that is, it's causing me stress. [P16]

Uhm, so I ended up staying in the office till eight o'clock last night because I was stressed about the fact that I hadn't done the thing I was meant to do. And then I, yeah, I tried to do some of it, so, yeah, that was difficult. [P17]

Well, I just, I suppose I did in a way because I stayed in the office for two more hours, uhm, and so I tried to alleviate the stress by, uhm, trying to kind of get another bit of work done. [...] I had actually made some progress on the thing I was meant to be doing. [P17]

Yes. Yes, exactly, I was trying to solve the problem. I had done the work by doing some extra hours, basically. Uhm, so it did, and it did, it did help, yeah, it made me more able to relax. [P17]

Yeah, I think some people do, uhm... well, yeah, I mean, we talk about, uhm, fight or flight, don't we? So I think there's two ways that you can deal with it. You can try and deal with it head on, and just carrying on doing what you're doing, and try and wait for the feeling of stress to pass. Uhm... or, so, for example, you know, yesterday when I stayed up in the office two more hours, uhm, and that was me trying to face up to the stressful situation and trying to clear some of this workload. [...] Uhm, yeah, so it's... you can either kind, uhm, sort of face up to it, or walk away from it. And I'm sure that neither of those is better or worse, uhm... [P17]

Uhm... yeah, sometimes I do. Uhm, but sometimes I want to kind of just get on with the thing, or deal with the situation [...]. Uhm, so... if I'm in the middle of, uhm, kind of, I don't know, if I'm in the middle of doing some stressful task at work, and my partner sends me a message, it says 'do I chat', or 'hope everything is OK', or whatever, I will often just ignore it until I feel I've got to a point where I no longer feel stressed about the thing [P17]

Uhm... something I like to do, uhm, work-wise is to write a to-do list, uhm, and then tick things off the list, uhm, as I go through the day, so even if I don't manage to achieve everything on the list, at least I know I have done things and I haven't just not done anything. [P17]

Uhm, and I stand by that, it's like I work from home a few days a week, uhm... that can be stressful, but also that can be nice because I don't get people pester me all the time. [P18]

[...] but also they're good at managing because they know when to dedicate, focus time to work, and do the focused job, they know when to have the family time [...] [P18]

Uhm, so I think it's a whole double-edged shard how, I suppose, individuals manage things and shut off. [P18]

Yes, I'll stand firm, I won't just agree to what she said because I'm panicking and that's easy way out. I'll constructively argue, I'll go with an argument. [P18]

There's nothing more rewarding, I've, that's, that's another thing that I used to sort of motivate me now. It's incredibly fine, incredibly rewarding when I can switch off and focus on a task and do it. [...] I did two of those – great, bang! It's made me feel satisfied. [...] I find when you, you just switch, you know for yourself, you switch off, you focus on something – bang! you do that task in an hour [P18]

I wouldn't be able to think about much else, they would be going round and round in my head, and you'd be just trying to sort it, sort it out [...] [P19]

And then when you finally have to deal with it, you think, you're just in the state of slight panic, and then, then you either you manage it, or, you know, or you don't [laugh]. Not the best way to deal with things, really. [P19]

But normally, as I walk I would sort things out in my head, trying to get my head round something, and then usually within an hour or so, I'd be in a better state as a rule. [P19]

If I had to do a presentation in an, in an hour, you said I've got to go next door, and present on something, uhm, I would pace in and out this room thinking of what to say. [P19]

But, you know, it'd best to deal with it straightaway. [P19]

Uhm, and you, just inside you're thinking, trying to figure out how to, how to fix something. [P20]

It's not, when you're in the middle of that and you just trying, you fight with it and you're trying to keep things going [...] [P21]

Sometimes, yeah, sometimes you just don't notice, you're just too busy firefighting, trying to fix everything, and kind of... yeah, because also I'm a software engineer, so I'm a problem-solver by nature, and it's very, very easy to get sucked into trying to solve the problems [...] Yeah, you just keep, keep trying to solve it. [P21]

[...] and I get, that comes through a nice assertive, nice loud 'excuse me', I can get my way out, a clearer path. If I'm, kind of a learned monitoring things then I know better ways out. [P21]

So the only way to get rid of it is to conquer, or to solve an issue, or to deal with it. [P22]

[...] uhm, so we went out leaflet dropping, so I got an, an extra job, and [son] and I went leaflet dropping every day after school and work, so I kind of feel like there's always a way to solve it. Uhm, it's just finding it. [P22]

Because you always feel like you should be working in your home [...] yeah, I used to have that problem. Again, not anymore [laugh]. I took the things that cause me stress out [laugh]. I got rid of them. [P23]

I tried to fix everything when I worked to the rental company but it didn't work. [P23]

I don't, well, I know for myself that you can, you can either change what's, change what's causing stress, or you can find the way to fix the thing, you know, you can just, you can care less [laugh]. You can care less, or you can fix it [laugh] [P23]

[...] but at the same time, sometimes I feel like my subconscious is working because I sometimes get [snapping fingers] 'oh, this would work for that' and then sometimes I end up fixing two things at once. [P23]

Because I, because my brain tries to think about too many things at once if I'm actively trying to solve the thing that's stressing me, whereas if I move to something that I know I can fix, I know that I automatically still be thinking a bit about it. And when I start solving that problem, or when I come back to it, I've already got one success [laugh]. [P23]

So, I can, alright, I know I can do things, and there's one less thing I've got to focus on as well, so I can then have more of my attention on that, but hopefully I'd also been sort of passively think about the problem that... [P23]

I would say 'we need to go out. Now!' So I literally walked out of the front door and stood there waiting for her to do that, so trying to be extremely clear to her, uhm, what was expected from her, I suppose. [P24]

But I just feel, uhm... I have to... I, I'm quite vocal, so I, you know, if someone's like doing something and something, then I have to tell them. [P25]

Yeah. I'm generally not, I'm not that spontaneous as a person, I do consider myself to be a bit of a planner, because I think if plan things properly, you're not gonna have any mishaps and then won't have any stresses or worries [...] [P1]

I think, yes, I mean, I said about planning, and trying to make sure that you do something properly. If you gonna drive somewhere that you haven't driven before you make sure you know how you gonna go... If you are going on holiday and you fly from an airport you make sure you get there in plenty of time to be able to check in and that you're not creating stress. [P1]

I do try to stay organised because I think that helps with trying to mitigate some stress. [P1]

And we should probably back to what I was saying about being prepared, and me going on holidays is almost like a little project, you just need to make sure you're organised, and, and, you know, nothing wrong should happen then if you're organised. [P1]

I've told myself when I got these round of assignments, I'd start them early, so I wouldn't leave them to the last minute, because that's stressing, and for some of them I have done that, and it has helped. [P2]

I think about plans, planned everything out, my responsibilities, it'll probably help. [P2]

Uhm, if I'm well rested then generally I can shrug things off quite easily but really it is how I manage my time at work. [P2]

Uhm, being organised will certainly help. I'm not a much-organised person, in general. But if I was... I have to make conscious effort to be more organised, they would help me in the long, uhm, to lower my stress level. [P2]

Like it's me the happiest, pleasure, I think, being able to have this timescale at the back of my mind of things that I worry about, and having a plan, a strategy for now, or the next month. [P3]

I think just having a routine. Having a routine would be really nice. I haven't had a routine in years. [...] So, having time in the morning while I do something. So wake up at this time, be at, at my desk or whatever at 8 o'clock, and the from 8 till 10 I'll focus on my e-mails, replying to my e-mails, don't get stressed about the e-mails because you do it every day till 10, it's fine, I put my time. You know, then half ten, ten to half ten – break, and that's fine, don't, don't, don't keep looking at the time, I'm gonna have break because you have it at that time, you know, and then it's like do task one, task one is always at 12 o'clock. Every day. And that's great because I do not have to now worry about 'when I gonna have time for task one?' because it's gonna be at 12. Forget it. You know? [P3]

It wouldn't be, it would be the same routine, but it wouldn't be the same content. So I could have like... I do uni work 10 to 11, so like having desk time if you like 10 to 11. So like uni work one day, then maybe like sitting on Facebook another day, and like, there will be a routine, it'll be something that I can rely on. To know where I'm up. [P3]

I mean, if, I mean, realistically I could, I could tell myself, because I only have one, I'd, I'd, it's so super that I have one thing to do right now, just have my dissertation to do, and that's it. [P3]

Yeah, uhm... apart from anticipating it, apart from knowing that the stress is going to get on the corner step. [...] Anticipating the stress, being ready to hit the ground running, being ready, so... not leaving stuff to the last minute, so like making sure your bag is packed, making sure, you know, the, your list is written for what to do that day. [P3]

But then, with events and things you have a, a Gantt chart, you, you know, OK this week what you must, this is what you need [...] and I always allow too much time just so the, there's contingency in case something goes wrong [...] [P8]

It's a lot of time organisation, it's make sure that I don't double [inaudible 03:37] while I'm doing stuff, so that if something else comes up I can check if I'm free [...] [P9]

[...] I don't even really get stressed over deadlines because I normally can like pace myself in the way I do the assignment, and I do them in advance [...] [P10]

[...] I'm very, like, routined, and like, I think, I've really started it as soon as I started college and I just kind of routined myself, uhm, to do this, uhm, and then, as from there, like, it's kind of ingrained in my mind to always be kind of like routine, and be productive. [P10]

And on the other days, when I don't like, I guess, don't have work, then I would schedule in either working that morning, going to the gym, like going to town, doing like food shopping, preparing

food for the next day, preparing, like, anything kind of I need to do in advance, just so I'm prepared. [P10]

[...] and then I'll be on to the next thing which will be maybe a career, maybe a B Master's. But I would, like, transition into that, and I will build a new routine, and things, and so on. [P10]

Yeah, I guess it's like, it gets back to the point of, like, being prepared [...] [P10]

Uhm... I think most people keep an eye out, you know, you've got to wear your bag in a certain way across your body [...] [P12]

Actually if I could learn how to cook, I'd be reduce my stress levels quite significantly. But that's my excuse, I don't wanna learn it at all. [P12]

I think, I think it can, it can get to that stage [being unpleasant], uhm, if you don't deal with the causes of it, I think. [P13]

Uhm, no I don't think, I think it still can be. But you can, you can mitigate it, so you can prepare yourself, so it is not a surprise. [P13]

It's alright. I just think I deal with the, I deal with the causes, what the, the potential causes before I do get stressed. [P13]

I've set, I've set myself little deadlines. So by this day you need to do this, yeah. [P13]

Again, this is me about having the plan kind of thing, yeah. [P16]

[...] and therefore it's better if we try and build up that level of resilience that means that we can cope with the stress and that we can kind of remain in that situation, and learn to deal with it rather than think about we have to just get away somehow. [P17]

And then that's where the responsibility kicks in because you think 'I'm responsible for certain things, if I don't prioritize them, and I don't, sometimes do the work I don't want to do then that's not good enough. [P18]

So unless I'm, I put time in my diary every week, why, if not every day, to plan, and I've got my Outlook diary on-line, and I block out chunks [...] the... time and personal management, it's all to do with scheduling. If you cannot schedule and you cannot dedicate time to tasks you cannot do them properly. [P18]

So it's a try to make it sequential, and intelligent, so you're not duplicating work, everything fits seamless [...]. So that's been good, because I set my focus, but, uhm, that's it really, yeah. [P18]

Uhm... it's... for me controlling is that, always coming back to the planning, and I'll do it today again after the meeting we have. Big whiteboard in my office, I write down my priorities, uhm, and in a moment I'll be mapping out [...] Uhm, and if I look at those, I think, right, they are the things, if I can attach strings to them, or off them, I don't wanna be doing anything else. [P18]

Uhm, and again it's probably because I've got the, I'd have the training. And I'm not saying I can manage myself. Another element of training, I'm talking about it now as if I've mastered the situations that I'm likely to approach. [P18]

Great, another job done. So... finished off my dissertation, I've got ages to do that but I just want it done early. [P18]

[...] there's always something that needs doing, and you realise that's another good way of coping with stress, that... try to see that a quadrant, you've got priorities, you've got the things that need addressing now, you've got the things that need addressing next, tomorrow, next week, next year. [P18]

Well, I'm thinking, right, it's prioritising, and, uhm, that's a big element of it, again successful people can prioritise. Uhm, and that's something I really value and I'm learning myself. I do on my other, my whiteboard in my office, to-do for a week, one, two, three, uhm... complete the first draft of Liverpool paper, where I was before, make sure the dissertation marking is done, uhm, make sure you meet to do research testing – bang, done. [P18]

Because for me there's a process, I think, the process is there in place for a reason, uhm, to stop mistakes happening, uh... And I will think, I will think you need to cover yourself to make sure nothing can come back and say we don't do this properly, don't do this properly. Do it right in the first place. [P20]

But I did, before I, I suspended it [PhD] again, I sat down and wrote a list of, in that case it was, you know, of all things I needed to get done, and when they needed to get done by [...] So they, they weren't stresses, but it gave me a picture of the scenario I was in, and, yeah, well, they kind of were stresses because they all kind of needed to be done, you notice [laugh]. [P21]

I... because I like to prioritise things as they come up. [P23]

Uhm, perhaps, at times, you've got to try alleviate that situation, that stressful situation, or try to say to yourself 'is this really a stressful situation?' Or have you made it into a stressful situation? And is there a way of not making it so, or coping with it, rather than getting, you know, so worked up about it all [P5]

I think you've really got to try and look after yourself more, then try to get into that situation, and try to think is this really a stressful situation. [P5]

And also I think, I remind myself a lot, OK, there's only three weeks left of this, so just keep going... Uhm, and then... in the end you can have a holiday. [P8]

Uhm, I think it's just the mentality thing, just like, I kind of like say to myself 'is it really that big of a deal?' [P10]

Uhm... I guess it's like back to the point, I'm just saying to myself, like, is it that big of a deal? Like, is there any easy solution? If like, if does it actually, like, is it going to affect my life? If like 'no', then why am I, why I am worried about it, why am I getting stressed about it? [P10]

Well, what I've done about stress... You have to talk yourself out of it either by doing, get, overcoming the actual physical whatever has caused you the stress, or talk yourself out of it. [...] You have to talk yourself out of it. [...] You just don't do that, you just don't, I just don't, personally, I just try to talk myself out it now. [P11]

Not until, but I guess so, yeah, not until I'd done that. I said it's OK, everything's gonna, not, not be perfect, but it's gonna be alright. You're gonna get there a little bit late, then after work you're gonna have to deal with this car situation, but it's not the end of the world. Worst things happen all the time. [P13]

I think I'm quite good at going, and putting things in perspective, does it matter? if the world gonna end? You know, it's that kind of positive self-talk. [P15]

I think it's like an inward conversation with myself about, uhm, can't just really, you know, it's all like, so maybe I'll have a voice in my head like that, of very irritable me, uhm then, so I'll have, I can have a conversation with myself in my head, you know, but then sort of, yeah, sort of rationalising the thing in my head, so I, is it, is it worth being stressed over [...] [P15]

Uhm... I wouldn't, uh, I tried, I had these conversations with myself where I say I'm not going to, I can't, I can't, I can't stress myself out about that, I can't worry about that because I can't do anything about it, you know... It is, it is what it is kind of thing. [P16]

And things like that... that's, that can be really quite, uhm, nerve-racking, really. But I still, I think to myself 'well, at least I'm here, and I'm umpiring their game' because if I wasn't, and they couldn't get an umpire, they couldn't have a game. [P16]

[...] so I was talking to myself through the game, sort of saying, you giving myself those helpful hints, and thinking... I often do that, I often say 'right, OK, forget about that, move on, move on, make sure you can, make sure you do the right decision next time'. [...] So... I would talk to myself, my little inner voice [...] [P16]

Yeah, put it that. Probably talking to myself, I really do. Not really out loud but inside my head. [P16]

Yeah, and then you... that's what, that's what I meant about this talking to yourself, because you think to yourself actually 'really? is this really this bad?' you know, because 'really?', you could just really walk away and stop it [...] [P16]

It frustrates me for these reasons but I know that it wasn't necessarily on purpose' because I had time to think about it by that time. [P23]

I mean, you know, like for me... now, I wouldn't say no, I would, I would still have to kind of, uh... give myself a lot of kind of pep talk, I suppose [P26]

[...] the public tours when I had to really kind of like, right, you know, come on, you can do this, let's just move on from what was bringing you down before, or stopping you from doing this kind of thing before [...] [P26]

[...] you know losing a job could've been a terrible event, but I've tried to be positive about it. [P1]

I think it's... the bad stress, I think, you have to look at it as good stress. You have to turn it on its head. [P7]

Yeah, I think beyond... turning negative stress into positive, which you can do [...] [P7]

I've got to nip it in the bud, analyse it, turn it on its head, and turn it into positive, I've always been like that. [P7]

So you've got to think positively, so turn it round, oh, when I get there I'm gonna enjoy that beach, I'm gonna get the tan, and so on. [P12]

Like, and you should be doing, trying, trying to be positive. [P13]

[...] so that it hasn't, you know, you don't dwell on the negatives from a stress, you learn from it. [P15]

[...] maybe there's, uhm, trying to focus on the positives. [P16]

I can't cycle [...] and I'm kind of enjoying it because it's giving me more time on a, on a train to think, and read the paper, and disengaged in another way where before I would have been cycling forever to then get a train [P18]

[...] I suppose I sort of turned it into an adrenaline, or something, but it meant that, you know, I was quite good at the tours in the end [...] and I was able to sort of turn it into positive in the long run. [...] you, you know, you can kind of trick your mind into thinking 'right, well, you know, you're stressful when you walk down the street, and go like to get a can of milk, I mean, yes this is a stressful scenario but just push all your energies into doing something positive out of it, you know. [P26]

So I had no real stressful situations because when I had to do sport which is something that I enjoy and something I get a lot, I was generally very good at it, and I never had any, any 'oh, no! I'm not as good as this person'. Because I, I just picked what I was good at and just did it [...] [P9]

Depends on whether you want to do what, go, or be, whatever the reason why the crowds are... uh... so you can choose not to do it or you can think 'well, I want to', say it's a pop concert or something, you know. Do I want to see the pop group, or whatever the person more than I dislike crowds? You just have to weigh up the situation each time, I think. [P11]

[...] just the sort of the time demands, I, I did review that several times, and go, you know, can I actually do this? And the, like, yeah, it's not going to be for that long, and we make a difference when we're there [...] [P21]

[...] and yeah, some, yeah, sometimes can't let these things go, sometimes, you know, you have to pick your battles a bit, and I've learned, yeah, learning which ones are worth going for, it's, uh, it's a bit less stressful if you can, if you choose them there. [P21]

I get, yeah, I've got, I've got better about that like I'm more inclined to pick my battles, more inclined to say 'no' to things, or just ignore stuff, and, and risk getting told off, you know, and less, less of a good girl than I was. [P21]

[...] but I think I'm more selective and less... yeah, sort of become more, more inclined to [inaudible 58:53] rather than get really wound up. [P21]

Uhm, I suspended it [PhD] last semester because it just wasn't gonna happen but I was supposed to start it again in January [...] And then [I] realised there was stuff that's coming in and the amount of stuff I need just do, project students starting, all sort of other stuff. It just wasn't gonna happen. [P21]

[...] you have to try and get out of that vicious circle of worrying about it, you have to accept the fact that it's happened, and you have to try to move on. [P5]

But it was difficult to actually step back, and actually think 'alright, I'll, I'll have to just wait for him now'. [P5]

Uhm... Well, I, I play goal, so I know that most of the time in the game I'm not gonna be there, and when I do need to be there I can do my best [...] [P9]

[...] but if, if I can't do it then I can't do it. Like then, there, there're limits and... I won't get stressed out over it, I mean I might get a bit annoyed, but I, I wouldn't get stressed, I wouldn't let it kind of keep bothering me. I'd just be 'alright, that's happened' – where to go from there? [P9]

Uh... if I can't tackle the problem straightaway I, I just get on with life. I, I don't let it bog me down, I just kind of keep going with it. [P9]

Or I can just literally take it on the chin and say it doesn't matter, it's happened, now it's in the past. [P10]

If there's no something you can do about it, it's just as it is, why get stressed about it? Because there's nothing you can do. [P10]

It's like, if there's, if there's something I can do about it, or is there something I can't? Like either way, it's just like, like either I'm not going to be able to do anything and I can just like – it's done, I can rub it off. [P10]

It's, I guess, it frustrates me a little bit, but then I realise, like, within myself, like there's nothing I can do about it, so why am I like having these thoughts [...] [P10]

So still I'm trying to justify every day is a new day, so we're just trying to go with the flow [...] [P11]

She, no, she is back, and what she does, how she does it, how she takes over the whole house, I've just got to let it go. [...] And it's just got to be right, and I've just got to let it go. It's fine. Yes, dear. Whatever. And just concentrate on the happy times, and the nice times [sighs exaggeratedly]. [P11]

Because I say it's a new day for all of us. We've never been on this day before. You know, they've never been that bit older, or they, we've never been that... so it is a new day for everybody. [...] it's a new day, gone with it. [P11]

She's been house-sitting, so she hasn't been around for a long time, she's just come back home, and I've just got to calm down, go with the flow, and let it just happen. [P11]

[not being stressed] Well, it's being OK with the world, and if you're OK with the world, do my bits, be happy, really. [P11]

[...] if you can't see way forward, a solution to something, you have to accept it, or else it's gonna be stressful for you for the rest of the time. [P12]

Because a lot of the time, well, sometimes situations might not have like a solution, it might just be that, that is what's happening, you just have to deal with it. [P13]

So like a flat tyre, I've got flat tyre. Great. Not great but it's still there. [P13]

But the thing is, it's, I don't compare myself to other people, I just think it, this is my PhD, so if it doesn't work out the way I thought it would, that's just the way it is. [P16]

Just to some extent, and then think to myself 'well, I cannot make them do what I want them to do' [P16]

It was really, it was really upsetting to have to go OK, I'm not gonna finish it, I'm not gonna finish it in time to graduate this year. That was a thing to accept. [P21]

And some stuff I can go 'yeah, OK, yeah, that's not ideal, but it doesn't really matter'. [...] you know, so you can't fix everything, but there are some things that are either you can't fix and you have to buckle on, buckle down and stick with them doing, or some things that do look fixable but it's going to be a real fight, you have to, you have to have that battle, so there, they're stressful, [P21]

Yeah, it's kind of, I kind of learned a bit of 'nah' [laugh], you know, it is what it is, you know [laugh] [P21]

So therefore the only thing to do was to go 'Sorry, I'm not fit for this, and I have to go". So I did. But it took me a long time to realise that [laugh]. [P23]

I know that there's only so much that I can do in life, so... I can't do everything [laugh] [P23]

I do have chances to switch off, maybe have a nice holiday or have some quality family time, so... [my life is not stressful] [P1]

[...] you should be able to have coping mechanisms and things that you can do to take you away from, you know, more stressful places. [P1]

I went down to Starbucks and get myself coffee, just get myself away from that particular environment for 10 minutes, or maybe go for a little walk, or maybe going out for a drive, go to a shop in a lunch hour or, you know, just trying to take yourself away from an environment. [P1]

Uhm, sometimes I just lie on my bed, look at the ceiling, play music, just listen to that trying not to think about the stressful activity, and uhm... but there's no... I think that's it really, there's no major other thing that I'll do, uhm, to cope with stress. [...] It, it takes my mind off, once, uhm, I've got music right there, in my ears, I'm listening to it, uhm, I listen to that, and I don't think about, uh, other things. So it just takes my mind off it. That helps. [P2]

Uhm, generally, I see on the social media a lot of people will, they have a lot to do, so to set their mind off it, I've noticed they turn to food, just to eat, uhm... I suppose, I'd say people would like eating, give release to dopamine in their brain, and it takes their mind off the stressor, yes. [P2]

Uh... it depends, sometimes calm music would be nice, and sometimes, uh, quite heavy music would also be nice. I think anything that just distracts me would work. Depends on my mindset at that time. [...] Uhm... so if I've got a lot going on in terms of stress, and I have to cope with it, having the heavy music which has a lot of elements to it, to distract me would be better. Uhm, whereas if I'm just moderately stressed, a bit calm music, there's not as much, uhm... almost stress to get rid of. Yeah, it's a tricky one [P2]

If I'm, if I've got a lot of thoughts in my head, and stressed out them, have a music on that's also got a lot going on, uhm, I kind of attune to it, uhm, I kind of get there almost, uhm... yeah, like I said, it just distracts me from work that's going on. [P2]

Uhm, whereas if I wanted to de-stress as such I could actually focus on what was on TV, just to distract me a bit. Just having something on. [P2]

I'd probably do something completely mindless, something stupid, uhm, like, I don't know, doodle, or maybe... I'll, I do a lot of snacking, I don't really eat meals because I find cooking and eating a meal take so much of my time [laugh], uhm, so I do a lot of snacking, so like if I take a break I'll go to the cupboard and I'll have a snack [P3]

Kind of... uhm, I let myself have time to go to the gym, uhm, which is obviously time-out what I do. [P3]

It only helps because it almost like creating a distraction. So I have to, I can't be thinking of these other things if I'm doing yoga, because I have to concentrate on my breathing, on the next position, on what needs to be done. But it doesn't really help me because as soon as that stops I can then go back to those thoughts. So it's just a distraction. [P4]

Uhm... that also could act also as a distraction. [P4]

So if feel like I've got all these problems, and I'm extremely stressed, instead of sitting down and thinking 'OK, let me think about how I can get through this', I kind of just, it's almost like I just put it in the cupboard, shut the door, and [inaudible 53:40] I'll deal with that later. [P4]

[...] [relaxed people] perhaps can sit in a, don't take any notice of what else is going on. In... they are taking notice, but in a calm way, not getting involved, perhaps, in the situation. Sometimes if you're out, sometimes if you're at home, and the things going on in, like, you, you get involved,

where they, perhaps, wouldn't, they would just sit quietly, and then perhaps get involved in the end, but they wouldn't, it wouldn't bother them so much. [P5]

Made a cup of tea, uhm, and just tried to do things at home, you know, just in the house. Tidy up, get, start getting ready, and just trying to keep myself busy, I think. That was, that was just trying, almost to try and get it, get it out of my head that he wasn't about, really. [P5]

It's mass-produced pop that has no benefit to anybody, unless I want to escape from something. [P6]

[...] anything that will take them away from that stressful situation, uhm, so they don't have to consider it. [P6]

Well, put, they put distraction theory in their way, really, and try and find ways of relaxing. [P6]

And probably go down with the distraction theory. Uhm, I'm going sit in the sun, and uhm, I don't know, fall asleep for ten minutes? You might even come, in the subconscious you may invite the solution to the problem anyway, while you're asleep. [P6]

Uhm... but yeah, I think, people just step out aside a little bit [...] [P8]

Uhm, because they relieve the pressure a bit, they allow you to give your brain a break from thinking about all of the things too much, uhm, and I think, you know, if you take a break and then come back, you can concentrate better, uhm... [P8]

And, uh, it's like just a step back, calm, and look what's happening, assess the situation, then deal with it [...] [P9]

They try almost, uh, procrastinate doing it, because they don't have the stress of it. [P9]

I think different people have different coping mechanisms like some people smoke, some people, uh, go and get drunk, uh, trying to forget about all stress which they have, uhm... [P9]

Uh... people can also go and do different activities. So they can go play sport if they are stressed, and, you know, it just get them away from it, or they can go for a walk, or listen to music. [P9]

So I can only be potentially, you know, a distraction from, if they have some stresses, there, they're there, and be... if they have fun they don't think about their stresses, so... [P9]

I wouldn't... I'd, on the point, just like, I guess, I'm like, I'm quite relaxed in fact that I won't let things bother me [...] [P10]

Like I was just so wrapped around it, like, I just didn't know what to do, and I just like put it off, like, I didn't try to tackle it. [P10]

[...] and I just kind of put it off [...] it all kind of went wrong, and that was too much, like, going wrong with it, and I just kind of put it off, and like put it aside, and it's like 'no'. [P10]

Then it just like, I guess, manifest in, to you, either like just doing nothing, basically. And just like putting it to the side, just... [P10]

Uhm... and if they wanna play their little games, let them play their little games, but don't let it get to me. Well, I try not, of course yes, I do. I might meditate a bit if I can't get to sleep but at the end of the day it's their problem, not mine. [P11]

But if it helps it doesn't matter what you do, uhm... how you get out of something stressful rather than throwing a brick at brick wall or throwing a punch or having a very bad temper I've always had. You know, so you try to find other things that don't cost money, hurt anybody, hurt yourself, or has long-term consequences, really, I suppose. [P11]

So now, I wasn't losing any, I tried not to lose any sleep over it. I wasn't gonna take anything to go to sleep, I just think of the night thoughts. [P11]

[...] or you can just think, ha, some days are, ha, it'd be, as long as they're in front of me and not behind me, don't care. Whether I'm there late five minutes or ten minutes, don't care. [P11]

So now, I'm letting it no bother me. Let's someone else be bothered. And if it does bother me, make sure it doesn't bother me. If you can't beat them, join them – sorted [laugh]. Yeah. You're not gonna die because that washing up is left till the morning. [...] So now I'm trying to do it, leave it. [P11]

Uhm... it's not that I, I'm not principled, I haven't got my own points of view but they're my points of view. [...] if it's just a verbal political, religious event, just different way of making a card, you know, kind of piece of cardboard – you do any which way you want [laugh], I've, I've offered you my opinion, my expertise, my whatever. You don't wanna it? It's not gonna bother me. [P11] acceptance/ stress means caring

Or do get, do something else, forget about it. These days it's much easier because I just forget about it [laugh]. I will, I will definitely forget it by time I've got round that roundabout [laugh]. [P11]

Yeah. I just had work, you fool, now I've got work, and I do other things, and changing, you know, I'm doing this today, that's a difference for me, that's, that's got me out of the house [laugh]. You know, now, tomorrow I'm going to, uhm... [...] [P12]

So... I just left it there and I went... always a cup of tea with me, had me cup of tea, and then I went back, and I thought well, what I do, I'll empty some of the box, put half the box up there, and then I'll put the things in the box, and then put the lid on. [P12]

But then I'm not, yet, but I want to be sociable to get myself out of it. [P13]

So, that's not... I just if, if something bothers me, if, perhaps if it's a work thing I leave it there when I close the door when I'm on my way out. And I don't think about it at night [...] I can't deal with it while I'm at home if it's an actual work thing [P13]

Uhm... just take, take a, if it's something at work, perhaps, I just go out, get out of the office, it's in' it's in there, so get out of the office, get away from [...] [P13]

If it's something that you can't solve then like I'd, I'd either like just go home watch mindless rubbish TV just to forget about it or do something sociable. [...] It's just, it's, it distracts you. It gets you to stop thinking about it. [P13]

So my coping mechanism for that is to avoid thinking about it [laugh]. And it works [laugh]. For the time being. [P13]

I think being, like, with your friends helps, being around that helps especially if it's like a fun environment, if you're laughing, because it makes you feel better, distracts you from thinking about it. But also, like, makes you, it does distract you, but also it makes you think, oh, it's OK. Everything is alright. [P13]

I said, let's just get on, go to football, and then... she plays, plays football here, it's just started last week, and she was fine. [P14]

Emily always likes, I'm, you know, I'm [inaudible 46:03] she always eats cake or goes for a cup of tea. Or she started a battleships group. She plays battleships a lot. [P14]

Uhm, when I look at the time when I was probably at my most stressed however, I made the biggest step professionally, because for me there was a real need to be able to almost put my homelife in a box. I'd thrown myself into career, so that I could get to work and push on, and actually almost had a completely different identity [...] [P15]

But I do things to make sure I am distracted from things that may be stressing me out. So... things like regular sport, and, and things like that. [P16]

Uhm, get distracted, uhm, make sure I'm distracted by something else, if I'm, if I haven't got a solution to the stress. Yeah, whatever is that's stressing me out. Well, things like take myself away from the situation that's providing me with stress by doing something completely different which would be, which is why I do netball. [P16]

So that's what I do, I'd specifically do different things. Because it gives me break from thinking about whatever it is. It... so I can't think about it because I'm thinking about something different, focusing on something different, and... [P16]

Like some people may get, take themselves away, and go for a walk. Take themselves away from their desks and things. [P16]

[...] uhm, then just sort of being out, kind of lie on the sofa and watch tv and not really think about anything, and just switch off, is very important to, uhm, kind of being able to relax, and not feel stressed. [P17]

[...] I tried to alleviate the stress by, uhm, trying to kind of get another bit of work done. Uhm, and that did help in a way because when I did get home it made more able to relax and switch off. [P17]

Uhm... and took me away from the desk environment which is where the stress was. So that's one thing about where... I am in the office; the kitchen is kind of a little walk down the corridor.

Uhm, so you kind of walk down the corridor, and then you walk back and just doing that in some situations is kind of, uhm, helps you switch off just for a couple of minutes. [P17]

I put my pyjama on. I find that, I find the actual active, uhm, getting out of work clothes and putting pyjama on quite relaxing [laugh] [P17]

Uhm, and, uhm, and then I talked about walking down the corridor to make a cup of tea, so actually just, uhm, kind of doing something that's away from the, the stressful thing. But then you are, it's, it's just a temporary break rather than walk away from it completely. [P17]

[...] [in the evenings] normally we'd just sort of watch TV, or if it's something needs doing in the house, you do something in the house, [...] so it's just having those rules where these things aren't creeping in all the time. [P18]

Uhm... but like one minute it's the obesity epidemic, next minute it's plastic in the seas, next minute it's Donald Trump, and it's just pervasive, and we really do, and I've got, I'm analytical and I know how to sort of bring the shutters down and just watch and read things that make me escape [...] [P18]

But sometimes I think, well, actually one way I can help myself personally is... literally getting out of the room and just having a moment. [P18]

But, uhm... it's that huge thing of thinking... go outside and have a walk around, and it clears [head]... [P18]

And you speak to experienced academics, and it's like 'whoa, I wouldn't touch a laptop after 7 o'clock at night'. And I've had some... I say experienced, experienced in successful, because once I see good professors, good readers, and academics... have rules. [P18] avoidance

[Drinking] Because that's a good way of, uhm, that's a good, quick way of creating the sort of sense of relax there and taking away some stress. [P19]

[...] what I needed doing was, uhm, procrastinating for a few days, and when I finally did it, I actually did it quite well [...] [P19]

My usual way of dealing with stress is pretend something's not happening in your life. [P19]

[...] but, you know, probably, I feel like I can't deal with this yet, I want to leave it, and it will be different when I look at it again in a day or two, but it never is, it's exactly the same. [P19]

Although, on the other hand, some people then go out, I used to run when I was young. I used to, uhm, I used to run when I was stressed, so that used to be very helpful, because you sort of pounded the thing away. [P20]

Uhm, but it's just about, and I've sort of learned over the years to, to step back and not get emotionally involved [...] [P20]

Uhm... for me... it takes quite a lot for me to get stressed, I can, I can take everything in my stride and take a step back [...] [P20]

I haven't always been like this but... probably since I have my daughter, and I'm working here and I try not to get emotionally involved because I think that's, that for me... brings, brings, brings others' stress for me. [P20]

[...] as much as you wanna go home, and think 'perhaps, I should go back and help, or do something'. That's not my role, and I've sort of learned over the years to just step back a little bit from that, I guess. [P20]

Well, we said, like we said that you know, reading, things like that that de-stresses people, going for a walk, it's just a personal . It's what, what makes you feel good, and, uhm, forget about your stress [...] [P20]

So it's just about being able to switch off, and, oh, again, not that I was stressed anyway, but that for me was... [P20]

Sometimes my initial step is just to sit in front of the telly and watch any rubbish that comes on. Yeah, sort of programmes that require no intellectual effort at all, but keep my mind sort of busy. You know, sort of distraction; requiring no mental effort but enough of a distraction to quiet the things down a bit. [P21]

So, yeah, sometimes it's quite static, sometimes is doing stuff, doing completely different stuff [...] now the hell, shifting priorities actually. Now it's sort of I'm not gonna do that, I'm gonna do this other thing. [P21]

Uhm... change of scenes can be nice as well actually. We did that last year, we'd just on, on Sundays when felt we could get up and go out, just be in places, go somewhere different. So, for several weeks we'd just get up and go out, go to have breakfast somewhere else, or, or go do something. Just so, so just change, sort of... all of it a distraction of some sort. Doing something different. [P21]

[...] there's a kind of no feeling, there's a certain numbness, [...] I was just, yeah, just kind of numb, [...] [P21]

[...] a lot of City workers that came into a bar [...] And they got absolutely shit-faced every day [...] Because it's, uhm, it's a way to detach themselves from normality, so you're moving yourself from the situation. [P22]

Uhm... socialising, yeah, hanging out with friends, just doing something different, just something to remove yourself from the day-to-day. [P22]

Uhm... I'd recommend that they, uhm, that they exercise and they got themselves out, and do this and different stuff. [P22]

Uh, the point where... if... the point where you decide 'I can't do this anymore', it's not working anymore, and you just decide to stop, you, you sort of shut down, I guess. I'd just go into this almost auto-pilot kind of mode where I would just... deal with things as they came but I would just try and get rid of them, and just... get rid of the problem. [...] But I would just try and get rid of the

problem by that point, you know, I'd just start shutting down. Mentally, not physically, but just mentally, just stop caring [P23]

People take walks, uhm, they tend, try to take them away from the problem which sometimes works. It's like what I do when I try, I just focus on something else, and in a sense I'm taking myself away from a problem, you know. [P23]

I don't, well, I know for myself that you can, you can either change what's, change what's causing stress, or you can find the way to fix the thing, you know, you can just, you can care less [laugh]. You can care less, or you can fix it [laugh] [P23]

I'm not like... I think sometimes if you sleep... I have to get, get myself away from the situation that's making me stressed. Uhm, or find the short term-term solution... to whatever it is making me stressed because otherwise I should be really, really ill. Or, you, you know, do something stupid, perhaps. So... like, you know, go out and have a few drinks. So, or, you, you know, go for a nice walk. [P25]

Uhm... well, reading is a great way to just get out of your own head, and absorb just sometimes a completely different culture, or, or different time, you know. Uhm, just to be swept away with either fiction, or whatever, whatever is your reading, with just some kind of a story. Uhm... yeah, I mean reading is a really great way to... does, it does something that films don't do, really, which is... just a kind of take you into a mindset that's totally different, you know. [P26]

As much as you can be, and maybe you don't put yourself in certain positions, you might choose certain place to go on holiday, uhm, you know, maybe people wouldn't go to Tunisia, or, or Turkey for example, because of things that happened in those countries. [P1]

I mean, I've never liked to go to London with my old job and would avoid going to London if I could do a conference call on a telepresence or a video link. I would trying do it that way rather than go up to London for the day. [P1]

I might no longer want to deal with the thing that's causing me the stress. Then I might want to push it to one side, instead of actually dealing with it, uhm, yeah. [P4]

Uhm, I think... not doing stuff which, yeah, made it a stressful situation [...] [P9]

Uhm, whilst other people would be like, oh I got to avoid it, it's a stressful situation. [P9]

So if they stop and think, if you just rephrase that sentence, statement, question, whatever, it can alleviate a lot. [...] take a leave, that is not worth the hustle. [P11]

And that's something I try and do but then I don't get in a flaming row anymore, it's not worth that hustle. Unless I want to, and I don't want to very often. [P11]

Uh... I think so, because, either you don't put yourself in a stressful position so you have to think about what you're gonna do. [P11]

Something making me less stressed... well, it goes back to you can, possibly not going to that situation but then you don't know if you gonna going to this stressful situation. Uh... because you could say if you don't like crowds don't go somewhere that is crowded. [P11]

I didn't want to be the chair, or this way or that, or the other, that would have been a really stressful situation. So I didn't put myself into a stressful situation and I've convinced myself it's more interesting being background. [P11]

Because one, because of one bit of equipment, don't avoid that bit of equipment, avoid the whole thing. Because of that one bit of equipment. So I got, got avoidance strategies for stress. [P12]

But I think that's, uh, it's, it's in the nature of some people not to be able to handle stress, so they don't even get themselves involved in it, because they, they know that, you know. [P12]

Uhm, sort of saying that I'm not gonna check, uhm, e-mails at the weekends and things [...] [P15]

[...] so I think when I'm stressed about something I would probably try to remove other things that cause me stress, so in other words I wouldn't want to, I'd want to get to the university quite early, so the driving when there's lots of traffic couldn't add to my stress [...] [P16]

[...] whatever it is that's making you stressed you might want to try and avoid it, I guess. [P17]

[...] one thing that I'm aware of now that wasn't around perhaps 5-6 years ago – sheer amount of information. Every day I get, I purposefully have a blackberry because I don't want a phone with the Internet on. [P18]

We both... haven't go, well, we haven't got kids yet, uhm, it's something we would want, for us it's just [...] it's not like we have parents, grandmothers who can look after kids [...] at the moment I spend too much time, perhaps, my work-life balance is heavily in work. [P18]

[...] again when you don't have those family networks, you don't have those, for me it's not having those family networks to... to occupy you [P18]

[...] but it's the person, me saying yes, yes. [...] Uhm... being, in the past I've had extra teaching offered to me, or more recently now things like extra research, extra teaching, external marking... Yes, some of it I take but it has to fit what I'm doing at that time and my long-term goal. Because there's that huge danger and I'm seeing other people do it – say yes to these [inaudible 38:33] and these contracts [...] but what they do is make you work in the evenings and take up your weekends, and you're not your boss any more for that time being. [P18]

Uhm, any journal article asked me to do it, I just say I'm sorry I can't review it this time. I can do in January when I come back'. And suddenly you realise it's like I've got power as well. [P18]

[...] go, talk to your boss, or whatever, or let something drop, start saying no to things [...] [P21]

I think we would avoid doing thing that we know could cause stress, or have caused the stress in the past. So... uhm... you may, oh, my mum, for example, she was involved in a road accident, uhm, a few months ago. She then avoided going that route to work because she knew that stress lay down that way. So she was trying to mitigate that stress by going different way. [P23]

[...] I was living on a day-to-day basis on like treading eggshells because I didn't want to upset my partner [...] [P25]

[...] not standing up to people that are making me feel stressed. Until it gets to the point of my, I just... [P25]

[...] I'd much rather go for a late lunch, it's a little bit more quiet there downstairs, but, uh... I don't know if that's necessarily related to stress, I suppose it's more realising I just enjoy it more when it's, there's less people around. [P26]

And, uhm, yes, I think having not, having stopped working there from the personal perspective, it's something I've started to improve on, less stress and less anxiety, so, so... a good thing maybe not being there... [P1]

To make it better I'd like to have extended deadlines for stuff [laugh]. Maybe mentally telling myself to put my personal deadlines on pause, so for example like... if I have a goal at the gym that I want to reach, maybe putting them on pause, so that I don't have to be at the gym every week. So that it doesn't take my time. That can probably be something I can do. [P3]

Uhm, I've sometimes even felt like 'oh, I could just walk away with more of it', so, you know, you, sometimes you just feel like 'oh, this is, I can't do this anymore, I'm going throw it out'. [P5]

Not now, uhm... stress has been removed from me which is part of the decision I took to retire very early. [P6]

[...] uhm, the sort of fight or flight theory, about whether you fought long enough, but now it's time to go, or not pursue that thought process any further. [P6]

Uhm... you want to run away from your environment, I guess, it's one, so you can make up you're ill. You don't wanna go to work, because the stress is at the work rather than addressing it, you're running away from it. [P7]

[...] so I think I would, if I would let myself get into position where the stress would be too much for me to do any work then I would then have to not, definitely not do the job anymore [...] [P8]

Uhm, I think it's kind of, it's the fight or flight idea, you either kind of, you deal with the problem, or you just try and avoid it. [P9]

Whether like it or not [...] you can walk out, or leave [laugh]. [P11]

Because stress, you've got just, we've got to get through it. Or give up. Get out of the situation one way or another. [P11]

But if it helps it doesn't matter what you do, uhm... how you get out of something stressful rather than throwing a brick at brick wall, or throwing a punch or having a very bad temper I've always had. [P11]

And I thought the only way you can really get rid of stress is to change the environment. Because it don't change in an environment. So I, I said, OK, I'm gonna resign, I'm gonna look for another

job [...] The only way I now attend to this stress is change my environment, so I'm gonna move somewhere else. [...] If I can't handle stress, I move somewhere else. [P12]

Yeah, I do, it was stressful going there in the first place, but the one time when I couldn't do it, that was it. I'm not gonna do it. [...] I rise to the challenge, if it comes to the point where I can't do it, I won't do it [...] or it affects your life, uhm, in a way that's negative, and you don't do anymore. [P12]

And some people that are stressed out like get rid of everything but I, I don't do that, I kind of, uhm, I just... reach the point where that's it, that's the limit now. [P12]

And then I change my environment. [P12]

They either give up, and don't go there again, so they can't do it. Unless they think of a way around it like I just did with the box. I can't do it, but I can think of a way of doing it. [P12]

Well, I think it's natural thing to avoid it, or to move somewhere else away from it if you can't handle it, you know. Can't handle it – get out of it. [P12]

Well, actually, imagine it comes from your, uh, your strategies, you know, this is me now, the fight-or-flight mechanism, you're gonna run away, or you're gonna fight. You know, if you were an animal, you either gonna have a fight, or else you can run as fast as you can, can't you. And I'm probably the animal that changes their position rather than stands the ground and fight, do you know what I mean? [P12]

[...] not want to take up any more tasks, struggling to prioritise probably, it feels like a task, issue, things like that. [P13]

I would like to reduce my hours. Even to thirty hours a week, I think, it'd make a huge difference. I don't know how full-time has to be like thirty-seven hours or above. [P14]

I knew it was kind of beyond repair, and then it was a, how, how would you get out of this. You know, and I did kind of feel I was in a, in a really sad place. [P15]

Uhm... and I often used to sort of say, you know, you do have a choice with your job, you know, at the end of the day. I think if, if it's too stressful then, it's putting too, you're under too much pressure and you... [P16]

Yeah, and then you... that's what, that's what I meant about this talking to yourself, because you think to yourself actually 'really? is this really this bad?' you know, because 'really?', you could just really walk away and stop it [...] [P16]

Yeah, I think some people do, uhm... well, yeah, I mean, we talk about, uhm, fight or flight, don't we? So I think there's two ways that you can deal with it. [...] Uhm, alternatively, there's the flight option which is [inaudible 46:25] when I'm gonna turn my back on anything that makes me stressed. Uhm, physically remove myself from the situation. So, I suppose the extreme example would be just me firing at my boss and going 'I quit' I quit my job, it's stressful', uhm... [...] Uhm,

yeah, so it's... you can either kind, uhm, sort of face up to it, or walk away from it. And I'm sure that neither of those is better or worse, uhm... [P17]

[...] I'm mildly stressful, if I'm not in the right mood and if everybody, I mean, there's big space, there's a lot of people and it's very noisy, I can find that, I want to withdraw from the situation, because I can find it quite stressful. [...] if I feel like I can't engage then I'd rather just withdraw than be in, than remain there, so that's a... [P19]

[...] [if] something really bad had happened that may have caused me some stress, then I would have thought, you know it's time to abstract yourself from this, and calm down somehow. [P19]

[...] but if I was that angry I'd probably just walk away [P20]

I'd just said that for me, personally, I just, I sometimes have to walk away, and, and just re, re, as I said, rejig my thoughts, and that normally does it for me to get me back, back in my... stride, like everything's OK sort of thing. [P20]

But you've got to, you've, you either don't do it, and don't get, get prickles, and just go, so you don't think about what's on the other side of the brambles, wasn't important anyway, and... [...] [P21]

[...] and sometimes you actually put the brakes on and say 'OK, something has to give', go, talk to your boss, or whatever, or let something drop, start saying no to things, give up some commitments, delegate some stuff, whatever, you know, there's, there's action you can take to reduce it if you notice. [P21]

[...] just wanting to kind of simplify things. So not having commitments, or make arrangements, or plans, or decisions. So, it's almost like, uh... almost like wanting to regress to being sort of a toddler, or something. You know, you just want to just be looked after and not having to worry about any of that stuff, you know, not have to deal with it, not, not decide what you... [P21]

There was, there was a distinct feeling of just not wanting to have anything to deal with, I shut myself away, and , you know, no, I have to, don't have to do that [...] don't have to do this. [P21]

[...] and ended up at that point, having to drop everything for a number of weeks in fact because, and had to completely stop and reset from there. [P21]

You know, I did that, exactly that with my PhD because I suspended it again. [...] And then [I] realised there was stuff that's coming in and the amount of stuff I need just do, project students starting, all sort of other stuff. It just wasn't gonna happen. [21]

[...] if somebody else is saying you can't possibly do a lot, you know, something has to give [...] [P21]

Lot, lots of things are consistent with that sort of simplifying, sort of, approach. [P21]

Yeah, flat [face]! Yes, yeah, Just sort of like, you know, that's, it's almost like that, that, even that's too much. [...] Uhm... I sometimes notice, well, I, I kind of get noticed because I get the cues back that I'm being a bit literal.

Uhm... I guess in some cases people return to drugs and drink. [...] But I can kind of see the appeal of it, sometimes it's that wanting it to, wanting things to be simplified and go quiet, you know, the world seem as, the world seemed to be a happier place, I kind of see the appeal of shutting things down, you know, withdraw into some kind of a different world, I can see why people want to, but it's not a solution, that sort of things. [P21]

Uhm, so... oh yes, so yes, I don't know, maybe I just, maybe actually withdrawing and going quiet is kind of a release from it. It's to... it's sort of, you know, that, that empty space is filled, partly cutting down, it's a cutting down some of the, uhm, the queue, some of the... inputs, you know, just simplifying things so there's less to deal with, it's kind of... you get with the withdraw thing. [P21]

But past that point it's kind of, feel like it's a point of no return with it whereas, whereas something has, the reset comes from something, the bigger reset, so it's like turn on and off again rather than just sort of closed down for a couple of hours [laugh] [P21]

I think because you can get set into a cycle where the more stressed you are the more stressed you feel, and it's sort of repeated in the cycle until you sort of completely shut yourself down [...] [P22]

If, you know, when I occasionally reached the breaking point, I'd just give up [...] [P23]

I tried to fix everything when I worked to the rental company but it didn't work. So I left. I, I tried every option I knew [...] but I couldn't fix it. So therefore the only thing to do was to go 'Sorry, I'm not fit for this, and I have to go'. So I did. [P23]

Oh, I get, uhm, it's almost like, uh, I got like 'this person can't got to gym with me, I've got rearrange this, rearrange that', whereas, you know I, I got it would be 'OK, this is happening, I have to do this to sort out', uhm, it's a more calm manner, whereas, especially she's less controlled with outbursts of emotions as such. [P2]

I think good few people use music as well, just to calm down. [P2]

[...] I'm going to lie on my bed and put some music on for 15 minutes, it releases, uhm, calming down a bit. [...] so if you just take some time out, if I play the music, I can calm down a bit, I can think about things properly, hopefully get some of that work done. [P2]

Moving slowly to me is like quite rare, and so just doing something really slowly, I don't know like what, like, brushing my hair but doing it really slowly for five minutes, would be like, that would completely, complete like re-zen of my mind [laugh] yeah. [P3]

I think, I would probably tell myself, I'd probably, I would probably try, but fail to put some time in to stop myself getting so angry, and, and stress it out at people [P3]

And so I think I'd probably take even a couple of minutes to do just, I don't know, anything mindless. To just not snap. [P3]

I don't know why, and uhm... yeah, I think yoga and crying are my two things that I need to do if I feel stressed. [P4]

[...] if you were trying to be calmer about it, you'd most probably wouldn't be quite so anxious, or stressed about it, or... [...] [P5]

So you get stressed, because you're worrying about what everybody else's going to cope, however everybody is gonna cope, should anything happen to you [laugh] which is a ridiculous thing, you know why? When you think about it at later on, when you perhaps have calm yourself down, and, and, uhm... [P5]

[...] if we perhaps, before we got to that situation, if we perhaps tried to be calmer, and, and sit and think about it logically, it most probably wouldn't be as stressful as, as we think it is. [P5]

Because you, your head takes over, where you should, you perhaps be, try to be a bit calmer about things. [P5]

I sort of tried to calm myself down, and, uh, you know, I've got sort of him get in touch with me, and he, I texted him, and he knew I was trying to get in touch with him, and in the end he did ring me. [P5]

I think that's what happens, I think, your whole body gets tense, uh, and heart racing and so I think afterwards it's, it's just trying to calm yourself down. [P5]

Uh, I think you just have to try to remain calm at times. [P5]

No, no breaking sweats or anything like that. Taking all, fairly much in my stride, really. [P6]

Take a deep breath, uh, have a cup of tea. [P6]

So, you know, back to slowing down your breathing [...] [P6]

And, uh, it's like just a step back, calm, and look what's happening, assess the situation, then deal with it [...] [P9]

[...] I would have to deal with it, but it would be in a lot less, uh, almost confronting way. [P9]

Uhm, hopefully they meditate, and hopefully, like, they do yoga. [P10]

Uhm, I do yoga. [...] I, I really like it, to be fair. [...] yoga helps me to just, I guess, release it, because honestly like, it's, it's like a good feeling of like stretching and just someone talking to you peacefully for an hour. That's really nice. And then just like deep breathing, that is kind of really helpful to just relieve a lot of stress. [P10]

So still I'm trying to justify every day is a new day, so we're just trying to go with the flow, and calm down, and carry on [laugh]. [P11]

Then there's always Rescue Remedy, so... [...] It's about, uhm, 40 herbs and flowers, all resolve, and they all relate to feelings. And you take so, and things, and it does actually help you relieve the actual feeling. [...] But I don't take that very often now, at work I used to. When I worked –

quite often. [...] And it does relieve accidents and other things, as well. So it helped, got me through it [laugh] [P11]

I might meditate a bit if I can't get to sleep but at the end of the day it's their problem, not mine. So I had to learn, I suppose, I don't get to that stressful level. I suppose I'm trying to get out of it by other means. I mean, donkey's years ago just for the heck of it I learned transcendental meditation, uhm, which helped, you're not supposed to sort of use it to fall asleep, but I do [laugh] [P11]

I know, you know, when you're in that situation the quieter you are, the better it is. It's very difficult to train yourself doing that but, you know, you can do. [P11]

She's been house-sitting, so she hasn't been around for a long time, she's just come back home, and I've just got to calm down, go with the flow, and let it just happen. [P11]

Whether or not it's my fault or not, uh... yeah, I'm the one who keeps calmer. [P11]

So just take a deep breath, count to ten, and hope for the best. Sometimes it works, sometimes doesn't work. [P11]

So, but anyway, I go to this yoga class, and, uhm, I thought that would be very de-stressing, and no stress. [P12]

I'm, I'm kind of religious, so I pray. So, here you go. Praying de-stresses me. [...] I pray. [P12]

Yeah [laugh], yeah. I don't know why I sing. I don't know, like, oh, I'm obviously listening in the background, you know, I can listen to words even if the song goes with them [laugh]. Obviously I do that as well. Obviously, it maybe calms me, I don't know, I don't know, know what... [P14]

[...] and sort of take time out and just think 'right...' [exhaling] 'OK', that kind of thing. [P16]

[...] uhm... but I'm always at pains to try and be calm and rational on the outside. [P16]

Uhm... I mean there's physical things you can, isn't it, there are supposed to be calming, breathing exercises that you can do when you're feeling, you know, to try and deal with that kind of your heart beating faster, that knot in your stomach, sort of trying regulate your breathing. [P17]

Uhm, I had a cup of tea, uhm, so... I suppose, yeah, the act of going and making cup of tea was quite calming in a way. [P17]

I like my breathing. That kind of relaxes me because I know automatically reduces your, yeah, heart rate. It just slows things down, when it's, like it's... uhm, it's a well-established method for, uhm, that I can use most of the time. [P18]

[...] [if] something really bad had happened that may have caused me some stress, then I would have thought, you know it's time to abstract yourself from this, and calm down somehow. [P19]

[Drinking] Because that's a good way of, uhm, that's a good, quick way of creating the sort of sense of relax there and taking away some stress. [P19]

So they go, they don't go physical, they go sort of still, or watch telly, or read, or that brings everything down, and calms them down. Some people meditate, or pray. [P19]

[...] whereas, you know, last night after it happened I've been already calming down but I met a friend for a glass of wine, and we had a chat for an hour. [P19]

If I didn't know them at all, I'd give them a very sort of basic advice of trying to breathe slowly, trying to just calm themselves down a bit [...] [P19]

Like I said, I think some people need to still calm things down [...] [P19]

I'd just said that for me, personally, I just, I sometimes have to walk away, and, and just re, re, as I said, rejig my thoughts, and that normally does it for me to get me back, back in my... stride, like everything's OK sort of thing. [P20]

I think I went, I think I did go to have a cup of tea and calm down and try again later. [P21]

And we sent him away to come back later when we do it, and of course one moment he got out of the room, he solved the problem, figured out because he wasn't there in that stressful situation trying to perform. [...] same if you're trying to remember a word. The more, if you try and try, like I won't, I still can't remember. So it'll come back to me [...] sometime in the middle of the afternoon. When you're trying to catch it, it just won't, won't play [P21]

I will go and sit by water. And that calms me down [...] [P25]

I do like meditation, I used to do a lot of, uhm, like on the YouTube, you know, they do like the guided meditations, [...] I'd go to the, the meditations there and then I could just, [...], I nearly fell asleep. [P25]

I try to keep the peace, you know, or I try to keep everything calm, and everything running smoothly, I wanted to keep my job, I wanted to just be normal like everybody, you know, so... [laugh] [P25]

I used to go and sit, if I was a bit like, feeling a bit like I can't handle this all, you know, then I'll just, you know, go and find some water because that seemed to calm me down, but that's just... me. [P25]

And it'll give him some time to like chill out from his day, go and have a drink [...] sometimes I just think I'd like that, just to be able to, you know, chill out and I'll walk in the sunshine before I get home. [P25]

Uhm... and yeah, trying to, to take away that thing in my life, meditating, and stuff [...] [P25]

I've been taught, you know, probably quite recently, if I'm honest, couple of years ago really, where that's I sort of start to fizzle out a bit more, and... I relaxed, more so. [P26]

[...] I was advised by the counsellor to kind of go and investigate meditation, and, you know, this, that sort of way of thinking. So my friend who was really into it, took me along to one of the sessions, and that was really helpful. I mean, I did it once but every now and again I will try to

incorporate that way of thinking if I'm, say, at my desk, or whatever, I'll be aware of my breath, and relaxed [...] [P26]

[...] I'd been aware of my breath and she [therapist], I mean, she instantly must have picked up that was something I would be drawn to, or would appreciate, so every now and again she would stop the session, and we would just do, uhm, breathing techniques, you know, to kind of, uh... calm, to bring a sense of calmness, I suppose, so, uhm... [P26]

I've been to a couple of yoga sessions when they have like a 10 second, uh, 10-minute meditation thing at the end. And it's so helpful, so beneficial to have someone talk you through. I think it's almost in a way that external voice sort of talking you through, uhm, you, you know, your breathing, being aware of your breath more, more so than not, and that sense of calm that just comes from that is, is kind of amazing, really. [P26]

I, I'll still talk to my friends when I'm stressed, I'll probably be moaning to them about whatever stressing me out. [P2]

I know, back when I was in primary school, when people having a bad time were given a spongy ball they could just squeeze [...] [P2]

Uhm... I'd say for some people stress-balls seem to help, they just squeeze it a few times, and just let the anger out. That seems to help some people. [P2]

[...] where I used to work, the manager used to get quite stressed, and when she got stressed, she would sometimes cry out of anger just because she was so stressed, uhm, and she's start blame-shifting, so like putting the blame on people for stuff, even though it wasn't necessary. But I think it just helped her feel like it wasn't on her shoulder by passing that blame on someone else, and just release a bit of pressure from her stress. [P3]

Huh, I cry! [laugh] Yeah, I just cry, it makes me feel better, though. [...] I don't, I have no idea! It's just like, if I feel like I need to cry, I take time to actually go to cry and if I feel like it doesn't come out I have to put a sad film on, or something, because I know that it will just really help me. [P4]

I don't know why, and uhm... yeah, I think yoga and crying are my two things that I need to do if I feel stressed. [P4]

Well, put, they put distraction theory in their way, really, and try and find ways of relaxing. [P6]

Uhm, whilst it's, I feel like my sister, it's much easier for her to vent. It's always a relieving factor for her if she is venting her problems, when it's kind of out in the air, then she's like 'right now I can breathe'. [P9]

I think like that [going to the gym] for me is like releasing, I guess, any pain, or anger, or frustration in that session on the day [...] [P10]

But if it helps it doesn't matter what you do, uhm... how you get out of something stressful rather than throwing a brick at brick wall, or throwing a punch or having a very bad temper I've always had. [P11]

[...] something might happen I'd might scream and shout but I can just get over it two seconds later, say it finished, no big deal [...] [P11]

If you're in a car, on your own, and people being bloody stupid idiots, you can shout, I mean I shout, swear, and whatever. Hopefully, the window's not open [laugh] [...] you are, oh, use your bloody indicators, or bloody bicycle, or bloody bike, whatever. You're just, I just, you know, that... I always say, a cliché is a cliché because it's actually true. [P11]

Uhm... the few times in my life, yes, I'll clean, I don't do that anymore, I haven't got the energy, uhm, but then I'm not that stressed, or that kind of stressed. But yeah, now I've just remember, those are two things that happened, or, or I find that I was doing it and I related it to being stressed was cleaning, I mean, literally, cleaning something with a toothbrush, or really intricate cleaning, none of the ordinary, the back of the cooker stuff. [P11] distraction

You know, I usually call myself a bleeding idiot, or something, you know, that sort of, or stronger. [...] Me, I just call myself all the names under the Sun, and hopefully I'll get out of it that way. [P11]

Doing something physical to get over it. It's a very physical things that affects... stress affects my body like, you know, I think, I'm doing something like [tapping on the table], I'll tap, bounce, so I'm doing something obsessively. So I associate it with doing things over and over again, kind of thing. And I'll, I'm putting my pens, aligning my pens, and, uhm, sort of, uhm... eating chocolate [laugh], and, uhm, doing things over and over again. [P12]

And it's physical, as I said, it's physical, it's, uhm, to get out of stress you do something physical. Like... I don't move very far but I might go and do some, uh, some exercise to get rid of it. [P12]

[...] you'll de-stress yourself with making a diary, or write down how you feel, and all that business. [P12]

And she said 'oh, I'm really angry today', 'why you don't go out and pull out a few weeds out of garden?'. So it's like, if you're stressed out, you might get angry, so go and pick, go and pull weeds out, or something. [P12]

I don't know, sort of, uhm, getting off your chest, that's the expression, you get it off your chest, you know. Having it out in the open, you know. When, when you're having an argument with somebody, uhm, my mum was from the north country 'Come on, let's have it out then!', you know. Let's get it in the open, let's have a row about it. [P12]

I sing to myself. [...] the Welsh side of my family all sing, maybe that's a part of their strategy to get rid of the stress in them. And they're singing, the men are singing males voice choirs, you know, so... and each part of Wales has got a different one, so they sing against one another, rather than have fights maybe, so... That's, that's the musical ideal again, that you can express yourself through something like music. Quite a few people do, do art and stuff. [P12]

And what do I do to, uhm, release the stress I've got now, I might just go like that with my hands, you know. [P12]

Oh, well, uhm... like a stress ball, don't they? So like... I have never, like, that's never really worked for me, I know that some people, it works for them, you've got like let it out like, like punching a punching bag or something like that. [P13]

They squeeze a stress-ball [laugh] [P17]

Uhm, the stress ball thing is about trying to kind of get out some of that tension from your body, isn't it? [P17]

Uhm, some people, uhm, some people don't, they just channel it into other things, the stress comes out in, you know, they do things furiously, they shop furiously, they drive furiously, they're furious in the lift with people, they're furious with their children, and the stress comes out slowly, and in a really bad way. So they don't really deal with it at all, it's all just, uhm, displaced [...] [P19]

[...] other people just need to displace it, and they need to be physical, and active, and get rid of it that way I think it depend on what you like really. Like I'm a displacer probably, I'll walk, and I like to, you know, get busy [...] [P19]

I can do, yes. I think, when I, when I walk, or when I'm with friends, you can get rid of it in a nice, positive way, yes. [P19]

[...] I love comics, but I can only do it when I'm already relaxed. So in a way, it's almost like you have to do something to get rid of the stress, and once I'm calm, I can really enjoy sitting with a book for an hour or two, or something. [P19]

[...] one of them will just sit, will, and she will just wanna talk about it all night. [P20]

I suspect anger is actually a bit of a coping with things, just kind of letting it out, but it doesn't, I know crying doesn't actually help [laugh]. [P21]

Well, I wouldn't say, I think, uhm, it's how you reduce it, don't you, you know, so... uhm, so feeling stress, say, you go into, put everything in the dishwasher nosily and banging stuff around. By the end of it you kind of like you blow yourself out, almost. [P22]

[...] in their stressful moments some people, so, for example, I heard on the radio, uhm, uh, a programme about people who swear, use swear words, and they were saying that actually there's some research that says that the people who regularly use the swear words when they're feeling stressed, uhm, it actually helps them to cope with their stress better. So it, maybe there's things, so yeah, maybe if I yell on my child then maybe it makes me a bit more relaxed suddenly, I don't know [laugh] [P24]

And then one day I'll just flip, and then [laugh] I don't remember, and that's how, then all my stress comes out [...] I'll scream and shout, get it all out of my system, but then I'll sit and have a cup of tea. [P25]

[...] I think it's walking, it gives you that, you can let all, anything that's bothered you out, and then calm, you know, before you go in. [P25]

[...] and then I wake up [...] I burst into tears, but I, I do get quite emotional, as well. When moon's full, I'll cry and scream, and I'm starting feel a bit better, and I can sort of like, then I have to walk it out, but... [P26]

Exercise is a great stress-reliever for some people. [...] it's a real... you know, release of energy, isn't it, so, uh... people do that quite a lot [P26]

Uhm, I think it's just that release of, of any kind of pent-up emotion, maybe, that you've got, that can come out through exercise, and, uhm... you know, uh... yeah, it's like, you're just, you're sort of sweating it out, aren't you, in, in a positive way, and, uhm... yeah, yeah. [P26]

Yeah... I think it's a comfort thing, I think people will actually try to do something they like and take comfort in, so some people can be chocoholics, some people can be alcoholics, or some people will just eat something that they really want to eat just to try and cheer them up. [P1]

Yeah, I ate some chocolate, and had two large glasses of wine which probably made me feel a bit better at that time. [P1]

I mean maybe it's just, it was, you know, sort of trigger mechanism to cheer up, and sometimes just by having... and maybe putting something different on the television as well. [...] a film that might make you laugh, or a film that you particularly enjoyed that's another mechanism for getting round the things do... [P1]

Yeah, I think it can, I think, I've mentioned, you know, last night I had some chocolate and two glasses of wine, so it does... [P1]

I think they do discharge positives by being able to exercise, and even if it's stuff like playing golf which is not energetic, while doing that you can feel a lot better about yourself, [...] [P1]

I think stress has that kind of effect on them, that makes them less happy, so to counteract that, they'd do something that they know will make them happy, uhm, that may be eating, exercise, whatever they're doing, they think that's gonna make them feel better, they'll do it. Just to counteract the stress. [P2]

I suppose, I'd say people would like eating, give release to dopamine in their brain, and it takes their mind off the stressor, yes. [P2]

[...] if I'm sat near a friend, or with a friend and we just start laughing at something really stupid, and it's like that kind of deep-belly laugh, we just, it's completely stupid but it doesn't matter because you're almost hysterical from the stress anyway, anything seems funny, and it doesn't matter for that kind of laughing, where you're laughing at stupid stuff [...] I'm laughing and I don't feel stressed right now, or maybe I do feel stressed but I'm laughing anyway and I'm allowed to. I think that makes me really, really happy. It's just laughing with people even if it's literally not funny, it's just laughing at anything [laugh] [P3]

Uhm, they might... do something that makes them happy. [P4]

Treating myself to something at the shop [laugh], but if I don't have money that's not an option, so I don't know what else could make me happy. [P4]

Uhm... maybe go to the gym, but it sounds, you know, if I'm not happy I can't get myself to the gym. But I know that it'll make me, I've, I always feel better [...] [P4]

Like I could call, maybe I could call a friend, or go see someone, or... just spend time with someone. I think being around people, talk, talking to people used to make me happy. [P4]

Yeah, not messages, but if, if, if I speak to them on the phone, definitely, I'll notice it changes my mood. [P4]

[...] if I speak to my son's teacher, or the corner shop guy, no, it's not the same, because I'm not... laughing. My friends can make me laugh, and I've, sometimes I forget that laughter is, it really helps, really helps you feel better. [P4]

[...] read a book, most probably it'd be my, would be my way of coping with it all [laugh] [...] So I think something like that, just try to get a hobby, maybe, you know, try something that you'd go to if you're not feeling, if your feelings are... if it would be me, it would be either taking a dog for a walk, or it would be read a book. That's, that's my way of, you know, I've done jigsaw puzzle, sometimes I've done this, there's colouring now, that is quite nice, I've done some of that [laugh] [P5]

Uhm, I had a nice croissant, and I had a cup of tea [...] [P8]

[...] you need to, within yourself, provide the sort of positive thing that will balance it out. [P8]

[...] maybe you'll just like treat yourself to something to make you feel better. Or maybe you'll have a few beers, or a few wines because, like, you maybe need that to feel like less stressed, or you need that to, like, cope. Or maybe you'll have the cigarette, or something. [P10]

[...] it makes me like feel positive, like I get up, and I like go to the gym, and I think I was like, I've started, like the day well, I've started it productively, like, and it gets me in a positive frame of mind. [P10]

Plus all my arts and crafts, all my other hobbies, you see that, oh, god, be through it, so I call it occupational therapy. [P11]

And I'll, I'm putting my pens, aligning my pens, and, uhm, sort of, uhm... eating chocolate [laugh], and, uhm, doing things over and over again. [P12]

You know, I've just had all this chocolate, because it was cheap. I think to myself, it wasn't really because it was cheap, it was because I was stressed out at coming here, really [...] but I've got to just, have been eating chocolate to help me along the way. And the excuse [laugh] [P12]

I think being, like, with your friends helps, being around that helps especially if it's like a fun environment, if you're laughing, because it makes you feel better, distracts you from thinking about it. But also, like, makes you, it does distract you, but also it makes you think, oh, it's OK. Everything is alright. [P13]

Emily always likes, I'm, you know, I'm [inaudible 46:03] she always eats cake [...] [P14]

Uhm... I love looking after my friends' dog because I find that very relaxing and really nice [...] [P16]

Some people get stressed and they turn to alcohol. [P16]

[...] because you can't imagine when somebody loses a child, for example, in awful circumstance, but you'd, you'd... uhm... maybe there's religion, faith [...] [P16]

[...] he's still massively overweight, and it's just, that's it, he eats to indulge because that's how he releases his stress. [P18]

It might cause me to overeat, or to, you know, into, uh, you know, look for pleasure, another and quick ways, you know, so three cream-cakes, they may, it takes some of stress off as well, perhaps. [P19]

Yeah. When I'm actually in stress, apart from walking, I'd say, uh, a glass of wine, some friends. [P19]

Uhm, I go with my daughter somewhere, and... just to see her happy face. I, you know, talking back to me, and uh... just, yeah. [P20]

Well, we said, like we said that you know, reading, things like that that de-stresses people, going for a walk, it's just a personal . It's what, what makes you feel good, and, uhm, forget about your stress, or be able to deal with it [...] [P20]

You know, I'd give, I'm quite happy to give a hug if, if they feel like they need a hug I'll be more than happy to give them a hug [...] [P20]

Uhm... I guess in some cases people return to drugs and drink. [...] But I can kind of see the appeal of it [...] you know, the world seem as, the world seemed to be a happier place [...] [P21]

And alcohol doesn't do it for me, because I, it's, uh, depressing anyway, so, you know, if I, if I drink when I'm, when I'm feeling I'm distressed I'm just gonna feel worse, so no point in doing that. But people seem to, and I don't quite understand how it works for them, but, you know, it'd definitely not like... [P21]

Uhm... I drank wine... [laugh] [P22]

Uhm, people do different things, uhm, if I'm feeling, like I, if I've got stressed then I'll, I tend to take dogs for a long walk, or exercise is always good, or just do something nice for yourself. [P22]

Uhm, then I would say, uhm, doing positive things to make yourself feeling better, so exercising, going for a swim, cleaning a house, making sure that your surroundings are tidy so you can relax and you're not surrounded by chaos, uhm, have a nice long bath... just generally treating yourself. [P22]

Uhm, people do things like dancing, exercise, they go to the beach [laugh], I don't know, they flow planes. Uhm, all sorts of different things. Uhm, you know, things like the circle skills is, is good. Uhm... people play music, or listen to music, uhm... [P24]

[...] I teach couple of groups of midwives, midwifery students every year, and [...] they all say to me 'well, the first thing we do, we go home, and we open a bottle of wine', and I think oh, that doesn't sound... always, the idea, you know, some people would do that to relax, some people then take it to an extreme, so... I don't know. [P24]

Uhm... I think hobbies are really, hobbies and friendships, yeah. [P24]

Uhm... I think with some exercise and some activities, so I've seen a video recently about, about dance, uhm, and it was talking about endorphins, and how that can make you feel really good. And it was saying, actually it increases the levels of endorphins [...] So things like that, I think, make people feel good, and it relaxes, you know, their mind and their body. [P24]

[...] things like laughing, uhm, can help with things like endorphin, and that's... And I know people do things like laughter yoga, or laughter classes, or something for that sort of reason. [P24]

[...] I can do my crafts, so I collected some pebbles on the beach in the day and I'm going to do it with like mandala painting, you know, on the little... and you see, I'm happy. [...] do your sugar flowers [...] I can sit there for hours and just, just do things like that [...] [P25]

I don't tend to eat, but when at work it's like I, I eat to get through work, I don't know... [P25]

You know, I don't really know, but, you know, there's those things that I can't, I think, I'd rather, I just I like, I enjoy having a cigarette. [P25]

I tried to do some exercise, to try and make myself feel better, so I'd swim, uhm, do some classes, or... [P26]

[...] in sort of social gatherings and stuff I would be, I would be sort of drinking probably just as much as everyone else, but I'd be drinking in a different way, you know, it was to just, because I knew once I was drunk, uh, I wouldn't be stressful, uhm, I wouldn't be stressed, sorry. [P26]

[...] people look for substances to relieve stress, you know, uhm... [P26]

Uhm... you know, people go for runs, and... really... uhm... I know for me personally if I go for a run then I'm kind of floating on a cloud for at least a couple of hours after that, [...] [P26]

So I've been referred to occupational health, uhm and been having some stress and anxiety counselling. [P1]

I, I think so. yeah, I think even, because I've been having this cognitive behaviour therapy, I've changed slightly myself, I think saying about these hypothetical worries and, you know, realistic worries, and I don't worry about hypothetical worries now. [P1]

I think having someone to talk to sometimes, I think uhm, you know I've been seeing a counsellor. She is someone I can open at too, and talk to very openly about stress [...] [P1]

I think, yeah, I think definitely talking about things and, and getting someone else's guidance, and ideally getting someone that can help you that is trained to do it professionally. [...] I think uhm, over the year I've used obviously a counsellor that I had through work and I've used a counsellor that I had through the NHS, but they were both very good at helping me see a different perspective on things, and being able to coach me through quite a challenging period of time. So I think that's really important thing is, if you are stressed to look at what's out there, that is there to help you. [P1]

I mean, I still take tablets for anxiety, so... how long I mean to take those I'm not sure, they do help, and... [...] taking some stress anxiety tablets as well, uhm, just to get me through to a better place. [P1]

Uhm, you know, I think it sometimes can lead to, perhaps a slight, you know anxiety, or a mental health, so I think sometimes if they do, uhm, cognitive therapy even sometimes will help, counselling. You know, you're talking to somebody over the phone I did that last year, uhm, to try not to get into situations where I felt stressed, you know, I'm worrying about things too much. [P5]

Some, uhm, see their doctor... [...] Uhm... some may buy themselves a help book. [P7]

Uhm... potentially going to, uhm, like a rehab centre. If they, if their stress is, can be kind of almost cured in a, in a sense, they could go somewhere and almost I'd say, uh, get it almost talked it out of them. [P9]

Well, I could never get myself on the list, but, you know, any therapy, any art therapy, or whatever, is good for people. [P11]

But I did have after, when my marriage went wrong, I did have CBT and things and I found that's really, really helpful in terms of my mindset, and in terms of thinking [...] [P15]

Uhm... I think there's a wealth of books on it that some people turn to. 'Don't sweat the small stuff' springs to mind, uhm... Yes, and people turn to do it [...] [P15]

I think cognitive-behavioural therapy helped me when I was sort of stressed and down just because it... the strategies to self-manage and regulate how you're feeling. [P15]

Therapy? I'm guessing. Uhm... medication. [P16]

[...] our position here is we are a landlord, we can't, you know, we just signpost, signpost to, to the correct people to deal with whatever the situation is. [P20]

[...] but my main problem would be obviously to get them help, uhm, I'm not qualified, I'm not qualified to, to make the decision what, what would be the best help for them. And we've got people like, like our welfare officer who... [P20]

I'd probably, my advice for them, obviously just being there, or to signpost them to, to the Bournemouth University, there's huge amount of support at Bournemouth University, and we've got a welfare officer on the site, so that, that, that would be the process for us. [P20]

Uhm... medication certainly can [help] if it's got really bad. [P21]

Yeah, I had some medication for, uhm, in the short term, and, uhm, I... yeah, there's an organisation to do with miscarriages in this country, I phoned them, it was quite helpful. And I think I had some counselling at, at that time as well. [P24]

I couldn't walk, not until I went to see an osteopath. And he did, uhm... with the needles, yeah, on, on my back. [P25]

And then I do, I, my friend, she does like reiki healing, you know, I go round there and she'll do some reiki, [P25]

I was seeing a counsellor back in London for a couple of sessions at least. Uhm... they were really helpful [...] [P26]

[...] I'd recommend counselling to anyone if, if they actually, genuinely, do have anxiety. [...] Well, because... yeah, because I just sort of in, in an open, sort of professional form I discussed my, my symptoms, and how it was affecting my life [...] [P26]

I'd really recommend if, you know, if anyone even has a shadow of a doubt that it might help, just go to, just have a session. [...] sometimes workplaces have things now... [...] Workshops and things, yeah. I mean I went to a couple of, they were quite helpful. [P26]

I think my management team has been quite supportive, and I think they realised that maybe the environment I was working in is not the best place for me in the long term, so I was made redundant. [P1]

So, you know, and, uhm, if she's working and she hasn't eaten, take her some food, you know, just having a, a... nice, good people around that person who is stressed, providing support, uhm... it's probably best thing. [P9]

So, it's almost like, uh... almost like wanting to regress to being sort of a toddler, or something. You know, you just want to just be looked after and not having to worry about any of that stuff [...] you are hungry and you want something to, for supper, but you don't care, you don't really care what it is as long as somebody else will feed you. [P21]

So you can talk to someone and you say 'I'm worried about this', they might have a different perspective on how to deal with something, and help you out with uhm a little bit. [P1]

But, uhm... my, my old manager was very good at helping me not be stressed [...] [P1]

Yeah. I think sometimes you might find out that person's been through that situation themselves, losing a job or worrying about finding the next job. You talk to someone that's done that. Uhm, I met a guy last week that was working with me in my old uhm role, and that've been made redundant at the same time. [...] it was a good opportunity to talk to him and say 'this is what's worrying me', and he was saying 'that's worrying me', and we realised that we're actually not doing anything wrong with what we're doing. So it's just a bit of reassurance since someone else said 'you are actually doing a good job of trying to find a new job'. [P1]

I think, yeah, I think definitely talking about things and, and getting someone else's guidance, and ideally getting someone that can help you that is trained to do it professionally. [...] I think uhm, over the year I've used obviously a counsellor that I had through work and I've used a counsellor that I had through the NHS, but they were both very good at helping me see a different perspective on things, and being able to coach me through quite a challenging period of time. [P1]

I like, when I'm stressed, talking to other people that are stressed about the same things as me makes me feel better. I think it's because it shows me that I'm not just being really, really super-crazy. [P3]

I think you have to be, you have to ask sometimes other people, I think you have to be honest, and just ask for help. [P5]

Or even, you know, ask somebody else to help you with a, with the situation. [P5]

And I think, sometimes, if it becomes too much, I think, you do need to ask, perhaps, for help. [P5]

[...] it's quite good to have an external person listen to how you feel, and then they, perhaps, give you ideas of how to, you know, to cope with things. [P5]

[...] perhaps they can actually talk to themselves, and by sharing that openly, they might be able to get someone else to engage in that conversation to help them find the answer. [P6]

Talk to others. [P6]

By just having male friends, or, in your case, female friends to resolve a problem will come up with a different solution than having an integrated, uhm, view. [P6]

And I, being the parent, I'm finding that stressful that, actually, I turned to [daughter] and, uhm, helping me with that, uhm, she's gonna get some advice. [P7]

Yeah, well, as I said, I spoke about it to other people, which was [daughter], uhm... [P7]

Then I would discuss it with a person, discuss it with other people that are close. [P7]

If you talk to another person you can get a different perspective on things, or you look, sometimes if you are so in something that you can't see the bigger picture [...] [P8]

Because I do know it's not my problem, and all I can do is, you know, help from almost the outside looking in. [P9]

[...] I guess like, having, someone to, like, talk to, or just to help you, like, realise that maybe it's not that big of a deal, or, if it is, like having someone to help you through that time can be a big help, and it can, like, relieve that weight from your shoulders. [P10]

And it wasn't until, like, I seek help from a friend that I've started, like, doing it again [...] [P10]

So I rang my housemate, said 'please, could you do me a massive favour?' Pick me up and take me here. [...] And I worked out that if he got to me in twenty minutes, then I'd be ten-fifteen minutes late. [P13]

Or you can talk about it with other people, how to deal with it. [P13]

Or at least some of it, you can talk about how to deal with it as well. [P13]

Uhm... I also went to see a colleague to ask advice [...] one of my supervisors but if it was a different sort of situation I would potentially go to a... my sister, or I would go, perhaps, a superior, superior work colleague, somebody that I respected, a friend who I respected, who I thought might be able to, you know, help me out, so, to give me advice. [P16]

Some or, or, yeah, confirmation of what I'm planning on doing, as a result of that. Rather than asking for a solution, I'd rather more like say, yeah, that's, go to them with a solution, with, with what I think would be a good idea to address the problem that's causing me the stress, yeah. [P16]

Yeah, I would, I would talk to colleagues, talk to different colleagues, different who were not necessarily associated. I would, I would talk to other people about situations that I was, uhm, experiencing, and, uhm, and take advice [...] I've never felt shy of doing that, just in term of getting a different perspective on whatever it was that was stressing me, making me stressed. [P16]

Well... if, if you're feeling stressed about something... I would recommend discussing, discussing what it is that's making you stressed to see if somebody else can help with that stress. [P16]

So they need help in some shape or form, uhm... so talking to somebody else [...] [P16]

You know, so I think it's, uhm, the, the, yeah, I think, I think, encouraging to find help of some shape or form... [P16]

Uhm, and... so... I suppose talking, talking it through, but also, you know, is it about 'are you doing too much work?', 'are you not doing enough work?', are you... uhm, you know, could you try this different technique, or you know, would you find this helpful? [P17]

And it starts you thinking like 'that's life', it's nice, isn't it, because he's obviously looking after his kid at the moment. I don't know that made me feel relaxed because you know other people do, and, uhm... [P18]

In sort of about a year ago with that colleague I did, it wasn't a counsellor, but I saw someone outside the uni just for like to chat with, then that was really good. That's, that's what I'd like to think has put me a good step now, because I just know what I've got in my armoury to get me out of it. [P18]

I mean, just getting somebody else's life, really, [...] talking about somebody else's life, trying not to talk about yourself. So if I am stressed about something [...] then it's quite good for me to meet a friend, and just trying to talk about them, and find out, you know, and if there are really any problems, I'm quite good at listening, and talk to people, so yeah, that usually helps as well. Just it takes focus off me and [put] it elsewhere, brings my life down to size. [P19]

[...] whereas, you know, last night after it happened I've been already calming down but I met a friend for a glass of wine, and we had a chat for an hour. And I didn't talk about it until the end,

you know, and, uhm, and somebody just meant that my life is, everything is coming back down to size, and I could see that this was not a big problem [...] [P19]

Not, uhm, yeah, I mean, just because it was somebody else's life [...] it's not just me and my life, and I, you know, these things aren't that big [...] and it reminded me I do, there are other people in my life, there's more things going on, you know, even if this thing didn't happen and worked out, there was other good things going on, my life is not just about this one, other things are happening. I don't know, it just helps you get real perspective back in see your life as it is. [P19]

[...] people had noticed stuff of me, and asked good questions at times. And I do the same, you know, are you sure? have you considered this? Yeah, it's, uh, other people can help with that. [P21]

[...] talk to people just to actually get some help or get some advice, or just sharing it, trying to make sense of it, realise what's happening [...] [P21]

I don't have to notice that I'm stressed, he, he [husband] absolutely knows, uhm, in a nice way [laugh]. Not 'what's up with you today?' [laugh] [P21]

Yes. Yeah, not, not just... you know, to recognise it in the first place, and to sort of, it seems... you know, it's, there's a bit of problem shared is a problem halved there, at least sort of sharing it. But then also sort of somebody sufficiently detached from it to think about it calmly and say, well, you know, could you do this, could you do that, why don't you do the other, you know, or, or just ask about it enough, to the point when you say when I do this, hang on, why do I do that? They may, they may not even say anything, they might, they might just listen but, and then you go 'hang on, why do I...?' [P21]

I'm so..., you know, sort of help you re-evaluate just by listening because I, then I have to do 'Oh, hang on, do I have to do that?'. Yeah, so... [laugh]. Would it matter if I didn't do that? Uh... not a lot... [laugh] [P21]

Just sort of step back enough. Sometimes that's easier for someone else to do, or to help with what you're doing. [P21]

[...] you don't want to let anything go, you don't, you want to, you know, want to do it all, but you kind of can't and sometimes you need a spare voice to say 'you can't do it all', so... Yeah. I think that's it, yeah. [P21]

[...] uhm, they'll talk to someone else about it. More often, I do that as well, more often than not someone else has had the same problem, you can speak to a manager, speak to a co-worker, you just speak to a friend, or parent. [P23]

When I was stressed at the, uhm, the car company I would speak to my aunt because [...] she would help break it down, so, and I think that's what other people can provide, what other people should do, you should speak to people to break it down. [P23]

So if I'm not stressed out at that particular point, having a second person look at something to help you break it down, to help solve, you know, the cause is useful, so... Sometimes, so, uhm, I may understand the problem that they're having. And I'm like 'oh, you're trying to get to this point, these are the elements that you need to solve to get to that point' but sometimes it might just be because I'm not part of it at all, I have no pre-conceived ways of solving the problem, sometimes you just need a fresh pair of eyes to go 'well, try this', or 'don't do that', or something, or 'why would you do that?' because... just, just the different way of thinking about thing sometimes can help and I know that speaking to other people will always help. Uhm... whether they have a solution for you [...] [P23]

And actually, you know, for me that's... there were times when, uhm, talking situations through with a manager, or, or my wife, or, or other friends, and people, uhm... You know, I think, we can help each other, where somebody says 'well, I think you're taking that too seriously', so maybe just re-form that, and, uh, not be so wild about that, and, yeah, that's pretty helpful. [...] Or, or even sometimes, I think, it's useful if someone says actually 'you're not taking that seriously enough', and actually you need to maybe put more effort into that [...] [P24]

But I also think having friendships, uhm, means that you've got somebody who is not in your situation and they're close enough to you, and can say 'have you thought about this?' or, you know, maybe there's something that you wanna do, and you hadn't thought about it, and they introduced that idea to you, uhm, or maybe it's something that you find difficult, and they say 'actually, it's not so difficult, have you tried doing this?' [P24]

[...] I've got a friend who's been feeling a bit stressed recently, and, uhm, I said to him, you know, 'you do know you live very close to swimming pool?', and he said 'oh, I used to love going swimming', so I said 'well, why don't you go swimming then?', and he 'oh, it's such a good idea', and he, he went swimming, and then we had a discussion next week, and he was sort of saying 'oh, I've found it quite difficult because I haven't done it for so long, and it was a bit difficult for this reason, but I really enjoyed it!' [P24]

Now, they always say that a problem shared is a problem halved. [P1]

Uhm, I met a guy last week that was working with me in my old uhm role, and that've been made redundant at the same time. [...] it was a good opportunity to talk to him and say 'this is what's worrying me', and he was saying 'that's worrying me', and we realised that we're actually not doing anything wrong with what we're doing. [P1]

I think there are, you know, that, that's been a supporting network, me being able to talk to someone and taking some stress anxiety tablets as well, uhm, just to get me through to a better place. [P1]

It was what I was saying maybe about people that you can talk to when you're stressed. [P1]

[...] and then I had some 4 or 5 months of some support from work and got to better place. [P1]

So it was important for me to talk to someone 12-15 months ago because it has got me to a better place, uhm, you know, to the point when I'm happy to come and chat about it here. [P1]

And I'm not on my own, and sharing that stress. [...] But if it's the same stress as me that they have, I'm so stressed about the uni work, I'm so stressed about not having enough money, I'll be like 'oh yeah, talk to me, I feel the same'. You can just talk and chat about it, and it's like you're venting, and they're venting, and you're sharing it, and it kind of helps [P3]

[...] it's me having some kind of human interaction, huh. But also because it's nice knowing you're not alone in feeling that way. And that you're not isolated. [P3]

[...] it's quite good to have an external person listen to how you feel, and then they, perhaps, give you ideas of how to, you know, to cope with things. [P5]

Finding it easy to open up and talk to people, uhm, is probably one of the most straightforward coping mechanisms. [P6]

No, if somebody came to me and said they were stressed, the first thing I would do is sit down and wanna talk to them. [P6]

Uhm, and that was very debilitating, uhm, not having a relaxing, uhm, time period when you could actually just unwind, talk to people about how I really feel. [P6]

Some might talk to their friends, their partners [...] [P7]

I think, you know, bringing in the people, when you need people to help you not be stressed [...] [P8]

Often if I'm really stressed I'd be like 'oh, I'm really stressed out for this reason, I don't know why, do you think I'm being unreasonable?' yeah, and then you can have a conversation with somebody who will sort of balance it out with you, because sometimes you just need to vent about it, and then you can get on with it. [P8]

[...] it's wonderous when they find out that they're not the only ones to suffer. Either physically or mentally, whatever the problem is. [...] It helps, it helps a lot to know you're not alone. [P11]

And she said no, and I talked to her about how I felt about going up in a plane, and actually it was quite relaxing. It, it helped me. [P12]

Well, get a wife like him [laugh]. Get environment which, which is, uhm, help you. And, uhm, talk about it. [P12]

And there are, uhm, the groups, the peer groups talk about stress. [P12]

[...] because then you should go, like, somehow, I don't know speak to your manager about what, what, what's happening at work, how it's making you feel, or how it could be making you feel, if it carries on like that. [P13]

Yeah, having, uhm, I was talking to, uhm, my friend about this the other day, and we called out, we call each other like 'venting buddy', so someone you can go to and just vent to. [...] Just, it

just helps you just get it out, I guess, how you're feeling, uhm, just, yeah, just almost like, like I said earlier, if it feels like it's building up or something, it's almost like a release. [P13]

I talk to either my husband or my mum. [P15]

And... I did find that really hard, and I self-harmed for a little bit, like a really, really short time, and that was, was never to do anything serious to myself, it was a cry for attention. And I know it was that, it was me saying to my family, like, this isn't working, help me. And... it was [nervous laugh] ironically [inaudible 38:39] they saw scratches on my wrists, and suddenly everything changed and everybody suddenly was supportive. [P15]

[...] if I do get stressed, I get the need to talk to my mother, and she's likely to get me either ring her or send her a Facebook message, and we'll certainly go through around of, this is, you know, argh, and they all comes pouring out, so probably the need to get things off my chest with someone I, I'm close to. [P15]

[...] maybe there's talking about it [...] [P16]

And having somebody to go home and talk to, and I suppose [inaudible 50:20] too, in a way. So if I didn't have that, if he wasn't supportive, or if he was totally uninterested then I think that would make it a lot more difficult, uhm, if I didn't have kind of sound support. [P17] resources?

But then it does depend because sometimes I just get to the point where I'm, I just, I do want just to kind of get it out and moan to somebody about it, and just say, oh I'm finding this really difficult. Uhm, yeah, so it's, it's kind of an either-or really. [P17]

[...] and I'll, yeah, as I've said kind of, sort of leaning on other people at times can be helpful, and just talking to people and saying this is really difficult, even if they can't really do anything about it, just, uhm, sort of verbalising it. It can be helpful. [P17]

Uhm, and then, you know, so... if I'd go home to my partner, I say, oh, this thing happened today, and so and so it did this to me, you know, that's really rubbish, uhm, but almost because we've said it and we've talked about it then it's happened, it's gone and I can kind of deal with it, and sort of push it away maybe. [P17]

So, if I had, for example, when I had a stressed student come to me, uhm, I would try and talk to them about how they felt, or what they felt, and help them with it. [P17]

[...] oh, it's happened before, it's happened before, and he, he would offer me shoulders to sort of cry on a bit [...] [P18]

Yeah, I'm quite, I'm quite an open person, and I'll, uhm, whatever if I was stressed about anything, or frustrated, I'd speak to my..., I've got quite close group of friends and family. So I'd just go and rant to my other half as well, or whatever, I'd speak to him. [P20]

[...] I know that speaking to other people will always help. [...] or whether it's sometimes just a way to vent a problem out, you know, so to get it off your chest, rather than feeling like you're the

only person suffering all these problems. Sometimes it helps just to talk to someone else because then you feel like you're not alone [...] [P23]

[...] they can help indirectly just by talking to you. [P23]

Or sometimes, just having someone to listen to you, uh, can help you to just sort of offload things that you need to get, get out really. Yeah, I find that pretty helpful. [P24]

Uhm... and, you know, if you don't have a healthy... sort of dialogue, either with yourself, or just with a therapist, or a family member, or something, uhm... [P26]

And, uhm, yeah, just having a healthier base or people to talk about those kinds of things is really important. [P26]

And that other people feel the same way as you, and make it on other side. And that that's completely possible. [P3]

Uhm, they might benefit from going to, possibly talk to someone about it, or like coping mechanisms, ways to deal with things. [P13]

My wife is very good because we're almost pure opposites [...] we talk, we get things out in the open, but, and we can sort of learn from one another. [P18]

[...] as maybe a young academic learning from others, and it's like, I like yoga, I like volunteering for other people like this because you learn from other... disciplines, and what goes on in other disciplines, see other practices across the universities, uhm... [P18]

Because I think you need this to see different perspective, to see different pace, for me it's pacing, I can see different paces of life, and I think actually, god, I was getting stressed about pooling the bathroom [...] [P18]

And when I'm stressed and I also like to share my stress out, so, you know, being honest with people, and... and I think also I've worked up to the position I'm in, so I've done all of the jobs I'm asking of people to do, so I know whom I'm giving the stressful things to, or whom I'm doing things with, so I, I keep it quite obvious, and I'd say I know that's not a very enjoyable job, uhm, but like we're gonna share out like this, and we can talk about it, and then we can sort of share out again, so... with that I'm trying to share out the things that may be stressful to make sure that one person isn't feeling all the pressure, and yeah... it does usually work. [P8]

Uhm, and I got my friends shall make music, an excellent event organiser, and excellent, is like everything, she's hostess with the mostest , so I got her on board, and I just like... And then, some other, and so... [P14]

Huh, sometimes I'm trying to pass the problem on someone else. That's another way of getting rid of stress, get rid of things doing it. [P23]

[...] it's me having some kind of human interaction, huh. But also because it's nice knowing you're not alone in feeling that way. [P3]

They could, you know, talk to someone about it, or... go out, or see someone. [P4]

You know, it's just nice speaking to an adult [laugh]. You know, I speak to a seven-year-old every day. Like sometimes I'm going to the shop to buy milk and I stand there talking to the guy, because I think if I don't talk to him, I'd not talk to an, an adult for a while. So [laugh] it's just nice, like, speaking to someone [...] [P4]

I think it would be easier if I just had someone there for me, whether it would be a family member, or a friend. Just, not just like someone to talk to, but I mean, just someone to see, or, you know... Just if I wanted to, like, you know, it was my birthday last month, I just wanted to go out for dinner with someone, you know? Instead of my child [laugh] The, you know, just something like that, it just would be nice. [P4]

Uhm, and that's when I tend to do nannying, and, and I'm back in the UK, so it's quite nice time to sort of see people, because obviously when I'm working I can't see anybody, because it's too much. [P8]

I think being, like, with your friends helps, being around that helps especially if it's like a fun environment, if you're laughing, because it makes you feel better, distracts you from thinking about it. [P13]

I suppose sometimes if I have a stressful day then I might go out in the evening with friends, for example, if I'm not too tired. [P17]

I'll have other people, and my life full, you know, and that's, uhm, that's how I'd get rid of the stress. [P19]

So, uhm, things that I do, I go pub quizzing every week, so that helps me develop relationships with friends, and... you know, we talk, we laugh, and that sort of thing. So I think things like that help people in the long term. [P24]

No. I, I am thinking of a situation where, if we disagree on a choice for the house, because being married you can't just say 'right, I'm gonna decorate this room in green', and your wife wants red, there's gonna be a compromise, or you shouldn't do it. [P7]

So that's stressful because the only way forward is to sit down and talk about it. [P7]

You know, there has been situations where they go off on a tangent ... uhm, I know in the end I'll correct that... by addressing it... not in one lump event but over time, and making them realise that that isn't the best solution. [...] I can address it as and when, and gradually get to a more agreed solution, rather than a one-sided. [P7]

[...] or if this person makes you feel a little bit under pressure I'll manage the meeting with them and we can talk to [...] [P8]

Having it out in the open, you know. When, when you're having an argument with somebody [...] Because, I was sort of taught never to go to bed on an argument. [...] always make sure you've

reached the point where you've, you've reached some sort of agreement before you go to sleep, so... [...] [P12]

[...] maybe, uhm, if it is a pressure or stress in their relationship, maybe go quality time, day, nights and... trying to unpick the problem. [P15]

So, I sort of tried to tackle it in the best way I could with her, uhm... and I do think that actually after that moment things sort of changed between us, there was a bit of, a shift in our dynamic. [P26]

I think for me it would be the amount of free time that I have to relax, I have to de-stress as such. [...] and I feel that I have free time I can relax, sit down and not have any responsibilities, uhm. Generally, it helps. In general. [P2]

That feeling to me is the best feeling – knowing I can take 20 minutes out, and it's OK, because I've got 20 minutes tomorrow or the next day for this task. That too me makes me happy. [P3]

Because if you're at work, sometimes work can be a really stressful situation, and, and there's not a lot sometimes that you can do about it, apart from, I think, taking break when you should have, and going out, perhaps, at lunchtime. [P5]

But I think, I've got better now in saying 'no, we need to, we need to have a holiday, we need to have a break'. That has released the stress from, from that, really, and from us, so, you know... [P5]

So you just want to, to sit and be quiet for the rest of the, of the day sometimes, if it's, you know... [P5]

Get outside and take ten minutes, and take a deep breath, and then go back to the situation. [P5]

You know, uhm, and rest, walk, go out for a walk, take the dog out, go, I don't know, go for a run, just go out in fresh air if you can, do something different [...] [P5]

Uhm, and that was very debilitating, uhm, not having a relaxing, uhm, time period [...] [P6]

[...] and therefore, uhm, if you can find some way just to relax, or a period of time it might actually help you. [P6]

So when I'm not working full time, because that's quite stressful, uhm, I do something that's a bit less stressful. I have kids [laugh] [P8]

But, on the other hand, oh, my god, it's like... I need three months of relax. So as long as the balance is there, I'd say it's rewarding. [P8]

Oh yeah, so afterwards, after I've done that, so usually I do a project, and then have a couple of months off, or six months off. [P8]

In parts, but I think it's quite well-balanced, so I can be incredibly stressed for some months, but I definitely I give myself enough time off to, uhm what wants it out. [P8]

So, you know, if I'm [stressed]... OK, I'll, I'll take five minutes off to have a break, and sit down [...] [P8]

Well, mindfulness seems to be very trendy these days. Uhm, but I think, generally, people, they like take time to relax, make sure that they get enough sleep, uhm, take time out to meditate. [P8]

[...] my life is stressful in the minute, but it's only for, hopefully for a certain period of time, until like I finish. And then it'll be a relief [...] [P10]

So I thought now, you know, I need to, I need something other than just doing this all the time. [P12]

Hopefully they relieve themselves by just taking downtime, uhm, to themselves, but I don't think a lot of people, like, do that, and that's, I think, that's why a lot of people are stressed. [P13]

So if you're always going to work nine to five, it's important to take a break [...] [P13]

It's nice to go on holiday [laugh] [P14]

Yes! I can! Myself and my husband with our oldest went travelling for a period of time, and that was fairly, that was very stress-free. [P14]

Well, when I was travelling on that holiday. Even when I'm on holiday in the UK, or even at the weekend I actually don't... we're just together, that's quite nice, like playing. {P14}

[...] and some people would go on holiday, and just try the whole, uh, idea of get away from it all. [P15]

I can get quite, quite stressed by certain games and the attitude of certain players. They... and it takes me a little bit of time to get over that. [P16]

I think that sometimes, uhm, I wouldn't say necessarily stress, but make sure that they have breaks. [P16]

So they need help in some shape or form [...] taking a break, taking time out if that's at all possible [...] [P16]

Because, uhm, it [free time] allows you to kind of decompress. [P17]

Yeah, you're right. Uhm... yeah. So, I suppose it's about balance, isn't it. [...] And that's why I think it's important to have time when you're not stressed, and when you're relaxing. [P17]

Uhm... well, first of all I think, uhm, it [stress] becomes negative when you don't have any periods of time when you're not feeling stressed. [P17]

Now, I've earned it so I'm willing to go for a walk, I'll go and get my lunch, I'll do whatever it is. [P18]

They work, it's a bit like Japan as well, they get about... and in America, do they get, did it like two weeks of holiday a year, or something. It's ridiculous and compare it to here, academic get about 30 days, NHS, other industries, you get about 24 [days], something like that. Uhm... it's...

it's, it's good to have those breaks because, it's funny, because you chat with them in Hong-Kong and I've heard it from other people, academics here, that they... there's more of a culture of taking sick days and getting away with it because... [P18]

For me... I really like having, ideally like a weekend when I don't have to look at laptop. That for me is a really good weekend. [P18]

And I remember when I was doing my PhD my boss used to say to me 'take two weeks off', and I'll make, I'd say this to everyone: you take two weeks off in summer. [P18]

Uhm... and in the past I'd taken laptops on holidays with me [...] I can do some work' which is sometimes fine but now I try to selectively, that I print papers off and think it 'right, I'll limit it to, like, what I need to do'. And it's nice talking to senior professors, successful as well, because like one of them said to me recently 'oh, yeah, Christmas, I just tell people I'm not doing any reviews over Christmas, I like that quiet time. [P18]

[...] I could... there could be a battle, a nuclear war and I could go and have a nap, you know. Which mean I've been able to cope, even when I'm very, very stressed I can go to sleep which is a great gift. We have to go to sleep, because then everything relaxes a bit, anyway, if you go to sleep. [P19]

It's having, having a nice day somewhere is uhm... [P20]

I think it's, uhm, I think it's just, I think it's a, I think at some point you need to relax in life, uhm... [P20]

Uhm, as I say, for me it's going out with my daughter, having a nice day somewhere [...]. I had a really lovely day [...] So, oh, this is nice [laugh]. So, but that for me, you know, was a really nice, relaxing day. [...] I think if everyone had a lovely day every day I think there'd be a lot less stress. [P20]

But it's a, it [sleep] certainly feels like it's, it puts things in order a bit, kind of gives you a reset [...] [P21]

I go to the bed for a day [laugh]. Generally. [P22]

Let's say if I'm really bad which is really, really rare, I will just, when he [son] is with his dad, or just go, uhm, I'll just, I'll just take a day, I'll take the dogs out, and I'll just... fall asleep. And then, uhm, when I get up I generally feel better. I find sometimes I just, I'd have to sleep, just to get away from it and the it gives your body like a period of readjustment [...] give your brain a rest, and then you almost like wake up again, and your brain can start again [...] [P22]

[...] I'd get to the end of the day and I'd go 'I just want to switch off, do nothing and only sit here, and just star at TV that may be on but I won't remember what's there because I'm just so tired. [P23]

Uhm, what else people do to deal with stress? Take a holiday [laugh] but then again they're just taking themselves away from a problem, so it's just another way of doing it. [P23]

I sleep, just need to sleep, you know. [P25]

[...] then I can sleep, I'd sleep 12-15 hours, I don't wake up, I don't wake up to go to the toilet, I don't wake up for a drink, I don't wake up to eat, or anything [laugh]. So it's simply, if I would say, that's like, you know, the stress, but I don't [know] whether that's the way my body deals with things, or whether... hmmm... [P25]

I mean, people go to retreats, you know [...] [P26]

Sitting and reading quietly, I think that's my, that's my, how I relax is reading, sitting. [P5]

But I'm not somebody who can't relax. I can read a book, I can fall asleep quite easily, I was very close to have a little five minutes out there [waiting for the interview] [P6]

Uhm... Try and find, uhm, a relax, something to relax with, whether, whether it be crafting, or, I don't know really, lie in the grass [...] [P6]

[...] or listen to music. Just listening to relax a bit [...] [P8]

[...] or just reading a book, or sitting and watching the sunset. And I know, I don't care. I have food in a fridge, I don't care. I'm happy. [P11]

Uhm, just staying [inaudible 19:50] maybe just watch rubbish TV... to deal with that, that... If I was in, so it's one I've got from home [...] [P13]

Sunbathing, uhm, I don't like sunbathing, relaxing, perhaps reading a book on the beach. I don't know why [inaudible 25:33] but I do think it's a part of it. [P14]

Yeah, yeah. Uhm, like, I'd say like, when I get home, I don't know if it's the same for [husband], you're just sometimes so bamboozled... It's like, you don't like, I just wanna watch a film or something like that [...] [P14]

Uhm, and... uh, watched a bit of TV, watched 'Neighbours', uhm, and, yeah, just kind of, uhm, yeah, uhm, lay down in bed for watching TV. [P17]

[...] and we just had quiet time when she read her appraisal paperwork for today, and I just read something else but it was, yeah, it was quite nice because sometimes we do that, we just sit in, not in front of the TV, just put the digital radio on, I just sit in silence for half an hour, and, we always chat anyway, but it's just nice [...] [P18]

Apart from procrastinating, I walk, I have a dog, so we, we walk a lot, and if, if I was stressed I would go for a walk probably, and I find, I would feel better when I walked. [P19]

If I had to do a presentation in an, in an hour, you said I've got to go next door, and present on something, uhm, I would pace in and out this room thinking of what to say. Probably for whole hour till I would go in there, and then, you know, I'd rather doing, that's, uhm... moving and walking is a very sort of helpful in a way, and, uhm... [P19]

Actually while I'm [inaudible 1:28:12] walking is nice, just sitting quietly is nice. [...] Uhm... reading is quite nice too. [...] Just sort of, I'll call it vegetating in front of the telly, basically [laugh] [P21]

Uhm, people do different things, uhm, if I'm feeling, like I, if I've got stressed then I'll, I tend to take dogs for a long walk, or exercise is always good, or just do something nice for yourself. [P22]

Uhm... other things I do... I mean, reading, obviously. Uhm... [...] And, uhm... yes, it's a really great stress-reliever, actually. When I think about it, it's very relaxing activity. [P26]

I don't think it's necessarily, I think if you're fit and healthy, you know, and you exercise a lot [...] I suppose to maybe just sitting on a settee every night, eating the wrong things, and, you know, watching television, from a wellness perspective, it's not necessarily be... [P1]

Uhm, exercise. Exercise would be good for reducing stress generally, uhm. [P2]

Being more lenient with myself I think, telling myself, I think... Because when I'm stressed I forget that other people take time out. [P3]

[...] so I think, it's almost like a, I felt like I needed to feel stressed, I don't know. I didn't want to just get over the feeling because I felt like I deserved to feel stressed [laugh] [P4]

Uhm... yeah, I feel, I feel less, yeah, I'm less inclined to want to make myself a nice meal. Which is weird because I'll make my son something, but I won't give it to myself. So, yeah, it's, I, I do think it's this punishment thing, [P4]

[...] I was, I'm not saying [husband] was, but I was putting barriers in the way of us going away during the school holiday because we were supposed to be looking after [grandson]. So that became a sort of stressful situation between us, because I'd always say 'oh, we can't go on holiday' because [grandson] is not at school and we've got to look after him. [...] I could, really, because work would be quite flexible, but I was always putting barriers in a way of looking, because we've got the grandson. [P5]

[...] because, I think, you tend not to perhaps go out at lunchtime, so you don't have a break from work, and I don't think, you know, that's not good for people but, you know, I know from being in an office, people sometimes don't go out because they feel they're under pressure to get something done. So they, they won't leave their desk, but that's the wrong way of doing it really, because you need that break, especially if you're working nowadays with all sorts of IT, you need that break, and you need fresh air. [P5]

I think you've really got to try and look after yourself more, then try to get into that situation [...] [P5]

And I think you have to speed up that, I think you have to be selfish, and look after yourself. [P5]

[...] you perhaps feel you should be doing things more for them [your family], or, uhm, you know, you shouldn't be doing things for yourself sometimes. Or you feel perhaps guilty that you're sitting down for an hour. [P5]

So I think you've always got to try. I think you've always got to try and look after yourself, and make time for yourself. [P5]

I think people don't look after themselves often as well as they could do, [...] not thinking about how they are as a person. Uhm, and I think if you do that then obviously you're not considering yourself, uhm, because there are things you need in life to be the best person you can be, and be in best health, and that sort of stuff. [P8]

Uhm, because I like the thing that I look after myself to an extent [...] [P8]

Uhm. Not, not hugely, because I usually do something with that if I feel like I'm too stressed. [P8]

Uhm, and then just eating things that, you know, help you, having a tea, but I don't drink coffee, and things like that, I think that can make you quite stressed out, or unhappy all the time, but, uhm... [P8]

I'll just get a shower if I'm getting stressed out, uhm, and then I might go for a short walk, or make sure I eat enough food, or you know, getting enough of all the things that are good for you, uhm, talk to people about it. [P8]

[...] and I think obviously a hot shower relax your muscles a bit. [P8]

Uhm, but I think, also knowing that you're allowing yourself the time to have a break is as important as having the break [...] there's working towards the goal, you, you can sort of allow yourself like oh, I'll have an hour left, and then I'll have a break, so giving yourself stepping stones for when you can relax and I think you're rewarding yourself as well, sort of 'uh, I'll have a whole brownie when I finish this bit', and the, you know, it's nice so, I think being kind to yourself is as important, yeah, as anything, if you're stressed out because... you can't stop being nice to yourself if you're, if you're stressed. It's not like you have to just stop [inaudible 38:38] yourself of food. [P8]

It's actually best to take five minutes out, have something to eat, so that you, you know, you have enough energy to do the things you need to do, because there's no point in doing something with half on fuel. [P8]

Because actually five minutes rarely makes a difference to anyone [...] if you've never done things in that way, where you're giving yourself a break then you don't even know it's an option, you don't know how good you'd feel if you have it. So, unless there's some way they're shown that's the thing, or they accidentally take a break, then they will never know to follow the element of taking a break, and then they might just think 'OK, I'll just get it done, and the quicker I get it done, the better', uhm... [P8]

[...] and when I used to do lots and lots of festivals in the summer, and I'd get sort of three or four hours at night, like sleep at night, and I'd be really, really tired, and I'd know there isn't enough time to sleep properly [...] So then I'd just go and have a shower and, you know, your skin feels toned again, and sort of feel a bit fresher, and then, yeah... I think we can call that 'relaxed' so for me that really helps, and then I feel, it's like pretending that you've had a few hour sleep [laugh] [P8]

[...] I've sort of been looking at the, you know, sort of hygge, [...] there's different elements of those, and, uhm, there seems to be the, just like 'have enough'. Have enough sleep, see your

friends enough, like enjoy the good things, eat good food, take time for yourself, so I think, you know, put in positive measures into your life regardless of how much stress you have. If you start, I mean, I, I'm actively, you know trying spend time with people, and eat good food that I like, and, you know, go outside and go for a walk and stuff. [P8]

[...] I don't think a lot of people, like, do that, and that's, I think, that's why a lot of people are stressed. Like there's a lot like, I guess, solutions to a certain extent, uhm, how to minimise it [...] or they don't have time to do it. But I think there are, there are things that people can do. [P10]

Do something, but do something and change your lifestyle to change the stress. Well, I have changed my lifestyle, I don't work 5 days a week, I used to work 7, then I worked 5, now I probably work 3 or 4. So I've got a bit of time to do other things, and a bit of time to do my work to cover the bills and things. [P12]

Because it's, there's no time just to chill out and have a bit of time for yourself. And that's important to, it helps in stopping, in preventing your stress. [P13]

She tries to force herself to go, like going to lunch. [P14] distraction

Uhm, in my homelife, I'm quite happy not to have challenges and have a really simple, quiet homelife [laugh] [P15]

I would be encouraging to relax your shoulders, things like that. [P16]

Uhm... trying to relax, have a bath, that kind of thing. [P16]

So, I don't know, we, that's something we both value, me and my wife, in our careers, it's all about, on me in particular it's, it's a marathon, not a sprint, and that's something I really have to be aware of now, about not feeling guilty that I'm helping people out for research, I'm not feeling guilty because I'm taking there longer lunch break, because I sat on the morning typing a dissertations, and, uhm... did that sort of answer your question? -ish? Because I suppose it's, it's a long game, it's how you sustain at day in and day out [...] [P18]

[...] I know that if, on those sort of days I'm gonna be rubbish, I've got think of it more of a recovery jog because I'm not gonna do anything faster, I'm gonna be tired from cycling, probably tired from work, I'd just have to do it at ease, and be happy with your time. [P18]

[...] to cope with my stresses, anxieties, I, and to give myself structure in a day, I do my cycling, I do my running [...] [P18]

[...] I'd had thing in the past that I'd kind of done that were more cathartic, that I felt like yeah, you have to do it, like running. You must not punish yourself, and no I've learnt that if I'm doing the hard graft I shouldn't feel guilty to enjoy that downtime, that relaxation time, [P18]

[...] I still keep myself [inaudible 01:32:07] right, you're getting out of the house. [P18]

But, anyway, it's, yeah, so many academics I do come across, and not just academics who 'oh, yeah, I have to, god, I've got to work all'. 'What did you do at bank holiday weekend?'. 'Oh, I had a really nice day, I went to Winchester, I did this, went for bike, and then just... had a day in the

park, walking with a friend dog. What did you do?' – 'I had to work all weekend, I had so much marking!'. [P18]

I didn't really look after myself very well, so for example I think for years I took very little time off, and uhm, I sort of gave myself a turn completely. Physically I didn't look after myself either, so I sort of burned out really just doing it so I think it was, uhm, it was about nobody pulling me back and saying 'you need to give time for something else', or 'you need to withdraw from this bit', [...] [P19]

Uhm, people do different things, uhm, if I'm feeling, like I, if I've got stressed then I'll, I tend to take dogs for a long walk, or exercise is always good, or just do something nice for yourself. [P22]

Uhm... I'd recommend that they, uhm, that they exercise [...] [P22]

Uhm, get enough sleep and looking after myself properly. [P22]

My wife keeps saying that you can only make certain amount of decisions each day, and when you're run out of decisions then you just, you start having to stop doing things [laugh]. [P23]

[...] if you're doing hobbies that are physical, that include physical exercise, you're just, you're doing things like that help things like your cardiovascular system, and your, uhm, you know, you, you, that's gonna help with things like keeping your blood pressure low, and just generally keeping you fit, so, uhm, I think you just generally feel better in that situation. [P24]

[...] if couldn't sleep at night I'd, uhm, I'd drink herbal teas, you know, trying to stop drinking so much caffeine, uhm, alcohol, uhm, things like that. [P25]

Uh... well, I mean, I do quite a lot of exercise, so cycling and swimming. [P26]

I think it's kind of via running, swimming and cycling, and I love cycling. We go, sometimes if, we can, if we're up to it, me and my friend will go for a cycling holidays, you know, that's really relaxing, actually... [P26]

It's just how you're able to deal with it and make sure if it doesn't become too much for you. [P1]

Yes. But again on the continuum. Fight or flight, you have to tell when you can walk away from something, or run away from something. If a rhinoceros is coming at me at full speed I'm probably gonna try and hide, or get up a tree, or do something. I'm not gonna stand there and say 'come on, I'll fight you off' because there that sort of emergency situations that you have to withdraw from the battlefield, and, uh, then come back at a different time and in a, in a different way.

Uhm, and I think, if also don't know yourself as a person, and you don't know all the signs of when you are being stressed, people can be stressed without realising they're stressed. [P8]

Uhm, but obviously if you can handle stress, and you understand that you are stressed, you do things like 'oh, OK, I'll have a smoothie' because it's full of things I'm probably deficient in right now, and that's probably part of why I'm feeling like this [...] [P8]

[...] and I know myself, and I've been in enough situations to know when I am stressed. [P8]

Yeah, I think, I just kind of gauge myself, if I know that I'm in a situation that may be stressful [...] [P8]

Often people are unaware of actually how they feel [...] [P8]

So I think if you've got that in place then when you're put into a stressful situation, you still, even if you're not able to do those things at the time you, you're sort of aware of them, and, you know, you know that oh, when you finish work you can oh, do these things. But it's known that things make you less stressed, unhappy, I think being aware of those can be helpful even if you are under stress because you don't know they exist, whereas they'll allow just, you know, it's that sort of things you do to unwind [...] [P8]

Uhm, and I don't think. I didn't, that they haven't got time to a think that they're stressed or that they aren't stress-free. Because if they think they're in control, uhm... so I wouldn't have thought that they would think themselves in a stressful position. [P11]

[...] the strategies to self-manage and regulate how you're feeling and recognise what was going on for your, you. So... [P15]

But I think I would, I would, uhm, I would definitely recommend to people if they're feeling stressed identify what it is they're feeling stressed about, what's the cause to see if they can do something about it. [P16]

I suppose mentally, uhm, you know, there's kind of... people talk about those sort of mindfulness techniques. [P17]

Because I think it's so easy to not do things and you need that gentle stress but you also need to be aware when stress isn't good. [P18]

Because they don't know the boundaries, they don't know how to... they can't recognise it, and that's something I've learned over the like, perhaps, past year or so, is I know my own anxieties. [P18]

But with stress, it's identifying situations that are going to be stressful, so now I know this, that colleague I spoke about before, who I found stressful, it sounds ridiculous , but each time I know I'm in the meeting with them, or going to be working with them, like, again soon, second marking dissertations, I've got one with her, she'll be hard work. [P18]

[...] and we know how to relieve our stresses, we like spending time together, uhm... [P18]

So I think it's breaking down those barriers, probably you don't wanna break too many down because then you've just got no inhibitions, or stresses, but an awareness of how much you can cope with that stress, I think. [P18]

[...] and it's just knowing what makes you happy because I'd had thing in the past that I'd kind of done that were more cathartic, that I felt like yeah, you have to do it, like running. [P18]

I don't know... so it can go one of two ways. It's, there's a, there's a huge element of noticing and paying attention there. That's something I've definitely got, my head got better at... Clearly, I

messed it up last November, but I had got better at noticing, so... you know, it can be building up and getting out of control [...] [P21]

So, yeah, but it's like, it's actually feasible before it gets to that point to hit the pause button on it, and go 'OK, let's dial this down a bit, and then you can carry on with sort of less of stuff, and keep, keep a closer eye on it. Like, you know, sort of track your heart rate a bit more as you go, or something. And do it a bit more controlled. [P21]

Uhm... I think if it's spotted soon enough, people put strategies in place and deal with it, recognise the problem, talk to people just to actually get some help or get some advice, or just sharing it, trying to make sense of it, realise what's happening but you have to spot it soon enough to do it, and that's quite hard when you're in the middle of... [stressful situation] [...] [P21]

[...] and sometimes you actually put the brakes on [...] whatever, you know, there's, there's action you can take to reduce it if you notice. [P21]

Uhm, sometimes they don't realise how many, until you stop and think about it because it's just getting on, solving problems. You don't really realise that some of it is stressful, so kind of get that, kind of collect data essentially. [P21]

Uhm... but also, yeah, just... those strategies really do is just question of noticing in time to do it. It's sort of... if you're alert to it, and you know, I know, you know the symptoms sort of what's happening, sort of reduce it and keep it at manageable level. [P21]

Now, if you realise at that point you can wind it back. But past that point it's kind of, feel like it's a point of no return [...] [P21]

Just being conscious of... of myself, I suppose in a different way than I had previously. [P26]

## Appendix 5. Study 1a. Lay interviews. Quotes representing *Individual context subtheme* (Theme: Complex, individual experience)

### **Individual level of stimulation/tolerance**

I think people, everybody is different, so I think people just have a different tipping point on what they can deal with [...] [P1]

[...] you know I think people would have to be quite thick-skinned [to not get stressed about certain things]. [P1]

Some people are really good at absorbing stress and, and thrive on stress [...] she would be comfortable having stress, whereas someone else that maybe doesn't like stress so much [...] [P1]

And I just think one person's adrenaline washes, someone else's a stress wash. [P1]

I've, I've got a friend, she always tells me she is stressed, and she always seems stressed. [...]

Uhm... yeah, I do think that some people are more prone to stress than others. [P2]

I can imagine getting stressed at that, and having to rearrange the schedule around that, or having to go alone, something like that would probably stress her out a bit. [P2]

I think that the term 'stress' is throwing about a lot, uhm, and I think it's... or at least the perception of it is different to different people. One person might say 'I'm stressed', uhm, another person might be, have a lot more problems on their plate, and they might not say that they're stressed. [...] Hard to put that into words, uhm... it has different meanings to different people at least. [P2]

I think other people would maybe feel stressed, or maybe nervous, uhm, but not as much as I feel. [P3]

So I need to... It, it's difficult but I've found myself having a lot of stress, I think more than other people because other people don't use it as their motivator. [P3]

Uhm... But I do, I do tend to think of it differently when other people say it. But I wouldn't assume it's as much as when I say 'I'm stressed'. [P4]

Uhm, but I feel like it's, when it... I think it depends on the person, how much that amount is. [P4]

But they're like 'it's too much', so yeah, I think, definitely it does vary from person to person. [P4]

You feel quite tense inside, and for me that's how I know that, uhm, you know, that I'm not at the right level that I should be at. [P5]

Stress is like, yeah, I'm getting an image now, of a rubber band and you pull it, and you know there's a point where... you sort of, in your feelings, in your hands, your muscles in there, you know there's a breaking point. [...] And then, obviously too much stress can... get it further and actually break the rubber band. At some point along the line there's a weak, a weakness. [P7]

But I think everybody is feeling it to an extent, because, I mean it's your threshold, isn't it, uh... [P8]

Like, normally I'm quite like relaxed, I would say, and I don't get as, what they call obviously stressed, that easily. [P10]

[...] some people, if they get something wrong, they'll just take it on the chin, and they're like, it won't be a big deal for them, and they'd learn from that like [...] so I think there will be people like me, but there'll also be the contrary [...] [P10]

And I think there's certainly a continuum of like people get stressed very easily or people that don't really care of anything happens at all. [P10]

I mean, you can say that's stressful to me, other people just go for it [...] [P11]

So I've got like, uh, what you call that... a threshold of stress I'm gonna put up with, and then I don't. [P12]

I, I don't think I personally get stressed too often. And if I did it's more, normally, like a short-term thing. [P13]

I think that I... like I mentioned earlier, I don't, I feel, it depends on the individual, everyone gets stressed at different levels [...] [P13]

[...] I think there's almost like a... yeah, like a, like a tolerance level perhaps, maybe of, how much can go wrong or not go right until it all just build up and then stress. [...] But for some people that one thing may just be enough [P13]

Uhm... so it's people just respond differently to stress, don't they? Some people enjoy being under the pressure, like, I know for me, I do enjoy an element of stress [...] I actually enjoy the pressures and the stress that my job gives me, and it makes me kind of hungry for more at the same time [P15]

Uh, but again, you know, it's stressful, but then some people thrive on that, and choose to that a career. So if you don't want to do it, you would get out of the way. [P15]

Like if you look to maybe a child of four or five whose parents split, some children can manage that, and they're OK. Uhm, other children, there's a massive fallout for it. [P15]

[...] generally speaking, in terms of thinking about the wider population I would say, I'm in the top, I don't get stressed as much as a lot of people, as much as many people can do, that's my perception but I've got no idea to be honest. [P16]

I don't, it's really difficult to quantify actually, I think it's very difficult to kind of put your finger on 'this is the right amount of stress, this is the wrong amount of stress' [...] [P17]

[...] when I have taught in the past, and I have taught undergrads, uhm, some of them really need me to drive them on and go, you know, if you don't, if you don't do this then you're not gonna pass the exam, but for some of them that would be negative. [P17]

Uhm, and it's trying to get to know the individual student to work out what motivates them, and where their kind of optimum level of stress is, I suppose. [P17]

But, yeah, he is very, very laid back, uhm, and always has been, uhm, whereas my older sister is, kind of gets quite stressed about things and quite anxious about things. [P17]

Yeah, uhm, I think... I think I probably do get stressed more easily than your average person, yes. [P17]

I thought I'd love that to be told to turn up nine o'clock every day to give people a tour on the museum, and then just go out at five o'clock, that would be great. But then, if I did it, I would be bored out of mind after about two weeks. [P18]

I like multitasking, I like, I like having five things to do at once, so I quite like a bit of chaos, and feeling I'm running around doing that, I enjoy that. That makes me happy, if you like, doesn't make me stressed, where some people it would make them stressed [...] [P19]

Uhm... for me... it takes quite a lot for me to get stressed, I can, I can take everything in my stride.

[P20]

I think, I think, I'm sure that everybody has their limits of something they will get stressed about.

[P20]

I'd say I don't know, uh... I'll say, I'm probably in the... third... 20%, 20% maybe who get stressed?

[P20]

And I'll, and I'll, probably with my stress, I'll probably build up for a little while. Uhm, because it takes quite a lot of me to, you know [...] take quite a while for me to say anything, I'll probably let it build up for a little bit [...] takes quite a lot for me to say something. [P20]

[...] and it's, it doesn't, is not really ever to the extreme [...] [P20]

There must, there must be a level where is too much for them, for everybody at all, so, you know, they can't, can't keep doing more and more. [P21]

Well, I'd say, uhm... well, I wouldn't probably say I'm less prone, uhm, but I don't get stressed about small things. I just get stressed about the big things. [P22]

So, I'm, I'm better when I'm under pressure than not. That sort of pressure, you know, like being busy. I have ADHD [...] Uhm, so I, I'm, I'm not good when I'm just sitting, I get bored. [P25]

[...] just sitting there it's really monotonous and boring. And I like a bit of variation. So it wasn't as much stressful, but it was just [argh; making faces], you know. [P25]

Like I thrive on being busy, might be really stressful to the others, you, you know, they'll be like 'I can't cope, it's too busy, I can't go and do that job because it's too busy all the time'. [...] I like the hustle, I like the bustle, I like the students around [...] [P25]

I, I think it's like, like I said I thrive on pressure, and other people can't stand pressure. [P25]

You know, I'll take it and take it for a while but then I just lose, lose, you know, sorts of like if someone bullied me, when someone stresses me out, and I won't say anything, I'll let them bullying me, I'll let them do that, I'm like that. And then one day I'll just flip, and then [laugh] I don't remember [P25]

### **Individual demands**

Uhm, perhaps it's just, uhm, the nature of their, their day, what they do with their daily life, uh [P2]

Their anxiety might be a big issue with that, if they have anxiety, or any other mental problems, and they're probably more prone to stress. [P2]

[...] if my room is really messy, then I'm going to the kitchen, and I find that I've got no milk, uhm, just basic things like that, things go in my way as such, then I'll be more stressed, but the little things can pile up naturally, I think. [P2]

Yeah. Yeah, I do. Some people can, I think it depends on, if you see a longer timeline, or whether you see a shorter timeline. So for example, me and my friend might do the, some work in the day and I will still feel stressed because I can see how much work I've got to in the future to get to a point. [P3]

I think, it, it just comes and goes, and it's usually just dependent on how life is going at that time. [...] But I think, the times where everything... it seems like nothing is sort of going well, that's when it becomes really stressful [P4]

[...] you've got to get up really early to take him to school, and that's extra source of stress. [P5]

Uhm, so I think if you're in a situation where you've got a mortgage to pay, and your job is under threat that would be a real stressful situation for people, being faced with redundancy and, and the fact that they could lose their home, or something like that. [P5]

So I think in those situations for a younger person, maybe, when they've got young family and they're faced with, uhm, redundancy, or... yeah, and, and they got to pay bills, and life is really hard, you know [...] [P5]

Yeah. Because, it was stressful, because of course it had to happen when, at the worst possible time [...] [P13]

Uhm, so if I, if it was, if I didn't have time to deal with it before going into like another situation that may, might not be stressful in itself, but isn't gonna, where I know I need to be, uhm, not stressed. So like if I had, uhm, I was stressed at something at work but then I didn't have time to deal with it and I would have to go into a meeting... I wished, I would have wished that I had the time to deal with the stress before going to the meeting because, yeah. [P13]

I think she was just the final straw of like months and months of, like six months of them, just constant little digs, and things like that. [P14]

[...] like my friend's got disabled son, so that's an added burden of paperwork and worry. So that, so she would, I'd say she had slightly more stressful life. [P14]

I suppose, it was also as an addition to what my full-time job is anyway [...] Uhm, yeah, it's just additional, just the extra duties, and it's quite... [P14]

I think, it's it is about being busy but the days when I'd had, when I feel I had lots and lots and kind of competing demands on my attention I'd be more stressful [...] [P17]

[...] if I'm already stressed about the amount of work I've got to do and then somebody comes up and says you also need to do this other thing then that would make it difficult for me. [P17]

Uhm, but sometimes I want to kind of just get on with the thing, or deal with the situation, and I find other people trying to come in and talk to me about it sort of distracting. [P17]

[...] stress comes more when either I've done something, or I tried to do too much [...] [P18]

And again, it's part of not having family and other things to occupy you round as much, you can do things like read academic papers, or... [P18]

[...] yeah, it's like you, you see other people, you come across people in lot worse circumstances, conflicts, bigger life events than me [...] [P18]

[...] when I get to work I'll see people and person, and I'll be able to talk to those people. And sometimes I'm doing 15 emails, not 15, sometimes I'm writing email after email after email, getting distracted, getting anxious, where when I'm over at Bournemouth I can see that person, and it's bang! Done. [P18]

It's probably about your perception, isn't it? About, about what's going on in your life [...] [P19]

You know, somebody, yeah, in a queue somebody jump, somebody jumps in front of you, not a big thing, but if it's, if it's the last thing that's happened then it's a very stressful experience, it could be massive [...] [P19]

So, the last time I remember getting extremely stressed, you know, when, when I was, when my mum was ill, so I was already kind of at a high level of the stress [...] [P21]

[...] it's sort of loads of pointless what-ifs which, none of which mattered until you get beyond the... [P21]

Uhm, no, no in comparison, not really, not in comparison to my last role. It's quite... relaxing. [P22]

Well, that's not to say that I'm always that way. So if I had a lot of stress like moving, for example...  
[...] I won't stress about small things, but then like I said when I'm really stressed with money, moving like we have been, uhm, the fact that [Ben] hasn't done the dishwasher when I get home makes me far more upset than I would then if we had nothing going on. [P22]

I don't think, that I could think of that would exacerbate it, other than the situation at hand. [P22]

But for me this job isn't stressful in comparison to what I've done in the past. That, in the past, I found more stressful than this, so when people get stressed here, I don't get particularly stressed.  
[P23]

[...] if, uhm, if I've got a lot of things that I'm trying to deal with, so if I have a lot, you know, my work here, I have a lot lots of different projects, and I've lots of reports due, at first it's stressful because more and more things are mounting on [P23]

[...] but equally it means that anything new coming along is going to add on stress to them. So, not only are they struggling with the problems they may have now, but then when they get a new problem which can compound the effects of being stressed. [P23]

But other people, if there's other factors, perhaps, in your life, or that, that are going on, that can just, that one thing can just tip you where you can't deal with the things. [P25]

And, you know, they don't know what's happening in that person's life, and if they are having issues, they might be going through divorce, they might be feeling really poorly, they might be getting a diagnosis of cancer, they might have parents that... you know what I mean. And, and some people [...] they just blurt things out. And that can totally tip someone over, if one's very worried. [...] you just don't know what's going on in their lives [...] [P25]

So, so I've always said to my mum, you just [mumbling] whatever, and if you, but if you're stressed and you're really having a bad time that can just tip you completely. [P25]

## Individual resources

I think it's, it's a bit of both. If someone who is worrying, or is always worried about everything, is in a carry situation, they'll probably be all right, but if someone who is normally always happy, and carefree, and goes into a stressful situation, or busy situation, I mean, his stress is a bit overbalanced, so I would say. [P2]

Uhm, if I'm well rested then generally I can shrug things off quite easily [...] But if I've had not enough sleep and I'm already in bad mood then, and I'm more susceptible to stress, stressful situations [P2]

Because, uhm, it could be like, you know, one time where, you know, I may not have much money, but it's all right because I've still got food in the fridge, and I've still, I'm able to concentrate on what's important. [P4]

That's how I feel, I think, this, the lack of sleep doesn't help, because I think it's like a vicious circle. If you don't get your sleep, I think you then, everything then becomes too much, because you are so tired. For me, when you get extra, over-tired, everything seems horrendous, so everything seems ten times as worse as it perhaps even is. But because you're not sleeping properly, everything just gets too much. [P5]

Yeah, I mean, I bring in all the skills that I've learned in management [...] It will bring it to play, how, you handle that situation. [P7]

[...] I'm kind of, my boundaries are a bit fuzzy, and they are with stress as well, but with him... it's, it's black-and-white boundary, and that's what stresses him out, if the boundary is challenged. [P12]

I don't know. I don't know, it could be just the way they, how they process, how they deal with things, uhm... [P13]

[...] in the Scandinavian countries, there's a kind of style, they've got it pretty right. They've been, they've got the infrastructure, they've been run well for a very long period of time. [P14]

Uhm, I look at other people, and I think I've got nothing to complain about really [laugh] [P15]

[...] what the people are no... who don't tolerate stress very well, [...], and she, from what I gather, they don't, that person doesn't really have anyone. [P18]

Don't get me wrong it's [non-demanding job] something I'd do definitely if I retire, and I've done similar when I was a student, young in my life, but not now, thank you, I can handle stress, I think, but, yeah. [P18]

Yes, I think, I'll, uhm, it depends, it depends on the context, but yeah, I think in the right, in the wrong circumstance I get stressed easily but I do have quite good, quite good, uhm, ways of coping with it, as well, probably, as well. [P19]

Uhm... yes, I think being very tired, not sleeping well, if it, that ever happens. [P19]

I mean, uhm, being out of my normal routine, so say I was away somewhere, and then I was getting a lot, uhm, a very stressful situation. I wouldn't have the normal, my normal, uhm, ways of coping with things [...] I wouldn't have that normal, I wouldn't quite know what to do with myself because I would be stuck, you know, I won't have a, the release that way. [P19]

It's probably about your perception, isn't it? [...] your own, uhm, your own feelings with how well you can cope with what's happening, and whether you are feeling confident about things or not, whether you're... [P19]

[...] [I] burst into tears when I got down to, to the sort of lunch counter and they'd run out of soup [laugh] [...] I got hungry by that time, exhausted, just wanted to be fed nice, comforting soup [...] [P21]

I don't know, maybe they're better at... managing things, and spotting things, and dealing with them. Maybe they've got, maybe they've got better strategies for... I don't, don't know if they avoid it, or they just perceive it differently. [P21]

[...] just being away from home in that situation was, makes it, yeah, some family being ill is already hard, but doing it away from home where you haven't got base, you know [...] [P21]

Because if you're not, if you're not getting that, if you're not getting enough of the right quality of sleep that's... [...] you're not really sort of straight to face the next thing that comes along [...] [P21]

Being tired doesn't help [in dealing with stress]. [P21]

No, not easily [get stressed]. Uhm... if I've... If I don't sleep enough [...] [P23]

And I suppose, also, if I feel more relaxed, uhm, if I'm getting good sleep, and if I'm not getting good sleep that sort of make me, make me feel more pressured, yeah. [P24]

I don't know but some people are tough, tougher, I think, tougher than, than others, or a bit more resilient. [P25]

[...] it depends on how, like I said, you know, some people, how they deal with things, so what might be, my [I might] be really stressed, might not be, not be the same... like because we are all different, aren't we. [P26]

### **Reactivity – Nature**

I think some people are born very differently [...] some people are quite happy to put their life on the line and throw themselves out of an aeroplane, while some people are very risk averse and they won't do that. [P1]

I've still got stressed out, even though I've tried to start them [assignments] earlier. It's just who I am as a person, uh... [P2]

I don't think so. I think I've always been this way [always stressed] [P3]

Yeah, I think, some people have that tendency to, I think, a lot of it is worry, which then becomes stressful. I think if you are a bit of a worrier [...] I don't, I know I shouldn't but I think it's just part of me. I'm just a bit of a worrier at that time. [...] I think I've always had that underlying thing that I do worry, perhaps more than I should do at times. [P5]

Uhm... I, I, I think it's a more natural thing, because if it is a skill you could learn, I think that's, well, I think it will be learnt by a lot of people. [P9]

I think that's just kind of who we are... Uhm, I think it's really got to with personality because when I was growing up I really cared about sport, so... and that, that didn't present any stressful situations to me [...] [P9]

No, I'm quite a low-stress person which is quite fortunate. [P9]

I think I'm a lot mentally stronger. And more independent, so I can, I'm much happier to do it by myself. [P9]

Uhm, and majority... I think it can be taught to a certain degree but then... having the natural ability to just stay calm and think about what's happening is, is very difficult to teach [P9]

I don't, some people will maybe be born with it, but equally I still think everybody can learn it. [P10]

Not better people, just better at it [coping] than other people. Have got a knack, like a talent. [P11]

I don't know, I think some people are just naturally laid-back, aren't they, really? [P12]

But I think that's, uh, it's, it's in the nature of some people not to be able to handle stress [P12]

[...] but I wouldn't be surprised if they found a few genes for like distress. Because you've got things like in my family, there's a lot of heart disease, and that's stress-related, and that's to do with the personality. You, you're more likely to get heart disease if you've got a certain personality, and that personality is more, uhm, vulnerable to stress, isn't it? [...] I haven't got it, so maybe I'm not so susceptible to stress. Because I haven't got that in my blood, who knows? [P12]

[...] maybe, I don't know if it's like a genetic thing, if you can get it from your parents, how, how well you deal with things. [P13]

[...] some people are just like born whingers, aren't they? They seem, the born whingers, it's like all of them, they seem to get more stress, more easily, but maybe that's because they've been negative. [P14]

I don't know, like, for instance, my, me and my sister, we would have, you know, maybe we didn't have, uhm, pull up together, she is absolutely less resilient... than I was, and I don't know why. I've always been like that. [P14]

I think some people are more of a... genetically, perhaps, more of a disposition, either they're more prone to kind of depression and they're not coping with stressful situations, and when things go wrong with the best within their world, you know, they can't bring themselves out of that [...] [P15]

There are some people, like I had a, a friend who was of that nature, he just would spiral downwards, and his dad was the same, and you kind of, in the family you could see that almost history repeating itself then. I don't know, he couldn't deal with stress, and he would have the same responses that his father would. [P15]

I think some people are born, you know, for example my younger brother is just so, you know, he's just so laid back about things [...] [P17]

Oh no, I'm sure it's not all about skills, I'm sure there's bits that people may, people's personality is different, but I'm just thinking it's learning. [P18]

But sometimes that can be stressful because being quite a competitive person anyway and... knowing what my PB is... you sometimes try, find yourself trying to catch in [...] [P18]

I'm kind of anxious sort of person, I worry about some things, and, uhm, that makes my life more stressful than it needs to be. [P19]

I think, uhm, it's just the way people are built in, isn't it. [P19]

[...] some people are very... very conscientious about certain things, and other people are less conscientious and that creates the stress because some people in their job, if they can't do their job perfectly, they could be stressed, whereas other people are quite happy just to do the minimum for their job, and occasionally do something extra in which case, you know, their level of stress will be lower. [P19]

And the older child is more conscientious, and maybe more liable to be stressed, perhaps, in their lives, the way that they are. [P19]

[...] some people, uhm, some people just, just are very good at switching off and trying to relax. [P19]

Why? I think for some people it's genetic, uhm, it's part of their personality, part of their physiology, I suppose. So, I'm guessing that's really a response to sort of stress hormones like, uh, cortisol, and, and things like that, uhm, adrenaline. And... I don't actually know but I'm guessing that some people might produce more of those, why, they produce more of those, rather than just a reaction to those hormones, might actually produce more of those. [P24]

I, I think it's like, like I said I thrive on pressure, and other people can't stand pressure. So, uhm, but I think it's just different personalities, different situations, you know. [P25]

Uhm, because I'm like emotionally intense, it's like, I think, you know, they said that people like that, emotionally intense, you know, so if I'm hurt I's, it hurts me ten times harder than if it, than it would, perhaps, somebody else. [P25]

[...]I do think there's kind of an innateness that comes out of our genes, and you know, who we are comes a lot, you know, must come from that, and you know, a huge proportion of it [...] [P26]

Uhm... you know, then again, you get these examples of, you know, children being adopted into really great families, and still struggling, you know, later on down the, down the line. [P26]

### **Reactivity - Nurture**

So I think I've been more confident in not worrying about something happening till it happens. [P1]

[Terrorism] was something that I would be particularly worried about when I started my counselling. And, because I'd lived at the bottom of the World Trade Centre, when the, you know, the planes crashed into that. [P1]

Uhm... I look at someone like my mum, and my mum's... my mum grew up in the war and, and my, her dad was killed in the war, when he was in submarine and she's had a lot of worry in her life, you know, my nan had to bring her up as an only child from 2, all the way through the war, she's quite a tough upbringing and, and she's got two bouts of cancer, and, and she worries and she, she worries about us, you know, I said I worry about my children, she worries about us as well. [P1]

Uhm... no I'd say I'm fairly normal man. I think having that some counselling I think I deal with it better if I, I might say I'm even perhaps better than some other people. [P1]

Yeah, and I think, you, you experience things in life that, that help you deal with stress a little bit better [...] [P1]

Uhm... It depends on how they've, the people around them have used the word [stress] as well. [...] I think, it's just how they've been taught to use the word. [...] It's just how people have grown up using the word [P2]

It depends on how they've, the people around them have used the word as well [...] It's just how people have grown up using the word [stress] [P2]

I have no idea why. I think, I think, it's... I don't know whether there's any biology to it, but I definitely think that, uhm, our life experiences shape us as well. [P4]

[...] he went to a very strict school, where they always had to do loads of work, uhm, you know, he'd come home, and we had very strict parents [...] Now he is, I think he was very used to a work-driven life. [P4]

I don't know, I think, I think it's life experiences... definitely life experiences, uhm, like something that I may have gone through it could be very stressful for someone else, but I've learned to deal with it, so it's less stressful for me. Because I've experienced it more often [laugh] and I've learned to deal with it better. [P4]

Uhm... but his job made him in that sort of person because he had to be in that sort of situations, where he had to go to places and talk to people that he didn't know. [P5]

And I think it's just learning to cope with it, and recognising it in ourselves, I think that's the main thing. [P5]

[...] I think you just have to learn, and sometimes to deal with it. [P5]

I don't think there's a secret gene. I believe in conditioning, and I think that everybody is generally born equal, and it's whether their parents, perhaps, in the first x number of years, maybe four, or ten years, express stress to them in a certain way which could make them stress, may stress themselves later in life when they come into that certain situation. Or whether there, I don't know, their upbringing conditioning allows them to sort through stress, really. Uhm, I don't know, I don't think there's a particular gene that just get triggered by stress. [P6]

[...] it could be in the environment you grow up in. [P6]

[...] I don't know, it's OK, it has something to do with the conditioning, people say to me, how do you conquer those nerves when you get up in front of a thousand people to do a presentation. Uhm... and it possibly goes back to childhood, really, I'm quite happy to be the centre of attention [...] You just, you create the coping mechanism [...] And that's something about conditioning and training, really. So training is probably got at large... understanding what stress is, first of all, it's gonna be, and, and then finding new coping mechanisms. [P6]

[...] and I do believe in this, not, not that gene that's there and can just switch on and off. [P6]

Past history will have some say in that. [P7]

Some traumas in their life will make them more easily susceptible, uhm, especially if they haven't... not everybody can say 'Right, I'm gonna turn negative into positive'. They will keep looking back, uhm... yes, it's that. [P7]

And obviously if I got used to doing that it would, the stress would diminish, just probably to nothing. [P7]

Uhm... Well, they might have not a career in management [laugh]. They might have been, let's say, a nurse... trained to react to every single situation as quickly as possible. [P7]

If you bang a gun, only some of the human will go, because during our lifetime, we're all learning, perhaps, it's not the best thing to run, because we, we're debating it, whereas the bird won't debate. [...] Uhm, but we do debate the decision, based on our past experiences. [P7]

Uhm, and majority... I think it can be taught to a certain degree but then... having the natural ability to just stay calm and think about what's happening is, is very difficult to teach [P9]

I, I think it, it'd be still your personality, so I think it'd still be what experiences you've had. [...] I think that if you deal with stress when you're younger, you can learn to deal with it from young age, and then you can deal with it actually growing up. [P9]

[...] and then [I would have] learned how to deal with because I, you know, I would have to deal with it [...] [P9]

Uhm, I think it's something that you learn. Like, I used to be like a very, very, like, stressed kid. Like, uh, like for every single thing mattered when I started secondary school [...] I think you learn it, and then over time, like things just, some things just didn't matter anymore to me, I guess. Obviously, still important things matter, but little things, uhm, like forgetting one thing here and there, so I'm like, I'm sorry, like, I forgot. [P10]

Things like that, just like, whereas thing... I think people, you can learn it over time. I don't, some people will maybe be born with it, but equally I still think everybody can learn it. [P10]

[...] once I'd gone to local, I had to really retrain myself in not taking on anybody's problems. And not looking for them. Because I was in administration, you take on people's problems. [P11]

I have, yeah, I have to learn not to be bothered. Either with somebody like [sister], I think, because I'm learning how she's not bothered, I don't think she's even noticing it. [P11]

I think you learn to manage your own stress. [P12]

If you've got two twins, and they gonna react to a stressful event in the same, and the answer is probably not, they won't. So... Identical twins, that is. So... I think people react in different ways, so I think the environment is important, and I've told you that I think to get rid of stress you change environment, so... I have to go with the, uh, the nurture thing, don't I? [P12]

It's how you cope with change, isn't it? It's how you cope with stress, and, uhm, so I think it's mostly the environment that produces the stress [...] [P12]

Maybe resilience levels? [P14]

Uhm, but again, that's the way, it's the outside of how their parents had managed it, they gone that way. Uhm, I think it's to do with life experience and the way you've been raised, and that sort of the approach for life that you've developed as a result of your parenting and, yeah, life experiences. [P15]

Yeah, I think, some of it is about, uhm, resilience, and, uhm, yeah, emotional literacy, maybe. [P15]

I think it [resilience] develops in people, that you learn by doing, and by talking things through, uhm, so in education, like we do quite a lot with our children about resilience, and sort of making them resilient then [...] [P15]

Whereas I think, you know, stressful situations can, depending on the resilience of the person very quickly bring people down and perhaps they can't get out from that so quickly. [P15]

But then, sort of whole thing, has it come from parents, and you learn what you see. [P15]

[...] for her [daughter] it's kind of that, she, she turns to the books, and just to... but then I can see myself in that. [...] So yes, she probably is mimicking me [laugh] [P15]

[...] I feel like I would need to, uhm, I would need to be able to do something, create something rather than just, you know, having all handed to me on a plate kind of thing. Yeah. It stems from a long, long time ago when I was a youngster. Circumstances, yeah, making me independent, and therefore... I think, yeah. [P16]

It, uhm, it, I mean, what makes us – our background, our family, everything makes us some... a look, some people are supremely confident because they are perceived to be good-looking [...] there's so many things that make, make us, make us up, that make us be who we are. [P16]

It could be education, it could be family, it could be self-confidence, uh, it could be lots of reasons. [P16]

Well, I think some people have an ability [...] to deal with situations. Uhm, and that's always helpful and I think that also comes, that comes with experience, I don't, uhm, I guess, I would think, yeah. [P16]

Which is, uhm, the rational me knows that's ridiculous but I think that probably leads to be, to me being more stressed, perhaps, than other people would be who are more confident. [P17]

[...] resilience which is about people's ability to cope with difficult situations, and many things can erode that resilience, and I think if you don't have a sense of resilience then that's gonna lead you to becoming stressed a lot more easily. [P17]

So obviously, uhm, people with mental health condition, or even just fairly low levels of anxiety. There was a famous, quite famous, uhm, female cricketer recently Sarah Taylor who has come out and said that she suffered from really, really bad anxiety [...] found those situations very stressful, or, you know, she found walking out to bat in a cricket match just unbearably stressful [...] Uhm, so... there's something about generally, I suppose, whether you kind of, uh... sort of whether your mental health is, is good or not, I think, can have a big impact on it. [P17]

As I said before, I think it's partly about a kind of self-esteem and confidence levels, and, uhm, kind of feeling able to do things. And... I've been, as I was growing up, I've been very academically able, uhm, so at school I was kind of the brightest, I went to Oxford, uhm, etcetera, etcetera. And so the feeling, uhm, that I can't do something, or feeling that I might not be able to do something, uhm, makes me very stressed very easily because I think I found most things in life fairly easy from quite a young age, I remember when I was learning to drive, and that was when I was 18, and it was like the first thing that I had found really difficult. [P17]

Uhm, because... yeah, because I think that, uhm, confident people probably get stressed a lot less, because they just feel, you know, they, they feel confident that they can do things, and even if people are making competing demands on them they think 'oh, well, everything will get done',

and they just feel, uhm, you know, they're able to relax about things a lot more because they believe in themselves, they believe in their own capabilities, and they probably think 'I wouldn't be being asked to do it if people didn't believe that I could do it'. Uhm so that's how I think that high levels of confidence can create less stress. [P17]

It, uhm, it is. I love my job, and I love what I do... and I've got quite good at managing it, actually, but... [P18]

Oh no, I'm sure it's not all about skills, I'm sure there's bits that people may, people's personality is different, but I'm just thinking it's learning. [P18]

Because it doesn't work all the time, uhm, and I'm not, I'm by no means mastered any ways of controlling the stress, and of knowing that's stress. [P18]

Uhm... I think it's, management is a big thing, I think people who I work with who get stressed either don't, I think they don't manage it because they perhaps haven't had any kind of training to do... [P18]

Yeah, the upbringing, I think, and your family life. You know, there'll be a difference depending on even where you came in the order of children, perhaps. You know, they say, first children are more, are more sort of anxious than children later on, because the parents put so much time and effort into the first child than they put in the third or fourth. [P19]

Yeah, would form you, I think. Yeah. It also forms you, though, I think, your ability to cope with it because I think, I think the good thing about the good parenting, and a good family life, I think, it gives you resources to cope with stress. [P19]

You've got, you've got the total opposite to me that take everything with a pinch of salt. But I do believe certain percentage will want everything done properly. You know, you have like OCD, I, I'm not OCD [laugh] I'm not [laugh] but, you know [...] [P20] -> individual tolerance?

I think it's just make-up, I think it's just how you're brought up, if your parents were very relaxed, they probably viewed things differently. [P22]

[...] so anyone who has, uhm, suffers from depression, uhm, is more likely to be affected by stress. Anyone with a sort of mental health issue is more likely to be more affected. [P22]

Uhm... they... I don't know, I mean my, my parents have, for me, have always been able to, they taught that for me. My dad was an engineer [...] And he would always think it out, plan it out. And so I think that imparted on me. The same with my mum [...] she'd break each individual element down until she knew it worked. Uhm, so for me, I learnt it from my parents, so I would assume that they, some of them, they have never had the ability to learn, or they have never had that opportunity to learn from someone. [...] I also did critical thinking at A-level [...] that was an opportunity for me to learn so that if someone else didn't have the ability, you know, they got stressed easily, it's because they don't know how to, to break it down into the elements [...] [P23]

I definitely, yeah, I think you can learn how to deal with stress. [P23]

Uhm, I think some people would have, uhm, past situations that might create stress [...] there was a lady here who is a skier, and had been caught in an avalanche, uhm, and actually part of the training was to get used to being in a very small space, and she couldn't cope with that [...] [P24]

[...] and I think there's other people that, that get into, who maybe get into habits of getting stressed, and so see everything is a bit stressful. Uhm... and maybe panic a lot. And I think, so, yeah, past situation may, can have sort of an impact on that, on more permanent level if you know what I mean [P24]

[...] some of them are maybe more volatile, uhm, or unpredictable, perhaps [...] and that, uhm, some children grow up where they, they're not nurtured, uh, well. And they don't make the, the, the connection between the two parts of the brain doesn't happen, [...] they were talking about how you can develop that, that even it's not happened when somebody is very young, there are still ways to nurture those people to, to, to... uhm... [P24]

Uh, do, do you know like when we are children, I think if you fall over and your parents pick you up oh, and, you're crying all that long, and then you'd got your parents 'get up!', you, you know, it's just a scratch. And I, I do think, you know, the way that you're brought up can, you know, when you're just sort of what your... when we've been, we've tumbled, and we played in the fields with boys, and... so I'm quite like [...] I'm quite, quite resilient. [P25]

So I think, I think it's just around how you brought up, and, that makes you more resilient, or... or not. [P25]

But some people, they can be given everything on kind of a silver plate, and then they can't deal with something when it happens, that would be normal for, for any normal person that hadn't been brought up and given everything and spoilt. Because we know that, we've got kind of, that I've got to work for what I've got [...] I have to work hard for it. Whereas other people just think they can just, it'll just be there for them because they, you know, they've always had things [P25]

And then you've got other people that have like been brought up by abusive parents, uhm, alcoholic parents, drug addict parents, you know. So I do think that that has a big impact onto how people deal with stress. [P25]

Uhm, it's something I can deal with so much better now, really, over the last... last kind of nine or so months, I suppose but I've been getting quite a bit of help with it over the years on and off in different places and stuff, so, uhm... [...] [P26]

Uhm, I think it's probably more than anything just age and experience, and... and, you know, maybe I'm discrediting the help that I've got because I did get quite a bit of help with it, with stress and everything. [P26]

Uhm... and then, you know, it was through counselling and stuff that I kind of realised it's probably a lot to do with my childhood, my upbringing, and... you know, all of those things, so... that they happened. [P26]

I think that some people, uhm, some people maybe haven't had a great deal of... oh, this is really, how can I put this in words... without sounding really harsh [...] I mean, I don't know, I think that's maybe because, uh, sometimes I'm surrounded by quite privileged people. You know, with really great upbringings, and, you know, uh... inheritance on the cards and, you know, a house already bought because of their [...] [P26]

[...] I think it's probably different for different people because, just because of, you know, their experience previously, [...] because of experiences they've had previously, or, you know, not having that, that manager that gives you that confidence to tell you, you can do those things. [P26]

Because I know for me... well, it's difficult to say, really, what exactly, how exactly I would be with a completely different environment, you know, being brought up. [...] if you're brought up in a really sort of abusive environment, and then that's gonna have a massive impact on you, no matter what... [P26]

## Diachronic changes

I think, yeah, I mean most people would be stressful about losing their job, uhm... [...] It's been a right thing to happen to me [...] [P1]

I don't know, I maybe will face redundancy now, uhm, it wouldn't be such a big, it wouldn't be a stressful situation this time, whereas years ago it would have been, when we were younger, and we were just managing, you know, paying all the bills, and things. [P5]

I think as we're a bit older, and we have, luckily, got some savings, and things. So it wouldn't, for me, if I had, if I did lose my job this time, it wouldn't matter, because I could just go and get a little part-time job anywhere, you know. [P5]

Whereas I'm a bit more aware of what's happening. Since I've retired I'm tuning out. [Laugh] I don't do nothing anymore. [P11]

As I got older I've, I've not been so excited about getting on a plane, I've been thinking about all the plane crashes that have happened! [P16]

[...] I didn't want to keep, I think, that level of pressure through... you know, it's alright for when I was young but didn't want to, I couldn't see myself working in Kensington when I was 65, just didn't, didn't want this for myself. [P16]

It's one of those things that would keep me up, so I had to change my belief systems [...] So [laugh] which is why it [death] doesn't stress me out, here you are. But ask me that about 6 months about, that might be my answer. [P23]

So, for example, I have a colleague who is much older, uhm, and his past might be considered the usual time [inaudible 22:15], and he says 'eh, it doesn't bother me now'. [P24]

Yeah. I think also it changes as I got older, so I've started to recognise, particularly in the last maybe six years that I'm getting towards middle age, and I'm starting to re-evaluate quite a lot. Uhm, what is important for me to do, [...] there's only a certain amount of time before you get really old, and then maybe can't do things anyway. [P24]

[...] but there was definitely a point where I suddenly realised if people were not looking at me, then what were they looking at? And, and if they were looking at something else they were not paying attention to what I'm saying [...] then eyes followed me, and I was like 'oh, good! now I've

got their attention!' and this is, this is great, so... so after maybe the first one or two speeches a bit more stressful but then I, oh, this is, this feels really good. [P24]

I've not... I think because I've got older, I've just got, well, if people don't like me, they don't like me. [...] And I think as you get older, you realise that, but when you're really in teenage years, and, you know, when I was in my twenties thinking 'the boys don't like me', or I was crazy [laugh] or I was, you know, [it] made me feel like, it was, you know, you were, you weren't worthy of, of anything, and that bit... Now I think with age I've got confident in my own. If they don't like me, they don't like me [P25]

So for me for some reason the hairdresser that was... and it's still, actually, and I have to keep kind of reminding myself that it's just fine, go, go back to that place but because I'm not really that stressed outside of the hairdresser's anymore, it's OK. [P26]

[...] it was like a great opportunity, a family friend got me the job and I was so happy [...] So, and, you know, the managers really liked me, and, you know, I was doing, and just as I got really good at the job, I felt, you know, I can't do that, I don't want this life, I could see where it was going , and it was my art school years behind me, and I was just leaving everything behind, you know, what, who I really was. [P26]

[...] more events that has more of, more of them happen when you get older, then... you know, you can kind of have different perspective on, on things, so... yeah. [P26]

I mean just, just it's not really an issue anymore, and then I've got different things to, to worry about, I suppose [laugh]. Get entry to the course, and getting my final piece and everything. It's a different sort of worry but a good kind of worry and it's all of the, I haven't got time to worry about anything else, really [laugh]. Probably not a healthy way to put it but anyway... Uh, it just gives you some kind of a perspective, you know, what is important, what's not in a way. [P26]

### **Individual responsibility (for getting stressed)**

I would say my life isn't stressful, but I make it stressful. [P3]

But at the moment I don't, and I have a lot of time that I can manage myself. And... that's really great, right? And it means I shouldn't be stressed. I'm stressed because I set barriers and bars to

myself that I need to reach every day for it to be a worthwhile day. [...] And so... I don't think my life is stressful for other people but for me I add this stress all the time [...] [P3]

And I think that, the, even me idea of having, the idea of having five days off, to do nothing, to me is... actually installs a little bit of stress because I'm like 'what a waste of time!' [P3]

I couldn't waste any time which sounds, it sounds crazy, probably was a bit crazy [laugh], and, you know, I had rules in my head that I was like I need to go to the gym twice a week, every week. Because to me, if you gonna go, then go, like if you gonna pay for membership then go. [P3]

I could have just chilled. I could have just been nay, just stop, like just said to myself, just chill out, just take five minutes and just breathe. But I didn't. I didn't want to. [P3]

[...] it's completely stupid but it doesn't matter because you're almost hysterical from the stress anyway, anything seems funny, and it doesn't matter for that kind of laughing, where you're laughing at stupid stuff – that makes me really happy because it reminds me it's OK to not be stressed [...] [P3]

It motivates me, but it does hinder me a lot. A lot. Because I really feel like, if I don't reach that what I've worked for so hard, or... there needs to be something to work, to be stressed over. There needs to be something to work for, to work towards, because otherwise, what you're living for? [P3]

I don't, I can't imagine... I feel like, especially, people were able to, like, make small things stressful [laugh], were able to, you know, like, I think if stress, if we wasn't aware of stress, then it's completely possible. [P4]

I think you put that on yourself almost. Uhm, you know, because I think you've got a good manager, they appreciate the fact that it does take time sometimes to do things, so I think you make yourself feel stressful by putting it on yourself [laugh]. Getting in that panic that you've got to get this done in certain time. [P5]

I know I get myself in, in a situation... worked-up sort of thing, because I worry about him not coming home, especially when the, when it gets a bit darker, so you know, he's not coming home from school. [P5]

And you just get yourself into that sort of stressful situation, where you think, oh, you know, things could have been so different if I had left it, or they, or the cancer would have been more advanced. Uhm... yeah, I think it's, it's that sort of situation, perhaps, that you, you put that on yourself, I think, what would have been. I think sometimes stress is a, is something that we can put on ourselves as well by not really [...] yeah, I think before the operation, that was quite difficult time, because I think things going through your head, you get yourself worked up... the, you know, perhaps this time you won't be so, quite so lucky with the diagnosis, and, you know, you've got, I've got family, I've got children, grandchildren, and I think you put that on yourself more than anything. [P5]

I think stress is something that, I think a lot of us put the stress on ourselves, I think that's the sad thing, isn't it? We, we do it to ourselves, and if we perhaps, before we got to that situation, if we perhaps tried to be calmer, and, and sit and think about it logically, it most probably wouldn't be as stressful as, as we think it is. [P5]

I think sometimes things take over, and you just get into that situation, and you make yourself feel more stress than you should be really. [P5]

[...] because like with [grandson], when I sort of get worked up about him not coming home, so I'm putting that stress on myself, I'd think, well, he's eleven and a half, he has got a phone, and he knows that he's got to come home, if I were sensible [...] [P5]

[...] and then it just becomes blown out of proportion almost, and that's where, that's, that's stress gets then, doesn't it? Because you sort of make it into something perhaps it's really not as bad as, as is, it seems at the time. [P5]

It shouldn't be. I think I make it stressful myself. By getting, uhm, wrought up about something. [...] I mean, my life really shouldn't be, I think it's just sometimes I make it stressful by myself getting worried about certain things I'm making myself stressed. [P5]

I think there's always gonna be an element of it, uhm, that maybe that's my own doing. [P5]

That's, that's my, I think that's, and that's most probably just me, I'm self-inflicting almost, that I'd always, it would be a part of me that will always worry [...] So I think a part of me inflicts, perhaps situations, stressful situations on, on myself. [P5]

I think if you are a bit of a worrier, you get anxious about things, I think sometimes you can make that into a stressful situation. Uhm, I know I struggle with, I'm quite bad at worrying sometimes, at times, uhm... and silly little things just worry, you know, things do worry me sometimes, and I think that way you make yourself feel worse because you can't not worry [P5]

I think it's just something that I put on myself. I think, you now, because I have to take [grandson] in the morning, so you've got that on the mind, you've got to get up really early to take him to school, and that's extra source of stress you put on yourself because you know you've got to get up because you're responsible to get him to school. Uhm, so that's, I think, something I put on myself. [P5]

So, yeah, I mean, it's not a stressful life really, it's just something I make it sometimes [laugh] [P5]

So that's the pressure I, I guess I put on myself, and I know that you have to give them responsibility, don't you? [P5]

[...] because like with [grandson], when I sort of get worked up about him not coming home, so I'm putting that stress on myself, I'd think, well, he's eleven and a half, he has got a phone, and he knows that he's got to come home, if I were sensible [...] [P5]

[...] I think I've always had that underlying thing that I do worry, perhaps more than I should do at times. [P5]

Because it's self-inflicted almost, the stress, I think you bring it on yourself sometimes by letting a situation get out of hand [...] [P5]

I think whilst, if you're at work, and you've got nags , or stress in effect that maybe somebody wants something like... five minutes ago, you know, because they ring up and say 'I need this half past, yeah, in half an hour', and you think 'oh!', I think you automatically think 'oh my goodness!', but you know you can do it, but I think you put that pressure on yourself. [P5]

And yet, I most probably wasn't, but I would bring that on myself. Yeah, because he would then, perhaps, we'd go together, but he would wander off, and it'd be like oh, now I've got to, can't talk to some [inaudible 51:36], and yeah, everybody was fine, and they weren't judging me, I was judging myself. [P5]

I think it is something that we put on ourselves, isn't it? A pressure that we sometimes put on ourselves, especially you, sort of things 'oh I shouldn't be sitting, reading a book', or, uhm, you know, 'I should be doing something else', or 'I should be coping with things, situations'. [P5]

Yeah, I think, you feel... I don't know it's just the way we are sometimes. I think you just feel... I, it's only if you've got like a family or something like that, you perhaps feel you should be doing things more for them, or, uhm, you know, you shouldn't be doing things for yourself sometimes. Or you feel perhaps guilty that you're sitting down for an hour. I don't know why, don't ask me why. I don't anymore, I used to, because I used to think, oh, I should be doing something around the house, or I should be doing this, I should be doing that, and now I think 'no, I don't think so, I'll just sit and read my book' [laugh] [P5]

[...] you know, the washing-up will be there tomorrow and the next day, or be there later, or the washing will get done eventually, or... I think at times you, you put that pressure on yourself, and think, oh, I must do this and the other. [P5]

Uhm... I can't explain it to you, yeah I just feel myself sometimes, that I put myself under that. So I stress myself out by, uhm, you know, there's something going on [...] [P5]

Uhm, so I think stress can be quite a lot of time self-induced, rather than from external factors. [P6]

What if I do something in a different order than I planned to do it, one of the implications of that: are they gonna be life-threatening, or are they just gonna be that I'm going in a different direction in a car, so it's all, so those sorts of decisions, uhm, can lead to stress, if you let them. [P6]

Oh, although I am leading in some ways and groups of people, I'm not leading, I'm looking after them in terms of their potential income generation capacity, and looking after themselves, than I was 10 years ago therefore, uhm, the, the pressures that I put on myself are not that great. [P6]

But, I knew I'd got to achieve it, or I felt I got to achieve it, but now when I look back at it, I think... would anybody be the worse off if I hadn't tried to achieve it? [P6]

Uhm, I think, I guess if there's quite, they feel there's quite a lot of news, then... oh, I don't know, I think people just don't, and also people don't feel like they deserve to feel OK over time, and I think a lot of people just put too much pressure on themselves [...] [P8]

Probably, because a lot of people don't get the stuff done right at the beginning, they kind of wait for the last minute, and then with deadline kind of hanging over you it's, it would be stressful, I think. [P9]

[...] and it's like basically being in a situation that's out of control, or doing, like, something wrong when you know, you maybe, you could have learned it beforehand. [P10]

Uhm... I guess... like if anything that's difficult, I guess having, I want do the roles and responsibilities I do, but I guess having them, like, puts that little bit of stress each one at the time, just like it's a little bit of stress on me, like, I've made a choice obviously, I want those, and like, I guess, without them I'd be less stressed to an, a certain extent. Uhm... I don't, I, I've thought, I guess, if I wanted to be less stressed then I would just like not do them, but I'd rather, like I guess, have them, have a little bit of stress [P10]

Every day is stress [...] It could be if you let it. [P11]

They're putting stress on themselves and putting stress on other people, I always think. [P11]

Well, no, that's the result of what's happening outside. Situation I'm in, or situation I've put myself in, or inflicted [...] [P11]

So you can put yourself in stress, you can think about if it's gonna be stressful, if you want to, or you just go and do it. [...] Uhm... so anything could be stressful, nothing could be stressful, really [P11]

So if, if I stress myself, and put stress to myself, I rise to the challenge, if it comes to the point where I can't do it, I won't do it. [P12]

Might be sort of, might be there's a bit of a way of doing it but that's, I push myself to the limit of it, and then I won't do it if I've reached my limit. So I'm kind, it's a kind of self-defeating in a way, isn't it? Because I push myself to where I can't do it anymore, and therefore... [P12]

Because of my own fault that I had, uhm, left so much of it so late, perhaps. There was a lot to do, more than I thought there was to do. And I didn't leave myself enough time to do it without getting to a kind of stressed. [P13]

Uhm, and that, if I messed it up, what I have been doing for the last three years, why did I leave it so late, I'd just been annoyed with myself that I let myself get into that situation, really [P13]

[...] but you choose like, I guess, certain reasons why, like, you put pressures on yourself. Expectations of, on yourself, perhaps. [P13]

It's just a little thing, isn't as big a deal as I made it out to be really. [P13]

I think, uhm... sometimes if you deal with it in a right way, so like when, if you're in one of those situations like I just described earlier like the speech, if that's, that's the situation you're choosing to put yourself into, you know, you know it's probably gonna cause you to be stressed [...] [P13]

No, I think people would, I know I put different pressures on myself, like I'm a little OCD [laugh]. [P15]

Not really, mmm, not really, I just know I'm a little bit [inaudible 36:55] frustrated and would like to go the next step [...] I know I can't do that and be the mum I want to, to my children. So it's kind of, it's in my head that I'm ready to push on, but I know, circumstance-wise it's not the right time. So I guess maybe that's just a pressure point in my head. [P15]

So for example, doing a PhD is quite stressful, uhm... because of all of the things you have to go through, and, but... I've often spoken to people about how challenging it is, and it can be stressful but the, the point being if I, I don't have to do it but I want to because I want to achieve the higher, uhm, level of education and career. [P16]

Uhm... but again, I would, I would be, I would be more stressed if I would need to be somewhere on time, and I hadn't allowed myself enough time to get there. So, consequently, the, the actions of the other drivers, really, I suppose I would lay that back on my door because I would think to myself 'well, I should have allowed extra time for this sort of things to happen', I suppose [...] [P16]

[...] but I'm also willing to challenge myself and put myself under stressful situations, for example. [P16]

Well, you put yourself in a position where you're in control of 14 sports players. And you have to make decisions [...] [P16]

P16: [...] you could just really walk away and stop it, like, at the end of the day this PhD stressing me out, yes, absolutely, but I don't have to do it, nobody's got a gun to my head, nobody's forcing me to. I could just walk away, but I couldn't possibly do that...

I: Well, on the other hand, you can say that you are holding that gun, in a way.

P16: Yeah, yeah, yeah, because I'm making myself doing it, aren't I? So I just have to blame myself [laugh]

I: No, not blame...

P16: But yeah, no, it's true. It's true, yeah, yeah. That's also something interesting that, well, sometimes we make ourselves stressed, and we, sometimes we don't realise that, sometimes we realise, but we still make ourselves stressed... [P16]

I think... pressure you can put on yourself, and pressure that others put on you. [P18]

It falls on the Friday, they shouldn't be getting then a reply until Monday or Tuesday, uhm, however, emails you think 'I've got to respond, I've got to respond', [...] [P18]

And being a physiologist you've then got to know how much physical activity you should be doing per day, ten thousand steps, and that... in some ways it's like a man who knew too much, it's, uhm [laugh], it's very difficult to disengage. And that's stressful. [P18]

But it's not the... it's not the management per se... but it's the person, me saying yes, yes [to new responsibilities]. [P18]

[...] some of the stuff I've got stressed about is absolutely bollocks. Get stressed over email from a student on a Friday afternoon, he wants to know why his grade was this, and why am I letting that bother me? [P18]

I can, whereas, I think I'm still at the point of my career where I'm, I don't want to be greedy, but I do want to, sometimes it's like snapping at every opportunity [...] [P18]

I, I don't struggle to motivate myself at all but I can probably bid issues and times I over-motivate myself. [P18]

So I'm, I'm a great procrastinator, so I'm not paying bills, or something, I'm not dealing with, with the financial problem, or with a, or buying something I need to get. And it's in the back of mind, but I think I'll put off until tomorrow, but really I'm worrying about it, and then... so actually you're causing a bit of the stress for yourself by not dealing with the thing you should deal with. [P19]

[...] that was stress, that was because I just, you know, just, just, I'd created the situation but by being far too relaxed about checking details and the room [...] [P19]

Not, well, no, not massively. It has been in the past, but it's not, it's not terribly, I don't have a terribly stressful life at Bournemouth really. It's, uhm, objectively I may, I create, you create stress.

[P19]

[...] whereas, uhm, for me it would become stressful when there's, uh, a feeling that I, I'm not, I can't cope with it [...] or that I am, I overthink what I've been asked to do, and I make it much more a burden than it needs to be, and I end up overworking. [P19]

[...] whereas at other times I got so stressed about something that I procrastinated and then in the end there was too, I couldn't do it properly, because I'd not left myself enough time, and it all...

[P19]

Yes, I think when I had a job interview once, and I, uhm, I did my usual thing, I procrastinated a few days. By the time I sat down to work on presentation I, I'd, I hadn't left myself enough time. So presentation was terrible at the end, uhm. I still got the job [laugh] because job interview was good, but the presentation was terrible, and that was because I left that, you know. [P19]

When I did my Master's degree which wasn't long ago, I found, I changed from my, when I first was at the university, when, you know, I was 18 [inaudible 38:16] always last minute, I would leave my essays until the very last, possible term, and then I would panic, and I wouldn't, you know, there'd be too much to do. [P19]

So, some of them are kind of self-inflicted in terms of caring about what's on the other side. [P21]

I'm not, yeah, I guess, I'm not great at delegating, actually. One of my friends laughed and said I'm an absolute freak control and I'm not great at delegating [laugh] [P21]

I: Do you think that your life is stressful?

P22: Uhm, it's as stressful as I make it [laugh] I try not to let it be, but yes, it is at times. {P22}

Uhm... sometimes I think, I mean, well, it's difficult, I mean, we've just moved house, uhm... and I'm seated on doing everything myself instead of getting people to help me. Uhm, now I could have asked other people for help but I felt like I could do it better by myself for whatever reason, so the, by the end I ended up incredibly stressed because I was tired, because I needed the deposit back in the house that we were living and I didn't have enough time to clean it, and the carpet cleaner exploded everywhere, so that was very stressful, uhm, situation. [P22]

[...] now it's probably pressure I put on myself instead of the pressure that other people put on me. [P22]

[...] but equally there could, there is the possibility that nothing could have, nothing had gone wrong while I was away, or nothing big gone wrong. But I didn't know that, but I was assuming that something bigger had gone wrong. That was my own decision, I had nothing else to make that decision for me. [P23]

Uhm, I also think, for me I'm quite hard on myself, so I will put myself under pressure about work, and, and targets, and things like that even when I answer these targets I will give myself a target to do, I suppose. [P24]

Uhm... I think because I put myself under high expectations, yeah. [P24]

Yeah. I mean, I think, so maybe another example... maybe a few years ago I've started going to a club where you practice public speaking [...] and so I was putting myself through that, I was choosing to do that, of course [...] [P24]

[...] but the I thought well, OK, I've actually always wanted to do this anyway, uhm, so now I will, and, uhm, so I put myself under that, I don't know that I'd call it stress, but, uh... you know, I decided to do that sort of thing [...] [P24]

[...] actually it feels great if you, if you put yourself under stress to do something, and then you achieve it. [P24]

And then I, I thought to myself more recently, uhm, that actually I would like to read again, and I'd like to do it in a sort of constructive way to, to put myself under pressure, under stress if you like, to, to achieve a certain amount for different reasons. [...] so I joined the reading group, and initially it was a little bit stressful because I was putting myself under that stress in a negative, slightly negative way [...] I'm sort of appreciating that I'm putting myself under stress to do that. Uhm, that it feels good, and a sense of achievement [P24]

I think, you know, oh God, I don't want to [inaudible 01:26:24], you know, they're not gonna move, or they're gonna be cheeky, all that lot. And then I saw, one of them turned and 'single file!' and he moved all his friends off like that. It's just, you know, I've been working myself up expecting

something and then it was a totally different situation, and almost put your faith back in people, you know. [P25]

[...] but, yeah, I think it's, I just get myself all worked up, and... I try and deal with it myself instead of, perhaps, sometimes getting help that I need. [P25]

### **Individual responsibility (for coping with stress)**

Not the best place to be but you've got to try and work through things like that. [P1]

[...] and if the tiniest thing happens in my day it will just ramp the stress right up , just because I wasn't anticipating it. [P3]

I let myself, I let myself feel stressed, I let myself feel upset, uhm... [...] So I think it was until last night, when my son went to bed, and I thought that, I need to sit down, and then put pen to paper. That's when I felt a lot more calm. I should have done that before, I let myself feel stressed all weekend, why I think it's because of the guilt. [...] I kind of blamed myself before I allowed myself to find a way out, so I think, it's almost like a, I felt like I needed to feel stressed, I don't know I didn't want to just get over the feeling because I felt like I deserved to feel stressed [laugh] [P4]

[...] maybe things inside you just take over, your head takes over, and, and you get into a situation where really, if you were trying to be calmer about it, you'd most probably wouldn't be quite so anxious, or stressed about it [...] [P5]

We, we do it to ourselves, and if we perhaps, before we got to that situation, if we perhaps tried to be calmer, and, and sit and think about it logically, it most probably wouldn't be as stressful as, as we think it is. [P5]

Because you, your head takes over, where you should, you perhaps be, try to be a bit calmer about things. And look at things differently maybe, you know [...] [P5]

Because it's self-inflicted almost, the stress, I think you bring it on yourself sometimes by letting a situation get out of hand, so you're not coping with that situation, perhaps, in the right way. [P5]

I think sometimes I jump straight into that manic-panic mode [laugh] which brings this, which is then a stressful thing, isn't it? Because then that makes you feel sick, or whatever, because you, you're not thinking through it properly. So I think that's how, you know, you don't, situation gets

out of control, where you should perhaps, if you thought about it logically, sensibly, and did it calmly you perhaps wouldn't need to get into that... manic mode. [P5]

Uhm, perhaps, at times, you've got to try alleviate that situation, that stressful situation, or try to say to yourself, is this really a stressful situation? Or have you made it into a stressful situation? [P5] self-inflicted

Uh, I think you just have to try to remain calm at times. It's very difficult, isn't it, I think, to, to do that. I think you've really got to try and look after yourself more [...] [P5]

And then you think, life's too short, I think you, as you get older, you think life is too short, and you shouldn't be giving yourself all these pressures. You should be enjoying yourself. [P5]

And maybe you have to recognise in yourself that you, perhaps, make yourself more stressed than you need to [laugh] [P5]

Now, whether there's a thought process, whether there's a process, or whether there's a dream's happening I don't know, subconscious dream, and that makes me think that I'm not breathing properly, I don't know the answer to that, I've never spoken to anybody about it because I'm sure I can find a solution to it, if you can just wake up and control your breathing, slow it down, then, uhm, generally OK. [P6]

Problem shared is a problem halved, I've never seen that, you see, a problem shared is just passing burden over to somebody else. So I don't follow that logic, really. [...] Yeah, I mean, I can... I'm big enough, I'm silly enough, I can find the solution... now, uhm, without needing to bother other people with it. [P6]

Yeah. I guess, the things that I do, I enjoy it, uhm, and if I was so stressed out that I can't do my job I wouldn't do the job that I do. Like, I think, the way that I'm working, you need to be able to handle the stress that you have [...] [P8]

[...] and I think if the pressure's from an external source then you need to, within yourself, provide the sort of positive thing that will balance it out. [P8]

I won't get stressed out over it, I mean I might get a bit annoyed, but I, I wouldn't get stressed, I wouldn't let it kind of keep bothering me. [P9]

It can be [harmful] if you let it. Any, any strong belief, internalised or takes over can be harmful, either physically, mentally, or both. [P11]

Get out of the situation one way or another. You can't let it just eat at you. [P11]

And if you can't handle stress, you get ill. Either physically, or mentally ill. [P12]

Like I look back at that point in my time, and I think that was a real time of stress for me. And it was one of those things that was kind of hold your head up and keep going. [P15]

Because I think it's the feeling of being in control of it and not letting outside factors take control of you and increase the feeling of stress or pressure. [P15]

Uhm... and I often used to sort of say, you know, you do have a choice with your job, you know, at the end of the day, I think if, if it's too stressful then, it's putting too, you're under too much pressure and you... [P16]

And, and, the very nature of the fact that the person feels stress means that they can't deal with it right then and there. Because if they could, they wouldn't be stressed. [P16]

P16: But I think I would, I would, uhm, I would definitely recommend to people if they're feeling stressed identify what it is they're feeling stressed about, what's the cause to see if they can do something about it.

I: What if they can't?

P16: What if they can't... well that's difficult for me to answer because I think you can deal with stress [laugh]. Be it by doing things, doing things like I've said that, you know, but I mean, I, I think that's very personal to the person to try and encourage them to keep trying, I guess. [P16]

Letting life get on top of you, letting, letting work or commitments, or your own situation become too, uhm, become too heavy, that you can't carry anymore. [P19]

So, it's kind of, yeah, I'm quite crossed about I didn't really, that I didn't handle it as soon as, there it goes. [P21]

[...] you sort of 'I'm so stressed out. Why? Is it fair? It's not fair'. And that is in itself isolating. Uhm... because then you feel like it's, you, you know, you feel like it's your problem, it's not everyone else's problem. [P23]

[...] but, yeah, I think it's, I just get myself all worked up, and... I try and deal with it myself instead of, perhaps, sometimes getting help that I need. Uhm, and talking to people, I just think no, I can deal with it, you know, you don't want to burden your parents, they aren't very well, or your sister that's trying to work and look after you, you know. [P25]

[...] but, uhm, yeah, there's nothing, nothings stops me from dealing with stress, really. Other than, other than me, you know, no, not an external force. [P26]

## Appendix 6. Study 1a. Lay interviews. Quotes representing *Oppression – limited autonomy and power* subtheme (Theme: Negativity)

### **Oppression, restriction, lack of freedom, powerlessness**

Uhm, stress is like a lot of pressure that have been piled up on someone. Yeah, pressure [inaudible 03:10] I think. [P2]

[...] and it sounds dramatic to say, but also it's like everything's against you, and you know that everything isn't against you, but in that mindset you feel like you're trying to do one thing but nothing's letting you do it. Uhm... yeah, you can feel overwhelmed sometimes. [P2]

If they're quite compact, and moving quite rigidly, that might suggest they're stressed compared to someone who is walking happily, chest out, swinging arms, something like that, then that, I'd say they're not at stress. [P2]

Sometimes I feel like there's a border around everything I see, so like there's a thick, uhm, yeah, a border kind of enclosing in everything that I envision in my head [...] but it's like the window from which I can see everything in my head get smaller and smaller the more stress that I get. [P3]

[Stress is like running on a treadmill] you've just got to keep running, you don't have a choice. [P3]

If you really, really tried you could do it, but you're not sure, you can't stop and think about it, and you can't take a detour, you've got to go that way because that's the only way you might save this baby, and you've just got to go. [P3]

[...] you'd just overthinking and overthinking, and just trying to think of a better way, any way to get out of that situation, but you know there isn't one, and you've just got to go because something depends on you. [P3]

But you, you can't just bail out , you can't just say 'I don't want to do it', you've got to do it because otherwise, you know, the baby is gonna die or something's gonna happen. [P3]

Stressful situation is like... it's like someone wrapped a rope around you and they're pulling it tighter, ever so slightly, only a tiny bit at a time, but... so like not enough for you to notice it at that moment, but then like after a day, after two days, after a week you'll know and you'll feel really tight. [P3]

But the stress it's just, it's the constant tightening, like you just, you just wanna be able to just take a deep breath and you can't. [P3]

And I... I spend a lot of time, I waste a lot of time in the evenings which is frustrating because I won't let myself make plans, like I won't meet up with friends or won't go out for dinner because it takes lot of time [...] so I guess the answer is I have free time but in my head I don't have free time. [P3]

I think stressed people have massive rucksacks because they've had to plan for the whole day, and they've had to plan for million and one things and stuffed it into that rucksack, a bit like their brain [laugh [...] [P3]

And so I would never be able to escape, it was a constant spiral of waking up at 6 o'clock to get to uni in time for free parking, sort of, sort of, it was constant time pressure: wake up, I need to get ready within this time, to leave within this time because I need to get parking, because then if I don't get parking I'm gonna miss something at uni, and I've got to be at uni, and I've got to do this really [inaudible 41:20] books... [P3]

And just, that feeling when you're... in a rush to get somewhere and you've got to be somewhere by certain time but you're in traffic. That feeling, when you can't do anything because the traffic is there, it's just tough, you're just stuck there. That feeling all the time. [P3]

I'd say stress is like contractions. So it's a lot to do with at the time, but once you get free it's, it's fine. I think we always build up on the thought of something being really, really overwhelming, but when, once, once it's over... [P4]

It was a super-stressful situation for me because I couldn't see a way out. Yeah, so I think that's probably the most stressful, when you can't see a way out, or you know that, you know, there's not just, you know, door that you can open, and then you'll be there eventually. Well, at least with people of work that, that's stressful but then they know that at the certain day they'll get the money.

Whereas I didn't know where when that was ever gonna come, I felt like, that's probably the worst case, yeah [P4]

[stress is like] Depression [laugh] [...] Severe depression. [...] The feeling. Because you lose hope. [P4]

Uhm, the inability to figure a way out [laugh]. Uhm, usually, if, if I'm having some, some issues, whether it be personal, or financial, if, if I can't see a way out, or see a way to manage it, then I would class it as stressful. [P4]

I'd say stress, stress can feel overwhelming [...] Uhm... yeah, definitely overwhelming. [P4]

But there's always like a line, and once it passes that line, it becomes really overwhelming, and it's no longer good for us. [P4]

But it's obviously hard to save when you don't have money to save, but, I don't know, I kind of blamed myself before I allowed myself to find a way out [...] [P4]

[...] because sometimes the situation just takes over, and you just get into that, sort of narrow line almost, you're just travelling down, so you can't really get out of it this, at the time. [P5]

I think it's difficult, isn't it? Because if you're at work, sometimes work can be a really stressful situation, and, and there's not a lot sometimes that you can do about it [...] [P5]

[too much stress] I think it's if you, if it's a, it goes on for, I don't know, a long time. You don't seem to be seeing the end of it. [P5]

It doesn't have to be something that will sort of pick you like a brick wall and say I can't rally further with this. [P6]

Uhm, you know, you could become, you get to a roundabout, and become totally, uhm, unable to decide which direction point the vehicle in. [P6]

Uhm, probably in a dark place psychologically [...] extreme stressed would be somebody who couldn't move on, couldn't actually take a physical step. Uhm, I've been in that place before, uhm, and the only step I could take was toward the GP. Because I knew I couldn't go in any other direction, I just physically couldn't. [P6]

I've never understood the concept of escaping from reality, only to have to return to reality at a later time. [P6]

I think lots of stress is caused by drinking alcohol, or [...] If you're addicted to gambling that's a stress. I've never had any of, well, yes, I smoked, so I was probably an addict, but I've packed all that up, [I] drink very occasionally, uhm, I don't do, I don't gamble, never saw any sense, the point of gambling, so all those sorts of external factors can stress people, uhm... [P6]

Unless you've taught yourself what the coping mechanisms are that work best for you, uhm, then stress can become overpowering. [P6]

Uhm... they feel they failed in some way, failed themselves, failed their family, failed others, uhm, and therefore they've seen no option but take, what I think is, uhm, very difficult step to end their life. Because, uhm, that is when stress becomes overpowering really. [P6]

Yeah, that type of thing, when things go wrong, I find that stressful, because it's also the waiting around with the result, uhm, with the, with the matter being cleared up. [P7]

[...] bad stress is things you, that have been somehow put upon you, you didn't ask for... [P7]

Uhm... oh, having a boss that is obnoxious and you can't find another job, that would be terrible as well. [P7]

Yeah, I think, when you're stressed you tend to roll in a bit. I've noticed that with myself, and with other people that this is, shape of body doesn't, it's not so natural. [P7]

Uhm, I guess when your brain is so overpowered [...] [P8]

When you, when you know in your own mind that it's not achievable, but you're being pressured to do it anyway. That would be pretty stressful. [P8]

[...] just the combination of being too hot, being sweaty, and being at tight plane afterwards, and then, that's full of stuff, you know, that's very stressful. I, I'm quite, uhm, a warm person anyway, and I get quite claustrophobic, I don't like being too hot, so for me anything that makes me too warm, makes me quite so stressed out, because I don't like it. I'm just like 'oh, open the window' [laugh] [P8]

[...] but being put in a position where you are unable to do what you're asked to do, left with no option but do it, that's negative stress. [P8]

Yeah, I think it puts pressure on things, I think if somebody is feeling stress from work, or from something they are likely to take out any sort of negative feelings they have from stress on other people. [P8]

Uhm, it's just being over, overpowered, I think... not able to conscient fully because of, of sort of limitations in how you feel, really... [...] being weighed down by things that are unachievable, or difficult, or sort of negative. [P8]

[...] so I think, yeah, there's no positive outlet that is produced by the stress, then it's just a downward spiral, really. [P8]

So I found that really stressful, and I think that's when it becomes negative, if you physically, or mentally are not able to do the thing that you are having to do. But you are having to do it anyway [...] and that's not positive, because unless there's a way to get out of it, you're just churning over it because you can't do, so you just look at these invoices [...] being put in a position where you are unable to do what you're asked to do, left with no option but do it, that's negative stress [P8]

I feel like there's almost like there's a layer around you, where, and there's kind of things which you have to do are constantly bouncing around that layer. [...] it's almost like you're in a layer of wax, and inside that layer you've just got like, oh, I've got to do this, just bouncing around, oh' I've just got to do this, still got to do it, and then something else be then, and that all just be bouncing around inside. [P9]

And she it's almost like she goes into a cone, and she just can't see anything. [P9]

My version of stress is like being just so wrapped up to top and just not being able to, like, do anything. [P10]

I guess it's like holding a weight, like, in a certain position, and you can't return to the top until, like, it's passed. Like, I guess, you're stuck in this, like, position, and you can't get out and there's like a weight on you, and there's like, I guess, resistance, so like get out of it, and you are trying obviously, like, your best. [P10]

[...] or, if it is, like having someone to help you through that time can be a big help, and it can, like, relieve that weight from your shoulders. [P10]

Even then, like, I'm sometimes reluctant to say what's on my mind and what's stressing me out because it's, again it comes back to, like, that independence, and like control of things, like, I wanna sort this out myself because I know I can do it, and then by doing so, like, in my head, like, I achieve something. [P10]

Uhm... like for about a week or two with my dissertation, I'm not gonna lie... Like I was just so wrapped around it, like, I just didn't know what to do, and I just like put it off, like, I didn't try to tackle it. [P10]

Like there's a lot like, I guess, solutions to a certain extent, uhm, how to minimise it, I guess, like not have as much, but I guess, people are so wrapped up, and like, maybe they, they do wanna do them, but maybe they're just like so stressed that they don't think it will help [...] [P10]

But to me because I haven't really been terribly stressed, really, because at the end of the day, you can always get out of any situation I have ever been in, and I didn't like. [P11]

It is, it's very much having a choice, uhm... you know, I've never been in a situation, I don't think, I couldn't really get out of, if I really wanted to. [...] If I can't get out, I think that would be the ultimate of stress if you can't do... not even losing control or whatever, you just can't get out of that situation. [P11]

Uh... and the stress is people not let other people do what they like doing. They're putting stress on themselves and putting stress on other people, I always think. [P11]

Oh! Being hostage, I think. Any sort of hostage. Whether it's on a plane, or anywhere. [...] but I think the hostage situation, because that's also out of your control. Well, out of my control, I think. And you're paid, usually, to be somewhere [laugh]. No, that's a side line. Uhm, no, I think, I think to me a hostage situation would be the worst [P11]

It's so just time-consuming and... because you can't get anywhere, because you're so stressed that get to a solution [...] [P11]

And, uhm, you know, it's very, sounds like cliché but it is... the world just stops. Uhm... life is going all around you, ain't just the end of the world. But you're trying to get out, I mean, I'm trying to get out of it [...] Just try to get out as quickly as you can. [P11]

So I would say it's uhm... like being dragged down. [P12]

I've got this view which is probably making me tunnel here, but, uhm... if you can't see way forward, a solution to something, you have to have accept it, or else it's gonna be stressful for you for the rest of the time. [P12]

But then I'm not, yet, but I want to be sociable to get myself out of it [stress]. [P13]

Yeah, because of, because we're stuck, like I say, because we're stuck in the middle, we're being fired at from all angles, and... [P14]

Stress is like someone having their hands over your face, no! Someone having their hands over you heart, and scrunching it down. [P14]

Maybe that, maybe, maybe not them, maybe they don't restrict you, but you think that they restrict you by... you thinking that you have to sort of, like, [meet] expectations... I don't know. [P14]

You're just... uhm, I don't know, like tired, you're just like physically-like exhausted in the battle and the fighting [laugh] against something all the time, defending yourself. [P14]

That's what... you know, funny thing, well I'll describe it... you know, what I said earlier, like you just don't know what to do, you don't know where to start with, every day's coming at you like... doom, everything's splitting [...] [P14]

Uhm... a really tight spring. A coiled spring, probably. [...] Uhm, because things are tight, and, uhm, perhaps you can't release in the way you want to. You feel sort of constrained and limited because of that. [P15]

Uhm, OK, so stressful situation would be like, uh... being pinned to dart, or to having like darts thrown at you, that you're just trying to dodge and juggle, you know to get out of the way them and sort of stay, survive [laugh]. Yeah, sort of that, the fact that it's just firing at you the, you're trying your best to, sort of, not get, let them get you down, that kind of thing [P15]

Sort of the things you may be seeing on TV, the sort of stereotypical characters working in a, a law office maybe eighteen hours a day too, or police things when you've got no end to the shift, you just have to keep going, and you got that pressure and stress that way. [P15]

Whereas I think, you know, stressful situations can, depending on the resilience of the person very quickly bring people down and perhaps they can't get out from that so quickly. [P15]

And I look back at that time, and I think that was horrendous, because so many things were coming from different angles, that were completely out of my control, anything that I hadn't wanted happening at all [...] [P15]

[...] it was almost having gone through three significant things in my life, and just having no option really, other than to just keep going, and keep going [P15]

[...] because I think, I'm someone who will just keep going, and because I felt like I couldn't, almost couldn't be stressed, you know, like you've got to just keep going, you've just got to get through this. [P15] self-inflicted stress?

Uhm, so if you're in a stressful situation, the situation you know is gonna be impacting on future, you know, decisions you might make about your circumstances and ways to move forward. [P15]

Not really, mmm, not really, I just know I'm a little bit [inaudible 36:55] frustrated and would like to go the next step, but, so I went and looked around for a deputy headship, and when I looked around I was like, I heard what the job involved, the full-time work and things – I know I can't do that and be the mum I want to, to my children. So it's kind of, it's in my head that I'm ready to push on, but I know, circumstance-wise it's not the right time. [P15]

And I look back at that time, and I think that was horrendous, because so many things were coming from different angles [...] [P15]

[...] and when things go wrong with the best within their world, you know, they can't bring themselves out of that [...] [P15]

Yeah, maybe things... uhm, so if there... strained, they would be, uhm... I think sort of being pulled in different directions, under... if you, so having different, uhm, different responsibilities, different, uhm... so yeah, so being pulled in different directions maybe, you know, you've got to

do this, and this, and this, so there's lots of things going on in your life that can make you... put you under strain, I suppose, yeah. [P16]

So that's what stress means to me. It can make you anxious, it can mean you're being pulled in different directions, it can mean you're put under pressure. [P16]

Because you, you always feel like you need to take a deep breath and sort of take time out and just think 'right...' [exhaling] 'OK', that kind of thing. [P16]

At times it can, yeah, yeah. Because things can become all-consuming, and, uhm, and until you get over the thing that's causing you the stress, which can take time, it's always going to, to be there. [P16]

[...] but I do think pets can definitely help, that kind of thing, but they are then a responsibility which can cause potentially, could cause me stress because being tied, and not being able to do what I want to do because I've just been me, I don't have to look after anybody else. [P16]

Uhm... and I often used to sort of say, you know, you do have a choice with your job, you know, at the end of the day, I think if, if it's too stressful then, it's putting too, you're under too much pressure and you... [P16]

So you can, you can, you know, do things you wouldn't normally do, uhm... because you just want to get out of that situation. [P16]

[...] somebody is so stressed and they can't cope, so what do they do, they end their lives [...] because they're overwhelmed. [...] Or being just... so, yeah, it's the feeling like they can't go on. [P16]

But not that you can't get better. Hopefully you can see some, some light at the end of the tunnel sort of thing. [P16]

No, that's just, that's just, that's just literally thinking about it. And, and consequently not being able to move away from that [...] [P16]

P17: Uhm, it's like... hmm... I suppose me being in a middle of a circle and lots of people around the edge of the circle all talking to me and asking me to do things simultaneously.

I: OK. Are they kind of pulling you?

P17: Yes! That's a, that's a good, yeah, pulling me in most of different direction, yeah, one of them has got one arm, one then has got the other arm, and they've bot got a leg, and they are yanking me, they're trying to get me to do different things at the same time. [P17]

Is there, uhm... so, for example if I'm teaching, when I have taught in the past, and I have taught undergrads, uhm, some of them really need me to drive them on and go, you know, if you don't, if you don't do this then you're not gonna pass the exam, but for some of them that would be negative because they would feel so stressed that would kind of be paralysed with fear and unable to do anything. [P17]

Then I've realised actually when you're in that situation, or you fail in that situation it's not the end of the world. And then that can be quite liberating because then that stress isn't as stressful as it was before. [...] That's really liberating because then I realised, I spoke to a few other academics 'yeah, get them every year', what? [...] Actually that's kind of something that I would absolutely be, absolutely petrified of. [P18]

[...] what they do is make you work in the evenings and take up your weekends, and you're not your boss any more for that time being. [P18]

[...] thinking, shit, I've got like deadline tomorrow, shit, I've got like deadline tomorrow. But, what I'm supposed to be doing, this is deadline a day after on now, what I'm supposed to do, what I'm supposed to do, what can you see... you can't, you need freedom in your head to think properly. [P18]

Yes, yeah it's about you, you're in a, uhm, there's not much you can do, either. [P19]

A stress situation would be like, uhm... it comes similar, I suppose, to being in a traffic jam, it's a bit like being in a traffic jam, where you, you can't move but there's too much going on and because there's so much going on everything grinds to a halt so it's like that. I think, just getting things, I think all the things moving become stationary, or uhm, you know [P19]

[...] it was just, uh, became all-consuming. [P19]

Yeah. To become... that stressed, I'd say doesn't..., overstressed. I think, there's a, the, yeah, there is a little background stress we all should have, but it's when it stops being in the background

and it's in front of you and suddenly all you can think about is you can't manage, or you can't cope and that's, uhm, yeah. [P19]

It feels, uhm... as if, as if things are constricting, life is constricting to the set of, uh, challenges, or to these, this job, or this expectation on you, or, uhm, life stops being broad, and yes, it is, it's just like a, like a heart attack, you know, when the arteries sort of, you know, they can get tightened, it's like that, everything just gets squeezed down. [P19]

[...] and you'd be just trying to sort it, sort it out, but not getting anywhere [...] [P19]

Yeah, I think it's, uh, anxiety is a major thing for other people, I suppose it's linked to stress, isn't it, I mean, I think other people, yes, allow their, uh, allow their minds to become, uhm, yeah, like I said again it's the narrowing down, isn't it. So I'd say your mental state, you mental health, it's narrowing your mental health down to, to one thing rather than, uhm... [P19]

Uhm, so, yeah, and, and tired after the day before, and, you know, sometimes kind of stressful with worrying about her. So, uhm, there's no headroom in that, so... [P21]

I think there's, there's an element of frustration, and... powerlessness to a kind of... sort of like things falling in on you, sort of tonnes, tonnes of bricks, and kind of difficult to... sort of way through all this. [P21]

But mostly because the said thing is stressful, ones where I can't say it doesn't matter, it's ones where I've got to get there and I've got to go sort of wrestle my way through the brambles to get there. You know, it's like, like, you know, like you're rescuing a drowning child or something, you go through the brambles, but you would have to... it's, uh, so there's, there's not always that element of choice either. [...] Some of them are just, you know, I don't want to do this, but I have to do this for whatever reason, it's just something, something ludicrous [P21]

With that one... so the, yeah, so, so actually the work were, the work ones are the kinds of the fighting through brambles, situations like that are kind of... they're like being... very tiny... as unable to, you know, very weak and vulnerable, and powerless but needing to get things done, it's...just like not, not being able to reach things on the shelves, but, you know, it's... or, or being stuck at the bottom of a well, and you need, you need to be up there, but it's, yeah, you need to get up there... [P21]

Yeah, because it's, if you can do something the you can resolve the thing that's causing the stress and you can change it but when you don't know what to do or how to do it, or if you're just feeling too fragile and vulnerable to deal with it. [P21]

But past that point it's kind of, feel like it's a point of no return with it [...] [P21]

Yeah, it's that... uhm, what's the word? Autonomy, almost, it feels like a loss of that. [P21]

[...] they're like being... very tiny... as unable to, you know, very weak and vulnerable, and powerless but needing to get things done, it's... just like not, not being able to reach things on the shelves, but, you know, it's... or, or being stuck at the bottom of a well, and you need, you need to be up there, but it's, yeah, you need to get up there... [P21]

Yeah, yeah. And it's, yeah, it's, you know, I can feel, I can feel that motion, yeah. So... And when you, when you're in it, it's just what you're doing, you know, just keep on, keep on running [laugh; gesturing]. You need a video, really, doing my hamster in the wheel... my impression [laugh] [P21]

Uhm, and there's also, damn, what was the other one? Oh, yeah! There's sort of, just the, that, you know, how much headroom I have in that car? [P21]

[...] that's the, it's a, the difference to that, yeah, I was gonna say, like an empty airhead like a sort of, the space for mind, mind just gently wander and ramble about at times, but when it's stressed there's, there's just like a load of horses galloping around in it... [P21]

Yeah, OK. So sometimes it's just, you know, sometimes I just, it's that closing down again and not wanting to deal with it. [P21]

But sometimes if I get hemmed in, just sort of losing and then standing there just, I'll literally put my hands over eyes and just shut it out, close it off entirely, and get sort of stuck for a bit. Uhm... people had to rescue me in [inaudible 1:23:43] I was queuing in a coffee shop, going to visit my mum who wasn't well, and... it was getting quite busy in there, and suddenly somebody came into through the door and I was hemmed in and cut off from the door, and I went, I was already, I was already this far [showing a small amount with fingers] from the roof of the car [...] [P21]

Uhm, so... oh yes, so yes, I don't know, maybe I just, maybe actually withdrawing and going quiet is kind of a release from it. [P21]

[...] if you're in the situation, in the stressful situation chances are your freedom to stop and think about that rationally is kind of fairly constrained anyway. [P21]

Apart from support? Uhm... medication certainly can if it's got really bad. Just the sort of bring that to lower the car seat essentially to, to a more sensible level. [P21]

Now, if you realise at that point you can wind it back. But past that point it's kind of, feel like it's a point of no return with it [...] [P21]

[...] stress will dictate what job you can do depending on how, how much, what level of stress you can cope with. [P22]

If you, you know, if you'd endure... if you endure like a prolonged period of stress, I think you can get to a point, uhm, [inaudible 31:22], you know, when you get to a point where you could end up being depressed on the back of it, because your body has been so used to being in this sort of this negative cycle, and sometimes it's difficult to see a way out of it. [P22]

Stress is like... stress is like someone standing behind you waiting to strike, but you never know when they're going to, but you know that they're going to, and that's in itself is what stress is like. That's the easiest way I can describe it [laugh] [P23]

Uhm, so... a stressful situation for me would be if I am trying to deal with problem or situation and I can't see the way to fix it. That I can't see how to resolve that problem [...] [P23]

I think... the most stressful situation for me would be if there was an exit, and I had to try and get to that exit, and no matter how much I tried to get there, I could never get there. And if there's someone chasing me at the same time – that would be the most stressful thing. So if it felt like they're always just about to catch me, and it felt like I was always just about to get to the exit, that for me would be incredibly stressful [laugh] [...] Uhm... I suppose, uhm, so... when I worked to that rental company my, my, my main responsibility was to ensure that all of the customers that requested vehicles got the vehicles they wanted. So using the previous analogy of not being able to get to the exit and having someone to chase me, I think chasing me would be the constant demands from people always asking for cars, and I think the end be, be going, trying to get the cars but there never being enough. That would be how that would fit into that [laugh] So the goal would be have enough cars, there, I never get there, so there's not enough, and thing behind, chasing being more people asking for cars. Yeah. Does, does that work? [P23]

It was a struggle for him to, to get on top of that workload, and I think for the first two years that's how he found it. [P23]

[...] and then I would, eventually get to work, and then the manic-ness of that, of, you know, being pulled in million directions. [P23]

[...] particularly if someone's in a stressful situation is hard sometimes to see that there are ways [P23]

That was why, so a combination of those, constantly working hard, not eating enough made me to lose weight, and then I had no energy, so it was just a vicious circle of things that would, you know, keep going round. [P23]

I try my best to not get bogged down with the things that are causing me stress. [P23]

Because I feel like I can cope with it a bit better sometimes, and particularly if someone's in a stressful situation is hard sometimes to see that there are ways. [P23]

[...] my wife is older than me, so, uhm, she felt a pressure to be having children before the age of 40, uhm... [...] This put my wife under some pressure to want to have children before that age, and, uhm, so I felt that pressure too [...] [P24]

I, I think just the word 'pressure' comes to mind, really. Uhm... and I think for me stress is... I suppose thinking about obligations that I have to do, and, uhm, yeah, maybe don't want to do them, or, but I have to do them, I suppose. [P24]

So I think, you know, even as I mentioned, whilst at the beginning of this discussion, you know, I've, culture pressures, so for example just being brought up in the family, and in this country... there's, in my mind, this is a real pressure that you have to get the child to school on time, I don't even know, nothing would happen bad, that, that's bad if the child didn't get to school, you know, she was half an hour late, nothing, there would be no problem, but I think the cultural pressure that I've accepted, uhm, just, just over time, really, uhm... [P24]

I think there's a big pressure on parents that I, I don't know if it's a real one, or, or I perceive it, but I compared, I, I perceived, compared to when I was growing up, there is a much stronger belief, uhm, that, uhm you know, children have to do well at school, and it is really important [...] [P24]

I, I think like I said earlier, stress is a pressure, yeah. So if I feel really stressed then I feel like a pressure, almost, uhm, a physical pressure over my, my head, chest [inaudible 20:06] [laugh] [P24]

I suppose, so for me, one of the most stressful situations I've been in [...] there were two particular situations that happened, and in those moments for me it felt like falling down the hole. Yeah, so I would say that, that was probably my most stressful moments ever and it, that's how I felt – falling down the hole. [P24]

Uhm, whereas then sort of more negative stresses, uhm, you know, like if, if we're really late for something at like school, or work, that just feels like pressure, and, uhm, I feel a sort of, almost a physical sense of something pressing in on me a little bit, I suppose. [P24]

She wants to be a judge one day, so she, she's developed her argument sort of skills quite a lot, so, uhm... It felt unfair, and, and, uhm, unbalanced, the power had shifted towards her somewhat [laugh] [P24]

Uhm, so I couldn't just go off after work and just do whatever I wanted, and that was that pressure that I finished work, straight home, and, you, you know, making sure... [P25]

Now that's... sort of thing that will stress me. Because that's like my independence and my... if people take away my independence from me, I find that stressful. If I'm... I am... I don't like being told what to do [laugh]. I'm a bit of a free spirit and I like to do my own thing, you know, so if, if you would do that then I find that stressful. When I'm stuck to a routine, I have no choice what' I've got to do. [P25]

It's when I struggle and I can't do things, and I'm having to fight for my right, basically, just to get through things, you know. [P25]

And if people are stopping me, and are putting barriers in my way through no fault of my own then that's when I feel angry, and upset because it's, you know, that I'm fighting all the time to, to just get through. [P25]

So then, they're making me, you know, like I can't cope, I'm struggling, and then I don't get help so then I get quite angry with that. [P25]

But now, I think it's mainly, my life it's been people or situations I've been in that, or like, I don't feel like, if I'm feeling trapped but that's like I'm quite a free spirit, so I like to be, I like to be there and everywhere rather than sitting just in one a spot [laugh] [P25]

Or if they'd had a drink or they'd not had a drink, or they, you know, had a bad day at work, or, or something had happened to them, you know, and you, you just can't control that, and, you know, it's trying to get out of it because then they'd make you think it's you. [laugh] It, it's, you know, they make you think you're mad, and you're the one that's crazy, you know. [P25]

It's got worse as I got older, and one of these, my boyfriend that used to, he made me go to Alton Towers with him, and he made me go his rides and I was petrified. [P25]

Uhm, the fear of danger, and being trapped. You know, sort of not being able to just walk away, and perhaps being in a room, or, or something. I'm not very good with small spaces. So... anything that's like that, and the small spaces I can't just walk away from, uhm, you know, that would... you see it all on the news and think... you know. [P25]

That, that, I was petrified, and... I couldn't run off because I was, I was that frightened. And that stressed me out because I didn't enjoy, I couldn't enjoy it, I didn't want to, to go. I just wanted to run away [laugh] [P25]

I'm just thinking like, well what if I do get tired, or anything, because I have moved in with my boyfriend but he rents his house out, so there's five older chaps that live there, so sometimes I can get a bit overwhelmed with, you know, you'd find that a bit hard to adjust to when I first moved in, I mean it's temporary while we sort out. [P25]

So the only thing I could do is sort of like, you can look but in the end of the day you're stuck there because until you get another job, you, you can't, you know, you've got bills to pay, you've got commitments [...] [P25]

Yes, so I think if it's like I said, I can't deal with it, and I can't get through it, and I can't get out of the situation [...] [P25]

[...] there's stress like looking after your parents and having that burden of, of, you know, living with your parents, and, and that, you know, you couldn't have the freedom to just go out. It was, it rose most of, of my life just evolved around them, and, uhm, I went home this weekend, and it

was like, you, you know, because it's, you think oh, anything could happen to them anytime, [...]

[P25]

That's what I, I, he would point there at my neck, so if I couldn't... I sort of... kind like you were carrying a weigh on your shoulders, this sort of thing. [P25]

[...] but when it's stress it's like the pressure is constant. So, well, to me, if, you know, if it's, if it's going on and on. [P25]

Yes, so I think if it's like I said, I can't deal with it, and I can't get through it, and I can't get out of the situation [...] [P25]

And that did cause me a lot of stress, actually, because I was petrified [...] [P25]

And it was just sort of, I just got so... wherever I went I felt like people were coming up against, coming up against, you know, issues at work, at home, because of my mum and dad, but that's me because I was an adult in, in like I said, and that's really, you know, everything was like that.

[P25]

I was worried enough about leaving my parents, it was a massive weight to, to leave my parents, you know, to make that decision to move and meet the best. [P25]

Which is just sort of, like, I suppose, it's kind of insecurity but whenever I was in public spaces I would just be really petrified, like I'd become quite petrified. [P26]

[...] the analogy works in every sense and ways because it's this outside force that would ultimately mean that I would just be back to square one, emotionally, like emotionally speaking, because obviously if you go for like a month and you don't have like an, any kind of episode, or something, you think 'oh, I'm fine, this is fine, I've got this', and then, you know, if that happens again, you're like, you know, there's a bit like a kick in the teeth for you, because you are like 'I don't want this to happen anymore'. Uhm... you know, if it some kind of social faux-pas that you've made and you... do you know what I mean, and it turns into something inside in your head, or whatever. Uhm... you're kind of constantly going through this cycle, so... [P26]

Working... well, getting up every day, and going to the job that you didn't want to do, ultimately. Uhm, being in a really stressful office environment, you know, having a responsibility of a family

when you know that you're, the money that you're bringing into the house isn't, is coming from means you just don't enjoy, and you rather not be, you know. [P26]

Uhm, I suppose, being stressed is a bit like being in... one of those like medical, you know, the... [showing with hands being strapped to a chair] when they tie you up, and, uh... when you're kind of incarcerated, when you in one of those, it's a bit like that, I suppose. Uhm... you know, just trapped, kind of trapped inside of yourself, maybe. [...] Uhm... you know, having to kind of put on a persona for, for, for your career, uhm... that's all I would say. [P26]

But, uhm... in a way, I suppose, because when it's one of those type situations I really just push through and plough through because I know they're stressful for everyone, and it's legitimate stress, and I'm telling myself it's fine, it's fine. [P26]

Uhm... well, I mean it must do to some degree. If stress becomes a kind, becomes something that controls you, you know, I mean it must influence the decisions you make, and the pass that you take in life, if, if you're house-bound by, by anxiety, then of course, you know, you know, in a way it's influencing everything you're doing, really. [P26]

### **No/low stress is freedom**

[...] it's fine when you have a good balance, and being able to do lots of different things that you like. [P1]

I'm just trying to thing back to my sixth form where I had, a lot people were stressed, and lot of people who didn't seem faced by anything [...] they'd just get about their life as they want it, smiling, do whatever [...] [P2]

It's a really nice feeling not having, not knowing that something's going to stress you out, uhm, you can just go about your life, uhm, yes, it's a really nice feeling. [P2]

Something like a perfect life where you could live where you wanted, where you wanted, as much money as you need, you could do every... no responsibilities, you'd do what you wanted, take things at your own pace, something along those lines, I imagine. [P2]

I think, the lack of, not lack of responsibilities because there are always some responsibilities, but, uh, if I just got a big assignment out of way I know that that's done, I don't have to worry about the exam for a while, I can do other things with my time. Uhm, knowing that I can spend time on

whatever I want to rather than doing an assignment, or, uhm... I can just relax. So it's just a, like a freedom to do whatever, and that's what gives a good feeling. [P2]

I can lounge around, I can move slowly, and I can, I can do what I want, it doesn't matter, I don't need to plan. You know, if, if you're relaxed you kind of 'what we're gonna have for breakfast?' – 'who cares? it doesn't matter'. You don't have to plan, you don't have to think about today, or tomorrow, or the day after, I can do what I want, it doesn't matter. That to me is relaxed. Not having to use your mental energy to plan. [P3]

They wouldn't... they wouldn't have, this sounds really stupid, but they wouldn't have massive rucksack. [...], and this old, old person would, I don't know, they just, doesn't matter, take a little handbag, take nothing, doesn't matter, because they can go home and it doesn't matter, you go home, and come back, who cares, you have all time in the world, you want to do what you want with, doesn't matter. [P3]

I'm not mentally writing it in because it makes me feel better and less stressed, like not too stressed if I know I've got time to do uni work which I have. But knowing that I have the choice is so much less stressful for me than knowing 'on Thursday at 10 o'clock I have to do shopping', or something like that. [P3]

And that's really handy, obviously, doing it from home because it's quite flexible, and if I needed to do something I'm going to do that, then carry on work. Uhm, so that's not too stressful, really. I, I enjoy that. [P5]

I can cope with, uhm, what I have to achieve in my own time. [P6]

I can decide what I want to achieve within a time frame that is acceptable to me, uhm... I listen to what [wife] wants to do, uhm, I'm not always mindful of it, I'm sort of, I'm good at, uh, selective hearing about what has to be done when [laugh] because I feel more comfortable setting my own agenda, really [P6]

But they are good stresses, you're not doing it... you're doing it of your free will, you want to do it. [P7]

I think, you know, bringing in the people, when you need people to help you not be stressed, or having space to yourself, when you know you actually need to focus on a thing. [P8]

Uhm, it feels nice because there's no sort of time confines to do anything right then [...] you feel like the time is yours a bit more, uhm, or, uhm, that there's no pressures to do things, uhm... [P8]

[...] it's almost, they, they wouldn't conform to society, they would just kind of be themselves and just enjoy life. Because they, they would have no stress about what people thought about them. So there'd be, they'd literally just do what they want, uhm, appearance-wise [P9]

[...] I kind of like associate a stress-free life with being able to do what you want, being able to socialise when you want, and just living the life, yeah, as if like, I don't know, you didn't have like responsibilities, or, or things that you need to, to do as such [...] [P10]

It's not plodding on , it's... yeah, most of the time, happy to me is just not being unhappy [laugh], I suppose. [P11]

So, uhm... and so I'm better off with my own, my, my own, uhm, you know... my own balance, if you like. I don't like it being imposed on me. [P12]

I've got this view which is probably making me tunnel here, but, uhm... if you can't see way forward, a solution to something, you have to have accept it, or else it's gonna be stressful for you for the rest of the time. [P12]

I think, uhm... sometimes if you deal with it in a right way, so like when, if you're in one of those situations like I just described earlier like the speech, if that's, that's the situation you're choosing to put yourself into, you know, you know it's probably gonna cause you to be stressed [...] [P13]

They've paid for her house, so she's mortgage-free, uhm, they've been able to do what they want to do, and not worry about having to financially pay for it. So, because it's obviously paid for. Uhm, at weekend they can go out together, because her parents will baby-sit [...] [P14]

[...] their younger generation, the youth, the sort of teenage youths, they have a lot more freedom, and they're very free and liberal, uhm, but they're allowed to have that space to perhaps do more liberal things [...] [P14]

Yes, you have to be self-reliant, I think. And I think you, well I suppose it's about having flexibility [...] [P14]

And also no... no one knew us [laugh]. You could do what you wanted. I'm not saying we did that, but like nobody knew you, or no one, I don't know, it was nice! [...] Uhm... I don't know, I just, you just felt free. [P14]

And I think you, well I suppose it's about having flexibility [...] So be OK, and I just thought 'oh, you've got that flexibility to do more or less...' [P14]

I mean, I'm lucky enough they have allowed me, I work very early in the morning, so I can just do school pick-up. [...] They are very flexible, they're very pro, you know, everyone's, you know, got children, and you know, we do a lot with Athens SWAN application, trying to improve, uhm, the quality within the university. [P14]

So... not having to worry about any finances, and be able to go, yeah we would just go to Disney, we'll be able, you know, not have to think about making those things that you want to give your children, not have to think about and just go – you know? we'd just do that. You know, you wanna go to the shop and have it? Have it. But not spoil them, you know, just to, to not to have think twice to, to do things [...] [P15]

Not overly. I think I can sort of take a deep breath, like little day-to-day things, overtired, but that's minor stress comparing to like a huge overwhelming stress. [P15]

Yeah. Uhm... to feel not under pressure, so you feel like you can just enjoy what you're doing without thinking about other things. Uhm... you're just able to be in the moment, I think, without being conscious of things beyond that moment where you are. [P15]

[My life is not stressful] because I've got, I'm a student, I don't have to get up early, I can just walk in to the university except I don't, it's not like that at all... uhm, but, yes, I, I mean I've got flexibility, I've got choices that I can make, uhm... [P16]

[...] we might think about people who, for example, are retired, they're no longer working, and therefore some of the stress, or a lot of the stress might be taken out of their day-to-day lives because they can kind of get up in the morning whatever time they want, do, spend their days doing what they like, uhm, and, you know, that, that must be quite nice, uhm, but then... [...] [P17]

Yeah, I, I think, uhm, there is something about the ability to kind of work when you feel like working, and not work when you don't feel like working which most jobs, obviously, would not let

you do, unfortunately. Uhm, but yeah, so say you are really tired and you want to sleep for a couple more hours and then be, being able to have a get up a couple of hours later and, you know, kind of working a bit more flexibly would probably be less stressful, but... yeah. [P17]

Uhm, don't know, yes, pleasant, calm, and things move along at nice pace in time, and, uhm, there's room for everything to happen, you know, life's quite broad, you can experience lots of different things and enjoy them, you know. [P19]

[...] it would be nice to say: we wanna go on holiday, we wanna do this, we don't have to save up for that, we can just go out and, and, and... enjoy life, so to speak, and... [...] being able to do what you want to do when you want to do it, uhm... [P20]

And, you know, I kind of had the luxury of being able to make that choice and go, OK, it's going to take a lot of my time but it was feasible. [P21]

But then he gets the benefit of being out of the, plan his life, how he wants to plan his life. [P23]

It was like my boyfriend was saying like on Thursday I said I'm going down to the beach, and then he was like 'oh, yeah, but the football's on and I want to get back on...' and I was like 'I'll go on my own'. Because... I said to him, I don't want to be sort of like kept in a time limit. You, you know, so now I think we are both adult, so I said you, you stay in, do what you need to do, behave when the football starts, and I'll go off to the beach, and I'll come back when I'm ready. And if, then we're both happy, aren't we, you know? So I think, and yeah, he's really good and, he's like really [inaudible 33:09] chap, he will bring me up, 'you're right?' you know, he'll make sure I'm OK, but he'd let, let me just do my own thing, and I went often collecting my pebbles, and I'm quite, uhm, creative as well, so I make some jewellery [...] so, you know, if I can just go off, and he [inaudible 33.32] me a room when I moved here, I've got a wonder room, that's what it's called, you know [laugh] but I can go up, I can do my crafts [...] and you see, I'm happy. [P25]

But sometimes I just need to go off, and just have that peace and quiet, and that calm, and, and just enjoy things that I want to do. [...] I just can go off and do what I want to do, and, and be happy, and carefree. [P25]

[...] and, you know, it's a really good thing for me, and so that was a big weight off my shoulders. [...] Because that's all well and good that I've been given this sort of reprieve [...] But she's being,

she's been so positive, and I think in a way it's been a good break for both of us to have a bit of space, you know, it's one of those situations, [P26]

I mean, I did it once but every now and again I will try to incorporate that way of thinking if I'm, say, at my desk, or whatever, I'll be aware of my breath, and relaxed, and that was, you know, the session I had... with her was really, really helpful. So... sort of everything kind of was a bit, was relieved. [P26]

And, uhm... sounds really cliché but there're times when I sort of felt [...] when it, when I feel completely relieved and at ease [...] I could really feel such a sense of relief [...] as if someone had cut open the back of the thing you were trapped in, and you were just able to take an off and walk away. [P26]

### **Lack of control**

But, you know, if you told me we're going to go-cart that would probably be about as far as I would want to go, a go-cart or a fast car, but I wouldn't want to do anything where I lose control of my outcome. [P1]

Things like lack of control over it, or uhm just blindly going into it all, doing these tasks. I think that's what builds the stress up. I think that control over... [P2]

Uh... I think, hands on the general situation [would help], uhm, if my room is really messy, then I'm going to the kitchen, and I find that I've got no milk, uhm, just basic things like that, things go in my way as such, then I'll be more stressed [...] [P2]

Stress is like running on a treadmill, and someone is constantly putting up how far you're having to run, and you can't see how far you have to go, you just have to keep running until the treadmills stops. [...] The treadmill just keeps going, somebody else is in control of your treadmill, you don't know when it's gonna stop, don't know when it's gonna get slower, or faster, you've just got to keep running, you don't have a choice. [P3]

[...] but then if, as soon as you put in too much, then it's like 'oh my gosh!', hands in the air, I don't know what I'm doing. [P3]

It's, it's like this need to try and re-grip, and re-grip, regain control [...] [P3]

[...] like it is, everything to me actually comes down to stress, and I think again it's that control stuff, oh my gosh [...] [P3]

The only thing I can think of is just I don't think everybody has that mental bubble. I don't know whether that's specific to people like me who are stressed all the time. Uhm... yeah, just that I think, I think if you're a person who is stressed a lot then you develop the bubble over time, and you learn it as a coping mechanism. Uhm, you tell yourself that you have this space in your mind that's yours, that you can control, so that you get less stressed. [...] Because it's your space and you are in control. Other things are gonna make you more stressed, because it's your space and nobody can touch it. And I think that people who are perhaps more relaxed don't have that box, uhm... [P3]

Because I feel like I'm no longer in control of what's happening, so yeah... [P4]

[...] something gets in the way, and I'm not able to meet that goal, of what I expect, then I feel like it can take over because all other emotions suddenly get involved [P4]

Yeah. Yeah, like, you know, if you've got like, uhm, like behind a desk or something, you've got all these wires going to different plugs and stuff, and sometimes you have to look for where the wire's going, where it's gonna end up? I feel like that's my head, if I've got lot, a lot going on [...] [P4]

So it's, it's, I think it's about feeling like you can take control of the situation, and... like for me, the, the way I know it I can manage is if I've got control of it. And if I feel like I lack control in what needs to be sorted, then I'm not, no longer able to manage it, and my stress levels increase. [P4]

You feel quite tense inside, and for me that's how I know that, uhm, you know, that I'm not at the right level that I should be at. And I think that's getting on top, sometimes, of you. [P5]

[...] maybe things inside you just take over, your head takes over, and, and you get into a situation where really, if you were trying to be calmer about it, you'd most probably wouldn't be quite so anxious, or stressed about it [...] [P5]

Hmm, stressful situation is like... I don't know, driving down a motorway and not having any brakes or something sometimes [laugh]. It would be, I think, sometimes you just feel like, if you get stressed, you're just out, perhaps, out of control slightly. [P5]

[...] sometimes the situation just takes over [...] [P5]

I think sometimes things take over, and you just get into that situation, and you make yourself feel more stress than you should be really. Because you, your head takes over [...] [P5]

Because it's self-inflicted almost, the stress, I think you bring it on yourself sometimes by letting a situation get out of hand, so you're not coping with that situation, perhaps, in the right way. [P5]

So I think that's how, you know, you don't, situation gets out of control, where you should perhaps, if you thought about it logically, sensibly, and did it calmly you perhaps wouldn't need to get into that... manic mode. [P5]

Your worrying takes over, so you blow something out that is, perhaps, a small worry into something big. [P5]

Your body just takes over, and your head takes over, and you just think... [P5]

Yeah, well, yes, I, I know I can find a solution there, because I'm the one that control stress, and therefore it's not, it's not like it was when. somebody was directing stress towards me. [P6]

So it could be a control thing, stress then [...] [P6]

Yes, that's a selfish attitude, because, uhm, as human... it is natural to be protective of the ones close to you. So protection from getting run over we can control, protection from the death we can't control [P7]

So, if you do, if you don't quite know... everything, the fact that you're also, they're like, OK, this week you're going to this place, and then this week you've got, oh, you've got holiday last minute, and now making you get to this place for this thing, or in, if, if you're not in control of how it's, so somebody else's planning, if you wanna, kind of inconsistent and difficult way. I think that can be quite stressful too... [P8]

But it's the stress of me, myself doing everything, so it's quite tiring, because you're sort of putting everything in bags and moving it all alone, and then prepping the house, but it's also things out of my control, but I'm trying to control, ready for them to come back, so... [P8]

[...] and it's kind of very much in my control, so I wouldn't say it's particularly stressful. [P9]

Because then I'll have someone, for example my mum is constantly asking me about my college and I'm like 'it's fine, I have it under control'. And then, it's, it's almost a constant... like she's constantly like 'you need this, you need do this', and I'm like 'it's fine'. I'm doing it, I can do it myself. [P9]

And I don't like the, the, I think that, that kind of a concept, there's a time restriction on it, and I'm waiting on, I guess, someone else, and that would be like the most stressful situation for me. If there's like having to rely on someone else, in a time-restricted state, that's really stressful for me. [...] Yeah, mhm. I think that's the fact that I can't do anything, and I have to rely on them, and then I know that in my head there's time restriction, and it's kind of down second by second, and there's each second passes, that all that make me more and more stressed. [P10]

Uhm... I guess, it means, it means to me to be in a situation, uh, that is out of your control, [...] and it's like basically being in a situation that's out of control [...] [P10]

Even then, like, I'm sometimes reluctant to say what's on my mind and what's stressing me out because it's, again it comes back to, like, that independence, and like control of things, like, I wanna sort this out myself because I know I can do it, and then by doing so, like, in my head, like, I achieve something. [P10]

If there's like having to rely on someone else [...] I think that's the fact that I can't do anything, and I have to rely on them [...] [P10]

I wouldn't... I'd, on the point, just like, I guess, I'm like, I'm quite relaxed in fact that. I won't let things bother me [...] [P10]

Uhm... I'd say, like, there's like a lapse of, like, control in fact, but then maybe they can't control like everything in their life. [P10]

I think it's being in a situation where I have no control over the matter whatsoever, although I want to take control [...] Totally out of control [...] [P11]

Not in the same situation, but their stress might be something else because they've got to take control. [P11]

Because if they think they're in control, uhm... so I wouldn't have thought that they would think themselves in a stressful position. [P11]

[...] but I think the hostage situation, because that's also out of your control. Well, out of my control, I think. And you're paid, usually, to be somewhere [laugh]. No, that's a side-line. Uhm, no, I think, I think to me a hostage situation would be the worst [P11]

[...] uhm, other people like, you know, you can either let it take over or not. And I've learned don't let anything take over. [P11]

Uhm... I think now I've said it, something about not being in total control, and I think that is 100% control. If you're 99%, you know, even 1% control, you're not that stressed. You've got to let out [close? 47:44]. I think it's, now I've said it, I think it's being totally out of control [...] [P11]

Uhm... I was gonna say I don't let myself, but then I don't think you can choose when you get stressed or not. [P13]

Yeah, that's true. But then is it, is it a choice to be stressed? [...] I guess you don't choose if you're stressed [...] [P13]

Maybe things are out of your control. [P15]

So, to me a stressful life would maybe be things that are out of your control. [P15]

And I look back at that time, and I think that was horrendous, because so many things were coming from different angles, that were completely out of my control, anything that I hadn't wanted happening at all [...] [P15]

[...] I think since that I thought, OK, you need to do that positive self-talk, and just sort of say to myself, just get a grip, you know? [P15]

Uhm... knowing that I was prepared, and had the PowerPoint and that everything was in it, and in control of what I had to do, really. And I am a little bit a control freak, I need to know everything is there, and it's... you know, everything is done to the best of my ability, and I felt OK. [P15]

I'd thrown myself into career, so that I could get to work and push on, and actually almost had a completely different identity to the, uhm, sort of being really in control of my career because in my personal life I felt like things were out of my control. [P15]

Uhm, I think it was just so many things out of my control that I, I knew I couldn't fix it, I couldn't do a PowerPoint or something that would, you know, I knew it was kind of beyond repair [...] [P15]

Because I think it's the feeling of being in control of it and not letting outside factors take control of you and increase the feeling of stress or pressure. [P15]

Uh, I think, when you're not in control of something, that can be quite stressful. Uhm... so, which we're often not, so for example, I think at times driving can be quite stressful because of the actions of other drivers. [P16]

[...] that's because it's out of my control, you know, but that is my choice, I've decided to work with organisations to help me with my research, so I'm in their hands. [P16]

[...] I've recently had some work done in my house which has stressed me out quite a lot! Because it's just the mess, and the lack of control, of being in control of the mess [...] [P16]

Feeling like I'm not in control, got too much on, not eating properly, not having enough time to do what I need to do – that would be stress for me. [P16]

I, I do feel happier when I do know what's going on, and when I feel I'm in control, that's for sure, so... but... [P16]

[...] I do definitely associate stress with control, being in control, yeah. [P16]

When I think of stress then inability to control pressure. Sometimes real pressure, sometimes pressure is not there. I think... pressure you can put on yourself, and pressure that others put on you. [P18]

It's... I tend to become stressed... when I feel I have a lack of control. [P18]

[...] so for me that's another example when I feel stress because I feel like I'm letting other people down because I'm losing control, and that's the responsibility again [P18]

I: If you were to compare stress to something, like if you were to finish a sentence 'stress is like...' something, what it would be like?

P18: Losing control. [P18]

But I think [inaudible 16:14] main thing for me losing control, knowing how to handle manipulative others, particularly how confidence in my, myself because again, as an academic, I've had people before say '[participant's name], you've got every right to stand up to that person just saying no' [laugh]. [P18]

Uhm, and you think, yeah, I haven't got control over it but ultimately I get stress when I feel like I haven't got control over something, and I'm taking too long. [P18]

Uhm, so not, not coping with, uhm, with the responsibilities, or with workload, or with, or with a relationship, so letting things get on top of you, I think, uhm. [P19]

[...] yeah, what else cause me stress, I don't know, I mean ordinary life sometimes, having too much to do, some days, some days not, not keeping on top of the things [P19]

Letting life get on top of you, letting, letting work or commitments, or your own situation become too, uhm, become too heavy, that you can't carry anymore. [P19]

For me, I'd stress, you know, little things that, uhm, are beyond my control sometimes, but, uhm... [P20]

[...] it's a lot of locus of control things, where I can't, I'm being told what to do, and I have to do it [...] But also, with the feeling of being told what to do in terms of students from people who aren't actually daily in touch with students. [P21]

It's when, when things are happening, it's kind of, things are out of my control. [P21]

[...] it's quite a lot of the smaller things, the silly things like, oh... for example, yeah, and again, and it's either about things, it's, you know, things that I disagree with, but have absolutely no control to influence [...] [P21]

And I'd get really crossed about it, you know, because I just had no, no spare capacity to deal with things, so I was, I was in a position where my ability to, to deal with what was happening around me, that was outside of my control was really impaired, because, and, yeah, and it was very much reduced by the state I was already in. [P21]

And also, sometimes it's having to do things that, you know, outside of your control, it's somebody else's instruction to do something that you absolutely disagree with, like the, uhm, like the, uhm, exam, re-sit at home thing, and the... this, you know, there's, that, that cause a lot of stress, I gather. [...] And, yeah, all, I mean, somebody else telling you how to do your, your job. [P21]

I wouldn't, being in control of my own of my destiny a bit more in terms of things I have to do, and I don't have to do would be nice. I could do without that one. [P21]

So I don't, I think it'd be pretty hard to tell with those, whether it's a kind of, you know, I'm fine, I'm in charge, it's a fun! [P21]

But yeah, it was really hard to... sort of take control and deal with it. [P21]

[...] so it's about being out of control, I would say. Or feeling out of control. [P22]

They become, again, they become stressful, I would say, you begin to feel like you've got no control over the situation, or you feel very, very uncomfortable with it. [P22]

Well, uhm, stress comes from, like I said before, from I think people feeling out of control of a situation [...] [P22]

I can go home and not... feel stressed. So... I, it's sort of within my control. [P22]

And then once you've got through it, you've dealt with it, you control the situation and then you feel better for it. [P22]

It was a struggle for him to, to get on top of that workload, and I think for the first two years that's how he found it. [P23]

[...] I think it would be a life where somebody doesn't have control over, over their situation, but I think that, that, for different people would be different thing. Whether that control was in their own head, or whether it's a reality like, for example, going to prison, or something like that. Uhm, yeah, so I think it's, yeah, something stressful would be where somebody just doesn't have control over their life at all. [P24]

Yeah. I mean, I think, so maybe another example... maybe a few years ago I've started going to a club where you practice public speaking [...] and so I was putting myself through that, I was choosing to do that, of course [...] [P24]

When I think of stress, something that, that I can't handle, so I can't deal with situations that are out of my control.. [P25]

[...] but I'm quite emotional person, and that, I would just cry, you know, when I couldn't deal with things, whereas what happens when I could deal with things, a bit more in control which, I don't know if that's a good thing, or not, but, but yes, normally when I was overloaded, uhm, my university work overload, that, that did stress me out because I found that difficult. [P25]

I, I felt like... to me stress can make me feel, if I can't handle a situation, I can't deal with it, then I feel I'm out of control. [P25]

I... if I feel stressed then sometimes I can feel frightened. Uhm... I think it's I'm out of control. [P25]

So that was my fear that was something bad was going to happen... that I couldn't control. And I think when I feel out of control that's, that's a fear to me that I can't, can't control everything, you know, and I can't control everything in life but certain things, you know, most people... but so, yeah, I do feel, when I feel stress I don't feel so much anger, I feel fear that I'm out of, sort of out of control. [P25]

[...] so that was quite stressful for me that I was living on a day-to-day basis on like treading eggshells because I didn't want to upset my partner and that, you know, you try everything and, and it just depended on their mood. [...] Or if they'd had a drink or they'd not had a drink, or they, you know, had a bad day at work, or, or something had happened to them, you know, and you, you just can't control that, and, you know, it's trying to get out of it because then they'd make you think it's you. [laugh] It, it's, you know, they make you think you're mad, and you're the one that's crazy, you know. [P25]

It's just like out of control. If you are out of control. Do you know, I can't... if I can't deal with it, and I can't cope with it, then I feel totally out of control, and that's what stresses me, something that is out of my control [...] [P25]

Uhm... so... yes, that's how it feels like I, it just feels like, you know, I'm just not in control... [P26]

[Laugh] And, and that can cause a lot of stress when you work long time, you know, when you're at work all day, forty hours a week, and you've got [inaudible 27:08] on your case all the time, and that... so things like that would make me... but, yeah, and I couldn't control it because I needed my job. [P25]

Uhm... well, I mean it must do to some degree. If stress becomes a kind, becomes something that controls you, you know [...] [P26]

Uhm... but, you know, I had, I think I had an element of my trust broken from my parents, my parental give, you know, person who is supposed to take care of me, so that's where a lot of

things sort, I think, maybe spiralled out of control when I was older, was just a lack of trust in human, in anyone, really. [P26]

Yeah. I think it must have done, and it was, I don't think it's until I look back now, and in a new, fresh situation, and I realise that that plus this maybe has combined in kind of me being more... just more in control. [P26]

Uhm... so... yes, that's how it feels like I, it just feels like, you know, I'm just not in control... [P26]

So either I, I'm in control of it, or... or as I've said, lately it's more like it's not even a thing anymore. [P26]

### **Lack of self-control**

[...] I got it would be 'OK, this is happening, I have to do this to sort out', uhm, it's a more calm manner, whereas, especially she's less controlled with outbursts of emotions as such. [P2]

Uhm... they start working harder, the work they're doing, I suppose, uhm... in a less controlled way... [...] [P2]

[...] if they were in normal state of mind, uhm, they would say 'no, I'm not going to eat the whole bar of chocolate', but if they're stressed then they would just go and eat it. They wouldn't think about the consequences of doing so. They... yeah they kind of lose, uh, inhibitions of it, and do what they please. [P2]

[laugh] The only time, I think, you'd know is if people start getting clumsy when they're stressed [...] [P3]

I think sometimes it benefits for me from, from re-surfacing my thoughts, they can run away, and they can look too far to the future, and I can't stop, I can't stop panicking about getting to there [...] I'm trying to rein back the long-termness. Can't happen in five minutes? Well, that's fine [P3]

And I get it told a lot, uhm, well it's when my stress gets really high, like almost uncontrollably high [P3]

Though I think the lack of sleep, I know that I can get quite... not short-tempered, well it almost is, almost like a short-tempered when you find fault with things, you know, like something happens, the silliest little thing may happen, you know, like drop of glass, or break something,

and that will get really, I will get really crossed about it, you know, or if, if I, something doesn't work at home, and you so get 'oh, for god me sake!', or you get into the car and something happens with that [...] [P5]

I'd known it certainly when [husband] was working that if he had difficult times, you could tell he was stressed because it'd, he'd be short-tempered [...] [P5]

[...] but I think people perhaps will know because I'd be upset about certain silly things, or whatever. [P5]

It's, uhm, it's automatic, when you perhaps don't think enough. So you just jump into that, straight into that manic mode, almost, when, when you're, when you feel stressed, then you're almost gone manic, uhm, without going to a stage, perhaps, of actually trying to think about it first. [P5]  
individual responsibility

Well, I think, yeah, I think controlling your emotions, you know, are my way to control stress, really.  
[P6]

What would I do? Uhm, I wouldn't have a knee jerk reaction, I would think about it through my mind first. [P7]

[...] she gets [moaning], it's almost like a headless chicken. [P9]

[...] whereas she would just go in and then start confusing herself with getting, you know, uh, getting stressed out about trying to do different things at once [...] [P9]

Whereas stress is, to me, I think that's a little bit more long-term, and a bit more insidious, you don't notice it's creeping upon you until you go mental, you have an argument, you punch a desk, hopefully not a colleague [laugh] [P11]

So although I'm having a cat and dog, fierce row with somebody, not that I do anymore, but at the time, or a disagreement, uhm, I could turn to experts and literates standing next to me, and just be terribly civil and belying funny, or whatever. [P11]

And it's like a pressure that's building up, and if it's allowed it's gonna explode, isn't it? [...] he's like, he says he's, uhm, he's, uhm... bonfire night, we put fireworks in, uhm, in, in an old bin, right?  
[...] And he said, it's all there, you know that if that spark gets there, it's gonna blow up, yeah, I blow up sometimes like that. [P12]

So... if unmanaged, or, uhm... You go and have your red, don't you, don't we? [P12]

I think it might be, it's... it's difficult because obviously feelings are from like chemicals and stuff released in your brain, but you can't really control that [P13]

I'm a very emotional person if like, I just, oh, I have no filter for anything, so even what I say, or, uh, my emotions, they'll just come out if they want to [laugh] With no, I have no ability to stay full of them [laugh] [P14]

No. I wouldn't say it [getting stressed] was easy, but when it does happen I'm explosive, which is a... so I should probably learn to address it, and I don't [laugh]. Because when it gets out which I'm really like, all I say is 'good morning', and [laugh] [hissing] that way [laugh] [P14]

Uhm, I'm just trying to think what I do, I suppose I'm trying... sort of regulate my breathing a bit, uhm, and just trying... kind of there's a bit of my brain that's really panicked, and I'm trying to, uh, get the more rational bit of my brain to kind of, uhm, you know, hit the non-rational bit on the head with the hammer. Uhm, I'm just thinking about two little men in my brain and like a fight. Uhm, and so trying let the kind of calm and rational bit, uhm, dictate what I'm doing rather than the anxious, crazy bit, yeah [laugh]. [P17] calming down

[...] I get paid more than I ever have done but it's that month which is fine because I'm good at managing my money but it's just a bit funny because it's like working from home, another one, I just, I could buy like a Starbucks every day, I wouldn't want it buy, it was like, god that's my, I can literally, like the amount of emails I get free, like SportPursuit - buy this new [inaudible 27:15], Amazon – buy this new book, only 20 quid. And that's one of things, that's something I never had before, and now I can spend money any time of the day.[...] I buy a book and Starbucks every single day, what's that for the month? Alright, that's not quite as bad, I could probably get away with that but I think it's when you've got a mortgage you pay, which we're paying comfortably, you've got insurance on a card that you pay, which we've got one card between us, it's fine. All these other things, it literally feels like money's disappearing all the time, professional membership. [P18]

Anyway, but in that perspective I think it's being able to have things on [tack? 28:53], and that's where you've got to have control again. Uhm, it's like controlling your workload. I've got to have

control because I can buy or gamble on-line whenever I want, 24/7. I've got to have control because I can do what I'll pretty much want in my job. [P18]

I can't, I don't have any self-pace, and that's the same for work sometimes when I'm stressed [...] I cannot pace myself. I think 'it has to be done now', 'you're a slow person', do it now, do it now, do it now. [P18]

Uhm... so I broke down people's game, and you could tell when you were psychologically winning with someone because they, they'd lose composure. [P18]

Because it doesn't work all the time, uhm, and I'm not, I'm by no means mastered any ways of controlling the stress, and of knowing that's stress. Uhm... it's... for me controlling is that, always coming back to the planning [...] [P18]

I think it's mainly not controlling your anxieties. [P18]

She, I remember, she put something not so long ago saying... 'Everything waits till tomorrow', it was, I think it was like advice to ECRs, and she said 'Pace yourselves, as long as you can focus on what you need to do today, everything else will wait'. [P18]

[...] I'm working here and I try not to get emotionally involved because I think that's, that for me... brings, brings, brings others' stress for me. [P20]

[...] you know, it [stress] can be building up and getting out of control [...] [P21]

You know, do I go [snapping fingers], or do I go berserk [P21]

Uhm... I'm, because I'm easily angered, I would say [my son] will know when I'm stressed because I'll come over and I'm arrrrggghh that he hasn't done the dishwasher... [P22]

I'd just go into this almost auto-pilot kind of mode where I would just... deal with things as they came but... [P23]

Yeah, so, uhm... that was then something that I had to keep my eye on myself because if I, if I've done something like that, I would then be annoyed at them, and also the situation, uhm, an I'd have to make sure I didn't say anything inappropriate. [...] they're customers so you know that you can't be rude to them. So, you at least have got that block. [P23]

You know, you think, you burst into tears for no reason because you just can't handle anything.

[P25]

And then one day I'll just flip, and then [laugh] I don't remember, and that's how, then all my stress comes out [...] I'll scream and shout, get it all out of my system [...] [P25]

You know, you think, you burst into tears for no reason because you just can't handle anything what's going on. [P25]

You see, I tend to keep going, and going, and going, and then I crush. [P25]

[...] I think stress can quite easily turn into something more and bigger, and become, you know, very quickly out of control. [P26]

That [social anxiety] probably should have been a phase in my teenager years but then just sort of spiralled out of control. [P26]

Well, actually, funny enough, there was one of that I used to use quite a lot, and it was pack of cards, so there, there were days when I felt like I was fine, all my cards was stacked up on each other, and it was fine but it was fragile, you know, one, and as often would be the case, one sort of strong wind too much in one direction, and all the cards would fall on table, and there would just be a mess. [...] the analogy works in every sense and ways because it's this outside force that would ultimately mean that I would just be back to square one, emotionally, like emotionally speaking [...] [P26]

Uhm, I mean, I think the more I'm in control of my stress, as I get older, I feel like the levels of stress that I feel now are normal [...] [P26]

Uhm... I think that... I think that in a way, in a way the kind of community that I kind of rubbed shoulders with, with the meditation class I went to, uhm... what... I felt like they were a little bit of blinkered in a way because there was, they were so kind of... in control, they kind of won, I mean, I suppose underneath they might have been feeling the same things [...] [P26]

Because when you have one, and you know how bad it can get, you know in anxiety situation like that, it can quite easily spin out of control, and you don't wanna be the person who's like 'I'm sorry', you know, in tears, leave because I'm having a moment, uhm, you can't do that [laugh]

[P26]

And then of course walking up to the actual place, the museum, and all the feelings coming back I knew I was gonna go through, and I can't really avoid what's gonna happen, it's like a train wreck , you know... [P26]

Like it's, it's logical, and, you know, not dwelling on it too much, not turning it, you know, don't turn it into something else, you know, not doing all of those thing when you get older. [...] And just letting it kind of wash over you more so than honing in on it, and honing it on that event that's coming up, that's gonna be stressful, those things... [P26]

### **High demands**

[...] all along is probably 10-15 steps with to going on a holiday, that are all, you know, stress-builders, and you know: 'have you got your passport?', 'have you got your tickets?', you know, 'have you got your suitcase all properly packed, uhm, you know, if you paid for your parking at the airport, uhm, you know all of that kind of stuff, that those... [P1]

And, and in terms of different kinds of job, I think there are jobs out there, that if you said to me, this is going to be your job, things like a doctor, or a surgeon would be very stressful jobs to have [...] Uhm, so I think they are always on the cast of potentially saving someone's life, or losing someone's life [...] [P1]

I think, I think even stuff like going on holiday can be stressful. Now, you've got to get the currency, you've got to pack your bags, you got to get to the airport on time, you've got to be up to check in, you've got to make sure that you don't spend too long at duty-free that you miss your flight, you need to know that when you get to your destination there's gonna be something to get you to your hotel. [P1]

Kind of probably sitting in my room, trying, uhm, working on my computer, drinking coffee, some, something like that, trying to get my assignment done, or something like that. [P2]

Uhm... particularly situations where you'll be rush for time, and where something is expected of you. For example when you're working on a group projects, and you're behind, you'd probably be stressed, you don't want let people down, uhm, or... if you've got a really busy day, you've got to get everything done, that would be a stressful day as such [P2]

[...] if you've got a really busy day, you've got to get everything done, that would be a stressful day as such. [P2]

Uhm, judging from people on my course at the university, they all say they're stressed when they have their assignments due, or when they're busy. I think that's a kind of general consensus [...] [P2]

Uhm... I think probably back in the sixth form it was stressful for me because of constant homework, constant tasks to keep doing whereas at the university the assignments are more spread out, uhm... always having something to do on a time limit. It would make things more stressful. [P2]

Uhm, due to the nature of my job there aren't too many hours, so it, it doesn't add in much stress, at least now. Uhm, but in the sixth form I say my life was more stressful. Uhm... studying for A-levels and having a job was quite difficult and that's because I was at school every day, had work to do, and then I had my teaching as well. That was harder than it is now. [P2]

Uhm... typically about I know it's a cliché, but a million thoughts running through your head, having to do everything at once, uhm, because I'd say typically feeling stress about [laugh] this isn't really help, uhm... yeah, feel, feeling a bit overwhelmed, there's a lot, a lot on your plate as people would say. [P2]

Yeah, uhm... she's always doing something which is a, a big thing. [P2]

[...] and the deadline was looming, uhm, and I knew I had to work, put into a lot of work to get it done in a relatively short amount of time, and I need to do other things as well, I had to go shopping, I had to do my washing, things like that, uhm... I'd be having all those piled on, waste stress levels, such. I think it's just having a lot of things to do at once. in a short amount of time. That's what stresses me out. [P2]

I'd say mainly there, I think it is the time pressure, having to have something done by a certain point, or criteria, something uhm... yeah, having something expected of them at certain time and being, not being able to do it, perhaps. [P2]

I think, I'd just told myself that I have to get them done. I, I have to go shopping to be able to uhm eat. I have to do my washing, and most of all I had to do my assignment, so I'd get to the university.

Uhm... things I have to do, and if I slack and don't do them then there'll be repercussions. I won't be able to eat, or whether there're clean clothes, something like that, so I have to them, but I have to do put in work to as well, if that makes sense. [P2]

I think I just told myself I have to. Uhm... if I say that I wanna get this done, or I wanna get that done, then it like I have to do them. I'm not really sure why... Actually it's something that has always been there, I know I'd just have to do these things. [P2]

If someone was stressed out, uh, they've got a lot of work, or problems with something, uhm... [P2]

I'm trying to think of... if a bunch of my friends had wanted to go to the cinema, but I was busy working [P2]

To put it simply, you having a lot on your plate, uhm, and almost not knowing if you're able to finish it. Kind of, uhm, nearly you have to put an effort to do it, and that can discourage people. [P2]

Stress is like running on a treadmill, and someone is constantly putting up how far you're having to run [...] [P3]

Not having enough time to do something that needs a lot of time, so having to balance lots of different things at once. So maybe, uhm... having to make sure you have time to go to work, and having time to do your uni assignments, having to see family, and knowing that you haven't got enough time, you've got to be somewhere, that kind of thing. Time pressure. [P3]

[....] stress is like, I'm... it seems to me a lot of time pressure, so like you, you, you under some sort of pressure for some reason. [P3] oppression

[...] stress is selfless because someone else is putting you under that. So, you've got a deadline, or you've got to make a good impression because of other people, and I think that's the difference. [P3]

Uhm, probably having something really big depending on you [...] and you've just got to go because something depends on you [P3]

[...] going to work and always having to do so much in a short day, and then having to go home, and have so much to do about your family, and then doing the same the next day, and next day.

[P3]

And... because not having enough time for something is something you can't change, you can't add an hour to the day, uhm, and it doesn't matter because people still expect you to do these things in this time. Whether you can help it or not [P3]

So, uhm, I, I don't have... at, at the moment anyway, it used to be when I had lots of assignments , and exams, and stuff [...] [P3]

Uhm, so I'd like to have to just like a family that I can trust, and a job that I actually enjoy that, but that requires a bit of responsibility because responsibility causes a little bit of stress [...] [P3]

[...] I just need my time for myself, and I just need you to just not take my time. It's what makes me shout, and it's, makes me get tight chest, it's always time, it's always time related. [P3]

I don't know, maybe they're just moving really slowly, they don't have time pressure, or they're just kind of taking their time, or... [P3]

I feel, oh my god, the last time I felt over-the-top stress I had, I had this really, really, really hard assignment to do, I had to read two books for this assignment, and I had a part-time job that was working my [inaudible 40:42], because I quit, because I couldn't cope with the time pressure. And I had so many, I had a lot of demands at home, uhm, because we get set chores, and my chores were the only ones uhm at every day, so I would, I wouldn't have a day off, where I could not do them. [...] it was constant time pressure: wake up, I need to get ready within this time, to leave within this time because I need to get parking, because then if I don't get parking I'm gonna miss something at uni, and I've got to be at uni, and I've got to do this really [inaudible 41:20] books...

[P3]

I think stressed people have massive rucksacks because they've had to plan for the whole day, and they've had to plan for million and one things and stuffed it into that rucksack, a bit like their brain [laugh] [P3]

So if there's a lot going on, and if I'm not able to manage it, uhm, the way I would normally manage stuff, I find it stressful. [P4]

Uhm... I'd say stress is like contractions. So it's a lot to do with at the time, but once you get free it's, it's fine. [...] it's, you know, it's a lot to take on at the time [...] [P4]

Uhm... I'd say someone who has a lot to manage all at once would be quite stressful. [P4]

Uhm... probably because either they've entered the job where they didn't think they would be doing as much work, or they may have other things that they'd rather concentrate their time on, but they have had to take on other workloads, for example. [P4]

Because I do think back to when I was a child, and how easy-going it was. But it was not because stress wasn't around, it's because I didn't have the responsibility, or the knowledge to take on matters, where, you know, for example my mum took it on, but she was feeling all the stress. [P4]

[...] that beginning stress could just feel like... I don't know, I'd just see it as part of life. I can't really describe it. What we experience day-to-day, when we just manage quite a few things at once, and just trying to, uhm, juggle all the things that we've got. [P4]

So, yeah, when there's a lot of to take on, oh, I don't know, it's really hard to describe. [P4]

Uhm... because I'm still ambitious. It's still, it still feels like there's a lot on, and, uhm, I've still got a lot to manage, but I'm still positive. [P4] stress but positive emotions?

[...] sometimes if we've got like one or two things going, if it was just those, those two things then that would be fine, but as soon as there's another thing that adds more the time constraint, or something like that, then it could create more stress. [P4]

[...] so maybe when if you are working, uhm, and you have a deadline, that can sometimes create... panic, in a way, which I think sometimes then you think is, is, what you think is as a stress. So you know that you've got a deadline to meet, so you're constantly thinking about meeting that deadline, and making sure you're working up to that, to finish that. [P5]

Home, does it as well, I have a family, I've got two grown-up daughters, one who's got two children who are 15 and 11, two boys, uhm, our youngest grandson which we look after quite often. [...] so we have the youngest one, with us after and before school, I have to take him to school sometimes, and then he comes to us every night after school. Uhm, he has a disability, in fact, he's hemi-paraplegia which means he has a left-sided weakness. Also he's been recently

diagnosed with epilepsy, and is slightly autistic. And he is very difficult. So that is a stress for me.

In... I have, we have to manage and look after him. [P5]

Uhm, I think, perhaps when my girls were younger, it was a stressful time having children and bringing those up, but to me there's more pressure and more stressful looking after my grandsons. Because they're more responsibility, it is more of a responsibility because I'm looking after them for my daughter. So that then, I think, brings on stress for me [...] [P5]

[...] I think it's because I feel so responsible, and I think sometimes, I don't know, maybe it's because you are a mother, a woman. [P5]

For me that is that stressful situation, because it's a responsibility, for me it's a responsibility if, I find it that way, it is because I feel that I'm looking after him for my daughter, so if anything was to happen to him that would be my responsibility if he was with me. [P5]

You know, I think, perhaps, when we were younger, when the girls were younger, we had, we had situations where it was stressful because we were managing a family, and trying to work, manage the family, and, you know, pay the mortgage and all the bills that went with that [...] [P5]

[...] we've had, you know, lots of things going on, I think during your life you have times where it's, it can be stressful [...] [P5]

I think, at work sometimes you'd see people, and you'd think if they're, they're under pressure [...] [P5]

I think, you now, because I have to take [grandson] in the morning, so you've got that on the mind, you've got to get up really early to take him to school, and that's extra source of stress you put on yourself because you know you've got to get up because you're responsible to get him to school. [P5]

Oh, it's quite, yeah, it's quite relaxed at home, uhm, yeah we just, I mean, obviously if I've got work, because I work from home, so I'm really lucky that I can work from home, so that's fine, I just start work, and do my 2,5 days. [P5]

[...] or you know you've got a deadline, or something to do, you've got to get somewhere by certain time, that can be, that can be hard, you know, because if I know that I've got to get him to school, but then we've got something to do but later on, or straight after that he's gone to school, then I

get sort of slightly stressed with him, because he doesn't get going quick enough, and now you know you've got to be at certain time, so I've got to get him gone quick [laugh] [P5] social interactions ?

I think, he is, it is just for me in that situation, it's the responsibility of him. [P5]

I think whilst, if you're at work, and you've got nags , or stress in effect that maybe somebody wants something like... five minutes ago, you know, because they ring up and say 'I need this half past, yeah, in half an hour', and you think 'oh!', I think you automatically think 'oh my goodness!', but you know you can do it [...] [P5]

Continued pressure, really, continued pressure [...] [P6]

Uhm, somewhere where it's constant time pressure to achieve an outcome or an output that is going to be satisfactory to the audience that you're serving, whatever that audience might be. [P6]

Uhm, working from seven in the morning to two the following morning, so, getting home about eight o'clock at night, and still write reports. Uhm, possibly caused by lack of staff, financial crash, working in the public sector, everything was changing. So, but, the, the outcomes and outputs were still required. [P6]

Uhm... major changes happening within the organisation, uhm, being out there to find the solutions, fairly isolated, uhm, very little support, because we were trying new things that nobody else had tried in the country, so, uhm... that constant pressure, really. [P6]

I mean, uhm, so I'd try to explain, right at the start, it's a constant pressure that causes stress. [P6]

And, and I have that now, because I have got not as many external pressures put on me, really [...] [P6]

Well, I don't, I don't have that sort of pressures. [P6]

But I do recall, when I, well, the people in Poland did feel like they were burdened by many different factors. [P6]

I don't have to make big decisions nowadays, like I had to make eight or ten years ago. [P6]

Uh, so I don't feel that I have to take those big decisions anymore. I'm not leading. Oh, although I am leading in some ways and groups of people, I'm not leading, I'm looking after them in terms of their potential income generation capacity, and looking after themselves, than I was 10 years ago therefore, uhm, the, the pressures that I put on myself are not that great. [P6]

you know, people talk about work-life balance. I did never have work-life balance, I had a work balance. Life was something that if, I'd be lucky to live if I found the opportunity for about a three-year period. [P6]

Uhm, so it's often working sort of twenty hours a day, or... you know, it's a project work for three months or whatever, but you're working, you know, often on location, so you're not at home, you're working from a hotel, or in different places where you don't live, uhm, and oh, you're on the road a lot. So it's lots of, sort of long hours, within a time constraint to achieve something, and it's usually, I'm usually working on my own to organise other people, so it's not like you have another person to bounce things also... so it's a lot of remembering lots of things, and being tired all the time, and are not at home, so... [P8]

Yes, so, I mean with the events it can often be that I do a lot of admin in advance, so it's just, you know, sort of a few hours a week at the beginning, and then it gets a bit more. But then it's being on site for anything from two days to several months for a bigger project. So, yeah, the time frame changes, but when you're doing the actual project it's very full on. But there's sometimes prep beforehand, and sometimes I wrap up at the end. [P8]

And being put under pressure. Uhm, yeah. [P8]

Uhm, one, I guess, when there's quite tight time constraints [...] [P8]

Uhm. I guess... something with a lots of responsibility, uhm, and pressure. Uh... and inconsistency, that's the... [P8]

Well, I mean today I felt a bit stressed, uhm, because I have been house sitting for six months for some people, and I'm trying to move out of the house, because they're coming back at the weekend, but they have so much stuff, and I have so much stuff, so just moving all the stuff to the car [...] But it's the stress of me, myself doing everything, so it's quite tiring, because you're sort of putting everything in bags and moving it all alone, and then prepping the house [...] [P8]

Uhm, well if you've got sort of a team that are being consistently overworked, and put under lots of stress, and there's no outlook for it, and it's not doing anything constructive, and it's just ongoing [...] [P8]

[...] and I think if the pressure's from an external source then you need to, within yourself, provide the sort of positive thing that will balance it out. [P8] oppression

[...] and then, sort of like, well, it's on the news, so I was the only person to do that bit of the job, so if you're doing get done, it had to be done by certain time, so I was just staying for hours and hours, trying to do the thing I wasn't competent at, because it's not my job usually. [P8]

I feel like there's almost like there's a layer around you, where, and there's kind of things which you have to do are constantly bouncing around that layer. [...] it's almost like you're in a layer of wax, and inside that layer you've just got like, oh, I've got to do this, just bouncing around, oh' I've just got to do this, still got to do it, and then something else be then, and that all just be bouncing around inside. [P9]

Stress is like multitasking to an unbelievable level. [P9]

Uh... deadline things, so making sure I've got to get stuff done before a certain time. [...] And once you get near the deadline you haven't start done it and it becomes stressful. [P9]

I think, the idea of the deadline is really almost intimidating, so trying to get it done is, is probably the stressful bit. [P9]

Probably, because a lot of people don't get the stuff done right at the beginning, they kind of wait for the last minute, and then with deadline kind of hanging over you it's, it would be stressful, I think. [P9]

Uhm... probably, the only, I can only think of one which actually happened, probably when my mum, uhm, were struggling for money, and she had so much stuff going all at once. So that, that would be horrifically stressful. [P9]

Because there's hundred and one things that she's gonna do, and she's gonna, if, if she messed it up then... at the time money was a really big problem, so that would have really kind of messed up our lives, so it was really, it was a hard time, and stressful, because if she did stop working out

all these different things then, you know, the whole kind of, let's say, lots of different comps which had to keep spinning, and if one stopped the whole thing will stop. [P9]

Uhm... trying to do lots of things at once, and feeling like you not could be able to do it. [...] Because, I think, of the time restraints. [P9]

Having lots of things going on, uhm, in a very short amount of time [...] [P9]

I mean, it was that and, uhm, my dad being, uhm, refusing to pay child maintenance which really didn't help, and then going through all of that, and she not only had to deal with the money stuff, but then, there was taking me and my sister to school, there was, uh, you know, after school activities, or the stuff which we did, you know, it's just, it seemed like there was so much stuff going on at once. [P9]

[...] because obviously the deadline's been fast approaching, and that's my interpretation, I guess, of, like, stress. [P10]

And I don't like the, the, I think that, that kind of a concept, there's a time restriction on it, and I'm waiting on, I guess, someone else, and that would be like the most stressful situation for me. If there's like having to rely on someone else, in a time-restricted state, that's really stressful for me.

[...] Yeah, mhm. I think that's the fact that I can't do anything, and I have to rely on them, and then I know that in my head there's time restriction, and it's kind of down second by second, and there's each second passes, that all that make me more and more stressed. [P10]

Uhm... I think it can go back to again, just like, if something takes too long, like on the contrary to be, something being time-restricted, annoying, having to wait for something else. If something takes too long and I need to get something else, and I know, like I'm running over and I need to get this thing done, that's going to stress me out as well. [P10] low resources/ threat to goals

I think that's gonna be like stressful being final year, with the deadline, like I've got so many other responsibilities and like juggling them all, like I'm trying my best, but, I guess, at some point it does get to me. [P10]

[...] in my opinion, I associate like the things and responsibilities I, like, have to do with a little bit of stress, like attached to each. [P10]

Yeah, there is like a little bit of stress attached to each one [responsibility] because you know, like, I guess, you have to, being a student rep, you have to represent your course, like, effectively, and being in my course is like 250 students. [P10]

Uhm... I guess, it means, it means to me to be in a situation, uh, that is out of your control, and either there's a time restriction on it, or... yeah, I guess like, yeah [...] [P10]

Uhm... I guess it's just going back to, like, if you've got so many responsibilities, it'd like, you'd be probably waking at six am, and you're not going to bed till like two or three am, you are not getting this amount of sleep. [P10]

Uhm... for me, like if, I when I'm stressed about three or four different like things that going around in my head at a time [...] [P10]

It's like, I guess, holding a weight, like, I don't know why I'm making this analogy, but, like, I'm into the gym and everything. I guess it's like holding a weight, like, in a certain position [...] [P10]

If there's nothing going on in my head, thinking about what I need to do next, where I need to go next, who am I going to see next. Uhm... if there's no sort of like what do I need to do on that assignment, what do I need to do next with my dissertation, what do I need to do next in like any aspect of my life. If, like, if that's not there, if none of that is there, I've been, and it's just literally like 'what should I have for breakfast?' It's like, that to me is like completely, I guess, chilled out, relaxed, and not stressed at all. [P10]

Uhm, I guess, like, if you've got some responsibilities, and you're stressed, and you're in a rush, maybe you pick the most convenient, like, thing available, maybe you'll just like treat yourself to something to make you feel better. [P10]

[...] you don't eat because you're so stressed, and you've got so much work to do, and so many responsibilities, or you just, or it'll maybe, or you'll maybe choose not, like, a great thing. [P10]

And it's not maybe like physical as such, but it's just like, it kind of drives you to the point where it's just like I don't know what to do, because you've got all these different thoughts going around your head, and all these different, like, the roles and responsibilities, and I think, I do think it is like different to an extent. [P10]

Uhm... I guess... like if anything that's difficult, I guess having, I want do the roles and responsibilities I do, but I guess having them, like, puts that little bit of stress each one at the time, just like it's a little bit of stress on me, like, I've made a choice obviously, I want those, and like, I guess, without them I'd be less stressed to an, a certain extent. [P10]

P11: So it's a very fine balance, and until you, I signed up for your [study] I didn't realise this is more stressful than working for the housing department in the Harrogate Council [laugh]

I: Wow, but why is it so stressful?

P11: Because it's 24/7. [P11]

With working it took me quite a long time because I used to take it home, I used to work 14 hours a day, sometimes 7 days a week for months on end [...] [P11]

[...] I've never been a manager in charge of hundreds of people in life-threatening god-knows what. Uhm, that will be stressful. [P11]

[...] being in administration, I've always been a secretary, I've never been a chair. [...] Uhm... so, now, you could put a twist on it because I didn't want to be the chair, or this way or that, or the other, that would have been a really stressful situation. [P11]

No work-life balance. [...] Doing one thing, getting obsessed with it, and, uhm... then having to set a targets that stress out. [P12]

I was writing things, you know, for science. You had deadlines, you'd got to be that, you'd got be the first people to do it. [P12]

Yeah. I just had work, you fool, now I've got work, and I do other things, and changing, you know, I'm doing this today, that's a difference for me, that's, that's got me out of the house [laugh] [P12]

And I was, I was in a job that was hugely stressful. I worked in a boys school. And it was very high achieving, and most students were doing very well, and I didn't have the work-life balance, and I felt very stressful, stressed out. [P12]

Uhm... they were high-achieving lads, and I was teaching science, chemistry, actually, and, uhm, I was always making that creating different experiments, and I thought well I can do this, I can do

this. I'm... I was teaching, marking, and at the weekends I was thinking about other things to do, so my whole life was around this, this activity. [P12]

I was, uhm, planning something, and they, you have to make a deadline, you know, you had to check upon people, and you think, oh, are they gonna do that, I'd better go, just go and see whether it's done, and it's not done, so you have to do it. And it's meant, somebody else is meant to be doing it, but they haven't done it so you've got to do it. So you've got extra to do than what you've planned. And that's stressful. [P12]

But maybe it was stressful trying to write right-handed when you're actually left-handed. [P12]

There's a lot of responsibility, uhm, particularly for someone who has just come out of education. You do have a lot of responsibility, like you don't, you not, you're not managed by someone. [P13]

[...] uhm, you're having to, uhm, work, perhaps, really hard [...] [P13]

I mean there's lots of different things that may cause it. You may not know what's causing it. Well, it might be a build-up of lots of little things [P13]

Uhm... it could be... uhm... could be that you're not happy about, uhm, lots of different things. Perhaps, in your, in your personal life, it doesn't necessary, it's not always a work thing. But maybe someone's putting pressure on you, maybe a partner, or a family member, that they... could be to do with anything that... you should, should it be, should it be looking for another job, or should it be doing something else with your life, or should it be doing... [...] Maybe it's because... maybe it's just because at, you're doing a lot of work, you feel maybe you're not, uhm, doing anything but work, you're always at work, not at home, having not enough time to go and enjoy perhaps like the sunshine. [...] Or it could be number of hours you're working [P13]

Uhm... personally I think, it was very stressful trying to get my dissertation finished on time last, yeah, this time last year. [...] Because of my own fault that I had, uhm, left so much of it so late, perhaps. There was a lot to do, more than I thought there was to do. [P13]

Uhm... because I was worrying I wasn't going to make the deadline, and maybe even if I did that work would, wouldn't be the best... quality. [P13]

Uhm, I was thinking about it the other day, actually. I think, uhm, to be someone in, maybe like, you lead a country, having to make a decision to press the button that detonates a bomb or

something. I think that could be quite, very stressful situation, because... [...] Because whatever decision you make, it has impact on so many other people. You'll have to live with that. Because if, if you... if you dwell on it too much then you make, like, kind of think that you've made a wrong decision. So you have to be absolutely certain that you're making the right decision. Uhm, I think that would be pretty stressful. To make the, that whole decision-making process there, what just must be going round in your head [P13]

Yeah, or just like all of it, a build-up of things. [...] Uh, so it could be deadlines at work uh, money, money issues, or like, yeah, waiting, having two more weeks until payday and not very much money, and then someone at work has annoyed you, or something like that, and then everything happening, the feeling that everything is happening all at once. [P13]

Uhm... stressful life, so always... so I guess, if you've got a lot of responsibility, perhaps, maybe, perhaps you've got a family, and you're working, uhm, working quite a lot, like eight to six Monday to Friday, or maybe you work shift work, uhm, but then... you've got, or you always get more work to do, work is just piling up, there's, uhm, no time to do things for yourself, because as soon as you do your work, it takes an hour and a half maybe if you're commuting. [P13]

[...] and sometimes we are trying to fill that void, we probably shouldn't fill that void, because we're not academics. And that's not for all departments, that's specifically for the faculty that I work with. [...] Sort of, but I'm, my leadership team asks us to do that, so... they shouldn't. It's like a hyperactive thyroids [laugh] trying to fill out, or fill the silence [laugh] [...] My job spans from anything from reviewing applications for external funders, so looking at financial data, benchmarking our academics, uhm, running training [laugh] those sorts of things. So it's quite a broad... running events, running conferences, it's quite a broad spectrum [...] [P14]

Yeah, just, you know, a bit, they're just constant little excitable things [laugh] And it's obviously better since, uhm, [daughter] started school this year, so it's balancing all that financial and administration that goes with it, obviously homework, reading [...] [P14]

Oh, we do now manage the communal area in where we live. That's quite stressful sometimes. [...] We're just trying to coordinate six different houses, trying to pay a bill, or, or... work out the legalities of certain contracts and things, that could get quite stressful. [P14]

Yeah. Just like work... it's just balancing everything at the same time, going to work, doing your work well, helping and supporting people, then you get back home, pick up the kids, their dinner, it's constant, constant, constant which is probably just like, that's why it's quite stressful. [P14]

So, it is, I mean, if you want to just try and balance everything, trying to be everything to everyone I suppose, and that's what's expected, I suppose. That's stressful. [P14]

In terms of... just woke up, like, walked around, you know, I don't know, it's just been, it's very simple, there's nothing complicated about it, it's just like the basics. We didn't have like fancy time, or anything, we went camping, driving around, we had coffee and the croissants, so it's nice, with ice-cream [laugh], just [inaudible 13:34] [P14]

[...] then you're in a centralised situation where you've got four, very different, culturally different faculties, all wanting everything different, no, you can't please everyone, and we have strict deadlines, obviously [...] And it has to be able to just... not, you have to be able to not be a perfectionist because you have to just get the job done. [P14]

I: Mhm, and how do you know that you are not stressed?

P14: I am stressed.

I: All the time?

P14: Uhm... probably, I think that's got something to do with kids, to be honest, I think, and yeah, not them, it's people, because they're lovely, but obviously you have to conduct yourself in a normal world at the same time. [P14]

It's like normal then. Yeah, then sometimes really stressed, but I think it's when all the world has got deadline at the same time probably. [...] So like school stuff, work, life... [...] Like all in one go, ha-ha, I don't know what to start with [P14]

There's lot more running around. And obviously both parents tend to have to work now. I suppose, you know, I, in Poland society, as well as in the UK both parents have to work now. [P14]

[...] but if somebody, like, had to deliver, with my role, and just getting the programme together, and getting all these different people, trying to get their numbers, trying get people to attend was quite stressful. [P14]

Also when I've got so much at work I sometimes forget to drink water, or get to the toilet, because you're just so busy [...] [P14]

At times, pressure, yeah. [...] Uhm, time limitations, working part-time and wanting to perform like a full-time person. Uhm... pressure on myself to maintain momentum in my career when I'm balancing parenting and family life with a career as well. And then I would say pressure from outside places, so like government pressure on data, everything in school. [P15]

Uhm, tension, a feeling of time limits, maybe, and, uhm, too many things to do at once. [P15]

[Laugh] uhm, a full day at work, coming home to homework, and grumpy toddler, and trying to get everything done, aware that I've then got to do schoolwork in the evening, so kind of sometimes juggling work, home. [P15]

No, I think people would, I know I put different pressures on myself, like I'm a little OCD [laugh]. So things like, you know, if I can see bits on the carpet, or there's things to be washed up, and I know that, for me, like the house always has to be like a show home [...] [P15]

Uhm, OK, so stressful situation would be like, uh... being pinned to dart, or to having like darts thrown at you, that you're just trying to dodge and juggle, you know to get out of the way them and sort of stay, survive [laugh]. Yeah, sort of that, the fact that it's just firing at you the, you're trying your best to, sort of, not get, let them get you down, that kind of thing [P15]

Sort of the things you may be seeing on TV, the sort of stereotypical characters working in a, a law office maybe eighteen hours a day too, or police things when you've got no end to the shift, you just have to keep going, and you got that pressure and stress that way. [P15]

To me stressed is maybe more the... a medical sort of diagnosis, sort of you're stressed and you've got a lot on, or even if it wasn't a formal medical diagnosis, it almost sounds more of a genuine thing to be heavily stressed. [P15]

[...] I was working full-time before baby number two, then yeah, I was, when I was juggling one, one child and a full-time career [...] [P15]

If I'm, if you, if I think of stress I think of... kind think of strain in terms of words, you know, uhm... pressure. Those are the sort of things that I would think about if I was thinking about stress, I

would look at how, what, if I'm under pressure to do something, working to deadlines, that kind of thing [P16]

Whereas I think stress, I, I think stress is from an intangible, emotional side of things but I, I do appreciate that people can be... strained but I would then say they're under pressure. [P16]

Yeah, maybe things... uhm, so if there... strained, they would be, uhm... I think sort of being pulled in different directions, under... if you, so having different, uhm, different responsibilities, different, uhm... so yeah, so being pulled in different directions maybe, you know, you've got to do this, and this, and this, so there's lots of things going on in your life that can make you... put you under strain, I suppose, yeah. [P16]

No, I, I associate stress with anxiety, pressure, strain, yeah. [P16] oppression

So for example, doing a PhD is quite stressful, uhm... because of all of the things you have to go through, and, but... I've often spoken to people about how challenging it is, and it can be stressful [...] [P16]

So you can be challenged in that you have to think about things, or do lots of work but if you, you can then become stressed because you haven't done what you've wanted to do by the time that you thought you would. [P16]

So, yes, so I think being, you can be challenged but if that challenge doesn't have a definitive end it can, uhm, it can carry on and not become stressful, whereas if you've got to do something by a certain time I think that at that stage you have to juggle lots of things to make sure it happens by that time. [P16]

Uh... I think... where you've got deadlines to achieve, and you've got lots of things you need to do. That can be, that can generate stress. So a deadline to do something, and then you've also got other things to do. [P16]

They weren't replied to me, so, uhm... the, there kind of isn't a specific deadline on that, there is a deadline because I want to try and get it finished, and again, that's because it's out of my control, you know, but that is my choice, I've decided to work with organisations to help me with my research, so I'm in their hands. [P16]

If I had stressful life I think I would have, uhm... uncertainty in my life, I think it would be frenetic, lots going on, juggling many balls. [P16]

I would think, yeah, if you've got financial worries, if you've got a lot of things to do, a lot of other people in your life to look after I think that could be quite stressful. [P16]

I do think it's sometimes to do with lots of things going on at one time, and wondering what to do first kind of thing, uhm... may end up sort of physically fidgety, I guess, I can, yeah. [P16]

Well, you put yourself in a position where you're in control of 14 sports players. And you have to make decisions [...] [P16]

Yeah. Yeah, and particularly I had different roles, I became a defender but I was an attacker, and so I was responsible for scoring goals, and, uhm...and I found that, that I preferred being a defender, uhm, that suited me better because the pressure and the stress of making sure that goals went in... [P16]

So if you are stressed you might not do such a good job because you're not thinking clearly, you're emotional, you know, you're worried, you're... uhm, and likewise your job can put you under a great deal of pressure, uhm... and that can make you stressed. [P16]

I think that kind of the most stressful thing is trying to juggle lots of different balls at the same time, and so I'm expected to attend lots of training but also around that fit in kind of doing my own research. [P17]

[...] uhm, and, uhm, you just kind of get frustrated, or very worried about trying to get everything done in, uhm, the time that you have available. [P17]

[...] uhm, just feeling very worried about, uhm, trying to get everything done, I suppose. [P17]

Uhm... what kind of situations are stressful? Well, at work the kind of situation I find stressful are when I've got, I suppose lots of competing demands on my time, so say lots of e-mails coming in and I know I've got to answer them all, and, uhm, as quickly as I answer one of the another one pings into my inbox. Uhm, so that's stressful because I feel like I'm not making any progress, I suppose, and I know I'm spending lots of time on something that I shouldn't be spending time on. [P17]

I know from conversation we have with my partner, we have similar kind of work situations where we, where we, that we get stressed about, so the, uhm, lots of emails coming in [...] [P17]

Uhm, and... yeah... I don't know, I suppose, if I'm, if I'm, if lots of competing demands on my time make me stressed, then I suppose, uhm, the most stressful situation at Bournemouth I can imagine is every single academic in the Management Faculty coming to my office at the same time to ask me to do something. [P17]

Busy, very busy, uhm, never any time to yourself, never any time to relax. Uhm, I'm, I'd imagine that for example if you have children, young children, you're always on the go and there's never time to switch off, then that will be very stressful. So yeah, it's about , uhm, kind of about being very, very, very, very busy. All the time. [P17]

I think it kind of goes in kind of picks and troughs, uhm, so... I don't, I definitely don't think my life is particularly stressful compared to other academics at the moment. Uhm, because I'm not, the role here, in Bournemouth, I'm not doing any teaching, for example. So I don't, uhm, I think I don't have too much to juggle. When you hear about academics that are working kind of hundred hours a week, and all people, you know, working in kind of stressful financial jobs, that are working hundred hours a week. So I have friends who are lawyers in the City, and, uhm, they're doing ridiculous amount of work. And I don't think that I work as hard as that, so therefore I don't think, uhm, that my life is as stressful as other people's. And I guess also, uhm, the fact that I don't have young children, uhm, I don't have those kind of caring responsibilities that you were asking me about, means that I have probably a lot more of free time, outside of work than other people might do who do have those responsibilities. [P17]

Again, it's, it was all about, uhm, kind of competing demands on my time meaning that I couldn't get the work done in time available. [P17]

Uhm, and if you're working very hard which is something I associate with high level of stress then you don't have that time to relax, and that time to devote to relationships, it's really important. [P17]

The thing that I find stressful is managing myself and responsibilities, really, uhm... so the big one recently, this year I've won pots of money, the responsibility is our outcomes, uhm, so for me it's

being able to, it's that double edge shard of having independence which allows you creativity and autonomy, independence, but also the responsibility comes with it. You've got to give back. [P17]

To an extent yes, and also in this stage it's managing information overload because one thing I'm really trying to learn is not to say yes all the time, all, or you see opportunities come up, and one thing that I'm aware of now that wasn't around perhaps 5-6 years ago – sheer amount of information. [P18]

[...] but then you never, you end up working the weekends and you never have time off and you feel yourself a bit strung out. [P18]

I know it can be done, uhm, it takes a lot more your, your life might be complete flux for a certain amount of time, uhm, and it might be frenetic [...] [P18]

When I think of stress then inability to control pressure. Sometimes real pressure, sometimes pressure is not there. I think... pressure you can put on yourself, and pressure that others put on you. [P18]

I'm part of the ethics committee as well, and doing that as a full member of staff is difficult, uhm, it's a clinical NHS one, and we're expected to read anywhere 4 to 6 applications each month, uhm, and again some months if you've got all the marking comment and you've read loads of transcripts already to then read six applications, you have to learn quicker ways to do it, and some of the members, the lay members are retired, so they... uhm, yeah, so for me that's another example when I feel stress because I feel like I'm letting other people down because I'm losing control, and that's the responsibility again [P18]

I've got more responsibility, I've got a wife, uhm, we've got a house, haven't got kids yet, when we have kids - that's responsibility. [P18]

[...] we used to have a lot of retirees who would work in London all of the years, and I, quite high-power jobs, and I remember one of them saying to me once 'yeah, it's good getting paid well, or getting good, get, having, having the positions' but he said ultimately... doesn't have to bring a lot of responsibility with it. He said basically he's like, it, it's great but your kids are then going to school, you want to put them to private school, uhm, you're looking for your retirement, you're doing... he said what you do, it might seem great but ultimately what you're doing is in some, it is great, you wouldn't, I'm sure, you wouldn't have it any other way but what you're doing is you've

got more responsibility. So like managers, they are paid more because, not because they're doing less work, doing less donkey work, but they're doing more strategic... the eyes are on them if that makes sense. Whereas if you're a dishwasher you just keep your dishes clean and just go in, you can go at 5 o'clock, it's grand. [P18]

Because there's that huge danger and I'm seeing other people do it – say yes to these [inaudible 38:33] and these contracts because they give you a thousand, two thousand pounds for two months, three months, but what they do is make you work in the evenings and take up your weekends, and you're not your boss any more for that time being. You're someone else's because you've got a project, you've got to do it in a matter of months whatever it is. [P18]

However, it's also, coming in that period when I lead a unit again which is September to Christmas potentially, uhm, I've got funding for a research assistant but that's gonna be stressful as well. Because I'm then managing a research assistant to help me, but I'm also watching my teaching, and do a lot of management crap there comes with internal grant and things like that and everything any way. [P18]

Perfect example, my brother-in-law... is an engineer in Hong-Kong, and... really great place. They work, it's a bit like Japan as well, they get about... and in America, do they get, did it like two weeks of holiday a year, or something. It's ridiculous. And they work quite long hours [...] So that put me on to that, and then I knocked my dissertations aside, so... anyway I didn't get all my dissertations done in the afternoon which put a bit stress on my head, uhm, but I did send off the proof corrections [...] [P18]

Returning from holidays to having 90 emails. Uhm... I wasn't really stressed... There's probably little bit of stress last night actually because you came back from holiday... [...] Uhm, we'd all got parked but then you've got things like, just everything all over, uhm... few house jobs that had to be done [...] So working through my emails, and... yeah, it was kind of like a full-on day. Oh, that's it, I had an article accepted but... the publishers that emailed me while I was away, oh this is one email saying 'can you do the proof corrections, so can you re-proof-read it?', I was 'yes', oh well, I was away. Uhm... and she sent me another email, please, uhm, you have not responded yet, please I would really like your reply as soon as possible, within a day. [P18]

Buying a house was quite stressful actually, because that, again, I had the benefit of that I could work from home a bit, and dash over to the estate agents, or wherever I needed to be, the mortgage brokers, at a fairly short notice. [P18]

Uhm... yesterday I found stressful because of what I've just said, that whole thing, if you come back from holiday, and you think 'oh, shit', you know, loads of jobs to do, and then I have to play catch-up, it's gonna be just like everything all over the place [...] [P18]

And if someone tells you they have to work into the evenings... I do actually quite like that now, because I laugh it off and I make an effort of... I had a session with a lady the other day, and she kept talking about how she has too, oh, too much teaching, and you always get people who talk about too much teaching. [P18]

Uh, I'd say, uhm, leadership is stressful, people who are in leadership roles generally [inaudible 10:26] sometimes a high degree of stress. [P19]

I think someone like, say, single mother who, who's working, uh, has to work full-time, who's got like a young child, has to balance, to balance, to pay all the bills. [P20]

Uhm, I think if you work in, say, Canary Wharf, up in London, uhm, you have a lot more stressful job compared to my job down here. Uhm... I'd say high-maintenance, life just being high-maintenance, constantly having to, not have that 5 minutes to sit, sit down and breathe... [P20]

[...] but also, as I say, just things being, you know, thrown at you all the time, and just not having a chance to take everything in. [P20]

Probably not compared to a lot of people. I have, I only work part-time, and, uhm, I, I get stressed quite, you know I can get stressed quite easily over silly little things, uhm, but in comparison to a lot of people probably not. [P20]

Uhm... I just, I don't know really [laugh]. Let me think... I think someone like, say, single mother who, who's working, uh, has to work full-time, who's got like a young child, has to balance, to balance, to pay all the bills. [P20]

But then as I said I don't have a complicated life, I don't, I don't have, you know, the same sort of, uhm, all the work you've got to do, and I, I don't have that in my life. My life's is a bit of a, I come

to work for my three days a week, and I go home, and take my daughter, and cook dinner, and [laugh] do the washing, and come back to work, and do it all again, so, uhm... [P20]

[...] various other, oh, various forms and having to fill in the, having to write your exams so far ahead to get them into the process because people, being asked for things at the last minute, lots of things [...] [P21]

Yes, because it's, yeah, in fact it's, that's just one aspect of how stress, things make it stressful, because there's so many bits of things, it's sort of, you know, I'm, I'm trying to get that finished and that's one priority, and then I'm teaching on one unit, teaching on another unit, uhm, marking projects, it's such a, you know, and then there are, there are my academic advisor students, so lots of little bits, and, you know, I'm not particularly important, I don't have any important roles within the department and I still get a load of e-mails, then I know there are people who get way more than me, but it's sort of, things are coming in from all over about, you know, it's sort of, you know, a student's stressing about something and I've got questions, or it's something on one unit, or another, or it's a bit of marking, or it's a bit of, a bit of admin I've got to do, filling in some forms, completing reports on things, and there's... every time, every time you think you sort of cleared the gap of all the bits you know you were going to do, you've got space to do the next bit, but there are always little things there popping up, enquiries about from project students and all sorts of, it's very, very bitty. [P21]

I think the demands on my time was stressful because I've been working full-time all week, and then spending all day visiting my mum which was quite tiring in itself, and then on Sunday getting done the, the bare essentials, like getting the laundry done, I mean the heck of the house a complete art of tip. I'm glad we are not doing this there. [P21]

I think it's usually... I said usually, now, most of all it's about amount of stuff. Sometimes it's just pointless stupidness of stuff. [P21]

Uhm... it's, its, I think a lot of it is those thousands little cuts and they run... sometimes it's a big thing, but if it's big enough, then there's a certain amount of energy to fight back against it, you know, it goes, yeah, right, while having this you'll go stopping in somewhere, I did that this morning actually, and, yeah, I feel about... yeah feel much better if I haven't got stomped in there, so if, if it's big enough, it's... it's quite a lot of the smaller things, the silly things [...] [P21]

But then I was running around without support, arranging everything, trying to get things straight with insurers, trying to, and organise flights home, and travel, and sort of letting the family know, and stuff like that. [P21]

[...] living in a hotel room, trying to, you know, go and buy fresh knickers [laugh] because, you know, there's only so much you can do in a hotel washbasin, you know, it's... just stupid lot of practical things like that, and just... [P21]

Yes, there's, there, there were two bits to it, I think, there was the, initially the worst bit, the illness bit, but then ongoing, yes, lots of things to do [...] [P21]

Hmm, one where's more to do than you've got time to do to your own satisfaction. Uhm, one where... so several, several things, so it's, yeah, how much there is to do, what you need to do, whether or not you value that and think it's worth doing, or... and that that ties in the time is worth, it's not meaningful, does it makes sense to do, then that's, uhm, atrocious waste of, of the precious time, you know, to be filling in some pointless forms [...] [P21]

It's all-consuming. And also it doesn't stay here, it's, that's always with you. Somebody was talking to me yesterday about he used to do a job as scaffold, he was a scaffolder, and a builder and things like that before he came here, and now he works at the university. And he said the nice thing of that is at the end of the day you go home, it's over. When you're doing intellectual work of some sort it's never over. [P21]

When you're doing work supporting people, you know, it's difficult, there have been cases, I try not to look at e-mails out of hours, but sometimes if I know there's stuff going on I'll keep half an eye on it, just occasionally, because, you know, maybe there's somebody worrying about something. I had a student come to me yesterday afternoon after his exam, I know he'd worked really hard, I know he was ready for that exam, he was in tear, because he was convinced he had failed it. You know, you wouldn't want to, if you know there's something like that going on you wouldn't want to be saying 'no, I don't check the e-mails when I'm away' and things. [P21]

[...] you know, sort of competing demands on my time. Now, it's just, you know, yeah, sort of volume of bits of stuff that need my attention. I could deal with less of that, but wouldn't swap it, so... [P21]

If you don't do that and you just carry on managing, and problem solving, and getting by, and making things happen, because you want it work for, for your students, or for whoever, and keep on going, it's... then it can go from there till the point where it snaps [...] and ended up at that point, having to drop everything for a number of weeks in fact because I'd just gone too far, sort of [inaudible 40:57] on top, trying to manage everything, keep everything going, and just couldn't, I got to my work and could do nothing for a bit [...] [P21]

Oh, there was one, when I was marking. I started, when I finished that cyberpsychology marking I went on to the programming marking, uhm, just trying, you know, up against time pressure again, get it done, trying to get it done in certain time, three week turnaround and I was having technical problems getting things up, set up to work with it. [P21]

[...] what made it stressful was being up, up against the time limit to get a lot of work done, and not having the time to waste on that. [P21]

Because, oh, yeah, that's again, again that's trying to get things done, wanting to get things done and can't, sort of time limited thing [...] [P21]

Uhm, what was very stressful about it, it was very long working hours, as a single mum, evening meetings, and no support from senior management, so.... it just wasn't a nice work environment in the main, and working 24 hours, 7 days a week, yeah. [P22]

Yeah, so I mean, I feel stressed if... I'm tired and I'm faced with a massive task, uhm, or... uhm, you know if you get a big bill through, or... [P22]

They might have a lot of stress... Uhm... really, I suppose anyone who's higher management than I am is probably horribly stressed, uhm, I look at my area managers and think 'I wouldn't like to do that' [laugh] [P22]

Uhm, it was generally stressful, like I said, it was me doing on my own, we were moving from a three-storey house that was fully furnished, uhm, into a much smaller house that had no furniture at all. So... uhm, it was about banks and everything, getting the animals over, getting all the furniture we needed, uhm, and then leaving the house we left in a good enough condition. [P22]

In my last role, uhm, I lied about how much public speaking I'd done, or the size of meetings I'd taken, so... I was faced with having to take meetings, uhm, that had like a 100+ people and I was chairing them [...] [P22]

[...] uhm, so the agendas for the meetings would be around finances because I managed all of their money for the year, so I would have to present the couple of the accounts. So, and as I spent that money myself, uhm, there would be stress around that, what if someone said to me 'oh, what's that? we didn't say you could spend that', and I'd certainly go 'I don't know what that is' [P22]

I would find, uhm, sort of when I worked in London, uhm, we used to have a lot of City workers that came into a bar and they would be very stressed because they worked incredibly hard for a lot of money. [P22]

Uhm... so my previous role was working as an assistant manager for a rental car company. Uhm, which, uhm, demanded a lot of me physically and mentally, so I'd be working seventy hours a week, and I would, uh, always be on call, and people would always be asking me for more information, and I'd be always facing the same problems, and for me that's what, that's stressful. [P23]

No. The only thing that I have responsibility for outside of work is managing property because I'm part of a free-hold flat, so I own one of the flats, and I help manage all of that. So that's the only thing, responsibility outside work. [P23]

Uhm... part of why other people may find it stressful is because there's a lot of different bits of information coming at you, a lot of different tasks that want your time and attention. [...] But for other people having lots of different demands on their time, I think they find stressful. Sometimes someone comes to me and go 'I've got so much going on, it's really stressing me out' [...] [P23]

So using the previous analogy of not being able to get to the exit and having someone to chase me, I think chasing me would be the constant demands from people always asking for cars, and I think the end be, be going, trying to get the cars but there never being enough. [P23]

Uhm, one of them is a teacher, uhm, and he is always very busy with everything. He does his work, and he brings his marking home, so it encroaches on his work, sorry, his home life. So he finds that quite stressful, and particularly when he started training, because he was constantly

trying to create all the new material. [...] He's happier now because he's done, he's got the foundation, and he is stressed because he's always trying to get to the next bit, so it's going for promotions and things. [P23]

[...] so if I have a lot, you know, my work here, I have a lot lots of different projects, and I've lots of reports due, at first it's stressful because more and more things are mounting on [...] [P23]

I'm still, I'm stressed at moderate level when there's lots of things going on, you know, I still feel anxious and 'am I be able to complete everything on time?' [P23]

That was why, so a combination of those, constantly working hard, not eating enough made me to lose weight, and then I had no energy, so it was just a vicious circle of things that would, you know, keep going round. [P23]

And... also because I work only in the term-time that's the really busy period, and so it's very difficult to find a time when you're not working 100%. So, that also can be stressful. [P24]

I think so. I think also, uhm, because you have, uhm, different lines of accountability, so... the team sits within students services, so you're accountable to a manager, and to the people in your team, of course. But also you're linked to a faculty, and so you feel that, that you need to provide for that faculty what they're looking for. [P24]

That's actually quite simple because then you can really focus entirely on this, but actually you have to do a lot of, almost marketing work to promote your services to academics, and also to encourage them to allow you to do group-work sessions on their course, and things like that [...] [P24]

Uhm... so a lot of it is one-to-one, uhm, there's also, uhm, a drop-in session that, that I do, uhm, and so at this time of the year, that can be really easy and quiet because maybe nobody turns up, uhm... but maybe around November, October-November time, uhm, it can be busier because people are queuing up and waiting to see you. [P24]

Yeah, so... I think as a person I often feel stress when I'm under time pressure, yeah, that's a particular thing I recognise by myself. [P24]

Uhm, so she plays at the national level, she goes to, to, to things like the British Championships. It's really good, but it's also like a quite a big pressure as well on the family because, uhm, we

understand that is she is to continue at that sort of level, and hopefully to get it to an international level, uhm, then, the, uhm, it's, it's actually a huge pressure for everybody, and you have to, uhm, put on that child, as well, and we have conflicts in our minds whether that's an appropriate thing to do. [P24]

Uhm, but it's also expensive, uhm, because it involves traveling to lots of different places, even... last summer we went to Wales, uhm, and it's expensive paying for hotels to stay, and, and for coaching, and it takes a lot of our time. [P24]

And it could be very, uhm, in some ways quite relaxing to go to a chess tournaments, because you could, the games are 4 hours long sometimes, so you can sit and do nothing [...] [P24]

So, for example, uhm, if we're trying to get out of the door in the morning, as I said to you already, I feel sometimes stressed to deal with time pressure, so if I have to go to work, uhm, and my daughter won't get dressed for some reason, that sort of thing, that can be extremely stressful for me. [P24]

[...] because I have the sort of thoughts in my mind ' I've got to go to work', it's a pressure for me to get to work. [P24]

I think time pressure definitely. [P24]

Uhm, I think about the number of things I need to do, and if, it usually goes back, for me, to that sort of time pressure. [P24]

Around times where exams, uhm, so when it's exams time for the students, they're very, they're very stressed, they want everything now [laugh] [...] [P25]

I think it depends what sorts of pressure, uhm... when I worked in Leicester, just before I came, I was a carer of my elderly parents. So I was working full-time, and then every night I couldn't, I had to go home to look after my parents. [P25]

Uhm... like today I was, I had to see through the old students' files and see which of our students has graduated but it's just sitting there it's really monotonous and boring. [P25]

Yeah, I think, you know, as for people, that used to stress me out with people that got children would say, oh, you know, people who haven't got children don't know what is life, you know, that busy, you know, they don't know what is life, to be busy. I told them, you look after two elderly,

old people that are your parents, that think you're still a child, I think it's actually worse because you can tell children 'no', or you can tell them off, can't you, but you can't tell your parents off, and you can't get frustrated with your parents because they're not well, you know [P25]

Uhm, I don't know it was responsibility, or I was just tired, and I think sometimes, you know, uhm, I was on antidepressants, so I'd been on antidepressants for quite a few years [...] P25

[Laugh] And, and that can cause a lot of stress when you work long time, you know, when you're at work all day, forty hours a week, and you've got [inaudible 27:08] on your case all the time, and that... so things like that would make me... but, yeah, and I couldn't control it because I needed my job. [P25]

One of the girls, you know, she said that, she started in November and they asked her to do a trial, and so it's nice, nice and quiet, you know, And then all the students came back and she's like 'Oh my god, it's really busy, it's just not what I've signed up to'. [P25]

I think before I moved here because it all happened so quick, so I was trying to hand my notice in, sort out my, all my... my references, my form here, trying to sort my parents out. [P25]

[...] [it] took a lot but I did, I was trying to juggle that much, many bits. So I was packing to leave home, I was still caring for my parents, finishing my job, starting a new job, that... [P25]

[...] I was horribly stressed because I'd got loads to do. For my holiday I've got loads to do before I go on holiday, you know, or I've got loads to do at the weekend, but it's not actually like that, but I just think, yeah, I think it does affect everyday life. [P25]

Yeah, I think it affects your concentration at work. So I think you can, if you're stressed, and you've got loads of things, you know, worrying about, and you, you like that. [P25]

You know, oh, I'm stressed out because I've got loads on. [P25]

You know, even if it's like only little thing but like I said, you know, I think there's difference in short-term stress because you're busy, you've got a lot on, you've got to deal with, or these other things or issues going on and on [...] [P25]

Well, back at London I've got, uhm, my mum who, uhm, you know she is a registered blind lady, and she is kind of slightly, she's getting on a little bit now in age, uhm, and has a few health conditions, so kind of all these things compacting together kind of mean that she needs an extra

pair of hands, uhm, and I was, I was that when I was living in London. Uhm, there was a stretch of time when, uhm, you know, her health really had gone quite bad, so... uhm, I mean, we've always helped, we've always helped each other out massively throughout, you know, my upbringing and everything, I've always described her as that, you know, but obviously as a child I've always, I've had to do that little bit extra, I suppose. [P26]

Uhm... well, it was hundreds and hundreds of emails, and the... all of these, uhm, calls I'd have to do during a day, and I had to be, you know, everything had to happen, you know, right on time, and there couldn't be a mess-up. You know, and there was a lot of ingoing and outgoing post with, with the job and I had to make sure things were sent, you know, on time, otherwise it would mean that an exam wouldn't happen the next day, and this, just stress, knowing that people are relying on you for these things, and, you know, people sitting thousands pounds worth of exams in Dubai, and I'd have to make sure that the centre was there and open, and they'd booked on, and they'd got the physical paper, it were shipped off to the examination board, and all... [P26]

Oh... all the work [laugh]. Just to, just to put it like that, I mean it really is just so much work, and I hadn't understood, uh, how much I need to, well, how much was there to learn, and initially there was so much, you know, new information I've had to take on board, and the first three, two-third of the course was a nine-to-five job, it's how I would describe it. There was, it was a structured course, and the lessons were just all the, you know, nine-to-five [...] [P26]

The deadlines and... [...] this course, and the whole uni, and I suppose, whole country really now is very much like there's a time, and there's, you know, a space you go on, you go in to which you can't go anymore after that time. Your deadlines passed, and you know, you have to fall for extension a week before, and it's all very official and the countdown is always there, and you know... I think that the fact you can't actually physically go on that webpage after that point, like you know you've really got to get it there beforehand. [P26]

I mean, I would defend it by saying it was because of a whole host of, you know, years and things piling up, and me not dealing with the situations correctly, that it would be that. [P26]

### **Low resources**

Uhm, so I think you worry about your children, primarily, and supporting them and especially not having a job, it's been quite a stressful period of time [...] [P1]

[...] they do take a little bit longer and sometimes that can put pressures or create different stresses for you just by not being organised. [P1]

So if, if someone said to me 'you've got to run the marathon tomorrow I wouldn't be able to do it, but if you gave me a period of time to train how to do it, I could probably train and be able to do it [...] [P1]

Uhm... so it's about being fair to people as well and making sure that if you put them in the situation that's gonna cause stress that one they're comfortable with what you're asking them to do [...] [P1]

Uhm, but if you told me to put some formulas in an Excel spreadsheet, I could do it and I wouldn't stress about it whereas someone else just would have [inaudible 40:41] fear just from opening Excel, because they don't know how to use it, uhm... [P1]

[...] I don't really know what I will be doing on a day-to-day basis at the moment. Obviously, I've not been trained in that role [...] [P1]

[...] something's gone on in the house that means you're seeing them with bit more resentment, and not the person that can help you work through the problem. Not the best place to be [...] [P1]

[...] talk about something I haven't prepared. Uhm, I'm like not very good at public speaking, personally. And uhm... and if I'm not having prepared something I generally panic about it quite hard... [P2]

I didn't really know what I was doing, I mean I knew always what I was doing, but the level of skill I needed, I wasn't quite at that level yet. [P2]

[...] if you're in a new job, uhm, and you don't know what you're doing, that's really, like to me that kind of scenario is really stressful, being in a new place where I don't know anybody, and I know that I've got to do a good job or something but I don't know what I'm doing, I don't know who to ask, and I've still got to try and keep doing what I'm doing. [P3]

[...] knowing you could do it if you really tried, but not having enough time to do it [...] [P3]

[...] and then having a job that is like... really, really difficult, and you don't really know what you're doing, and being in charge of lots of people who don't know what they're doing. [P3]

And then having to go home and then having a family, people that are trying to suck up your time. So like, I guess, uhm, the idea of a stressful life to me is never having enough time to go to...going to work and always having to do so much in a short day [...] [P3]

The idea of having my time taken away from me, I find really stressful because in my head I make plans for stuff [...] And... because not having enough time for something is something you can't change, you can't add an hour to the day, uhm, and it doesn't matter because people still expect you to do these things in this time. Whether you can help it or not [P3] expectations - imbalance

I would like to have, have a family that I can trust, because I think not trusting people is stressful [laugh]. Uhm, so I'd like to have to just like a family that I can trust, and a job that I actually enjoy that, but that requires a bit of responsibility. [P3]

[...] even though you've got a full schedule of stuff to do, it doesn't matter because you know how to do it, and you like doing it, and no one else can do it as good as you, [...] and you don't have to be scared about not knowing what you're doing, but if you don't know what you're doing it's OK because you've got a good team, like everything around you is just good. And you don't have to worry about money, and you don't have to worry about going home and having an argument with someone at home because your family is just perfect for you. [P3]

[...] if someone else comes into your bubble, and... even talks for two minutes, it's like 'no just go away, I don't need you take my time away from me, it's my time and I need that'. [...] but the feeling, I've just panic, I just, I just need my time for myself, and I just need you to just not take my time [P3]

Just having some amount of the future in certainty. Even if it's two months. Knowing what I'm gonna do in those two months makes me feel a lot better. Because I know what I'm working towards and I know I don't need to, it's always about time, really, so I, I don't have to think 'god, what I'm doing tomorrow?' I don't need to ask, I don't need to save that time for anything. Because it's saved and I know that it's gonna, I'm, I'm gonna be doing that at that time. I'm walking towards this. Having that certainty in the future I think it's the only thing that can help me. [P3]

Uhm... mostly, when I find I'm in a stressful situation, it's usually to do with money. The lack of. So I'd probably say, like, if I'm having some financial problems, that's affecting my son, uhm... then I would say that's a stressful situation [P4]

Uhm... well, when I first had my son, and I didn't, I wasn't claiming any benefits yet, and I was living on my own, I didn't have any support, I had no money coming in. It was a very stressful time, because I needed simple things like nappies, and just the basic things that I didn't have money for, and I didn't aware of where I was to get the money for [P4]

So, yeah, I mean, he always says I had it a lot easier, so... I don't know, but then he had, although he had it hard, he had the support all the way through. Like for uni, everything my family had supported him. I had to do on my own from when I was fourteen, so, like, my parents split up, and had their own stresses that I had to figure out my life from a very young age. [P4]

I think if it wasn't for my friends, kind of reassuring me, I would think I, I'd get stressed very easily but, uhm, no, not any more. [P4]

Uhm... so, well, my son's stopped receiving his disability allowance now, and I'm still looking for work, so I spoke to the Jobcentre last week, and we talked about all the money that's coming in, and all the money that's coming out, and I have a lot more coming out, bills, and rent than I do have coming in. So... she said to me, which I don't think was very helpful, she said 'how you gonna come up with this money?' [laugh] and I said 'well, I don't know'. And then, I had that thought in my head, how I'm gonna come up with hundred, five hundred pound a month? From where? [P4]

[...] and then I thought that as much as I think I care, I don't have much money, my focus is as long as I have roof over my head, as long as I'm able to feed my child that's a no thing, but over the weekend I started noticing there was no milk left, there was no bread left, there was no things, there just wasn't any food, and normally I think, OK, I will have got back-up, I've got things in the freezer, and there was nothing. [P4]

So I started to worry that I couldn't put things together to make a meal, so I started to think, well, OK, I need to really make money, I looked at my account, I think there was an overdraft about 80 pound, so I thought OK, now I need to try and get my account in credit, after trying get some food, so I had all the stresses of trying to get the money before Monday, so I won't get charged 50 pound [laugh] from my bank [...] [P4]

I don't have any friends here, my family live far away. [P4]

It's just because I don't have any friends here [laugh]. Like, after uni everyone went their separate ways, and most of my friends are in London. [P4]

But because it was trying... I, I didn't have that thought in my head about, in my head I thought 'OK, I'm not gonna get money for another week', but then I knew bills are coming out, so in my head there was no money for food. [P4]

Uhm... I would guess it would be, I mean we're lucky, but I would guess for me it would most probably be if you were worrying about money, uhm, worrying about your home, whether you're gonna lose your home [...] [P5]

And it, it's a silly thing because that's just me but I think that's most probably lack of confidence, sometimes. [P5]

Uhm... major changes happening within the organisation, uhm, being out there to find the solutions, fairly isolated, uhm, very little support, because we were trying new things that nobody else had tried in the country [...] [P6]

So, uhm... when I've time frame that is acceptable to me to find the solution, uhm, I'm gonna find it [...] [P6]

I don't get a, well, I do get a pension, I mean, my employment pension, uhm, we'd lived a reasonable life, really, reasonable, standard life, uhm, we don't want for anything particularly, so... if I wanna buy new a new car, I just go and buy a new car. So I don't have to worry about going to get a bank loan, or whether the HPS, I'd just go and buy one if I want one. Uhm, as can [wife] [laugh]. [...] I'm sure there are a lot of people stressed, worrying about whether they can turn the heat up when it's cold, whether they can afford the, uhm, increase in the utility bills, whether... our council tax has just been increased, uhm, six percent, 5.8%. People on fixed income, they're gonna be worried about them, because it won't stop there, there will be an increase next year. [...] they're elderly people in this, uhm, population in, where we are, can't afford it. Uhm, or if they try to afford it because they don't want to have criminal record because they haven't paid their council tax on time, they'll have to think about what they're gonna eat, and, and those sort of things intrigue me, really. [...] That doesn't bother me, because I can afford it, but people who are on fixed income possibly can't. [P6]

I've got that life experience. That might not just be within working life, it could be broad life experience that actually help people find the solutions themselves. [P6]

Uhm, yeah, living in poverty [...] [P7]

Uhm... it, the only time I found it stressful in management is when the boss came up with an idea and wants to implement it, but he's not discussed it with all the managers and... you know it ain't gonna work because you're the ground level. [P7]

So for me that's quite stressful. I mean, like delegate roles out, and then not... things come back that you don't, didn't think they were gonna come back, and then, and you haven't left yourself enough time to compensate for that. [P8]

Uhm... so something where... it's an unrealistic expectation, uhm, and you're not given the resources to do something. So, if you asked to do something, and you haven't got enough staff, and they're not trained well enough, and you haven't got enough time, or money, budget's often coming to it. I think that's stressful. [P8]

Or just trying to get a plane when there's not enough time [laugh] yeah, something like that, uhm. [P8]

Yeah, I think, I guess it, for me, always goes down to time because I'm very organised person, so if there's not enough time to do the thing you need to do, I find that stressful. [...] I'm quite thorough, and if don't find that I have enough time to do things as thorough as I like, then I'm worried that I've forgotten something [...] [P8]

[...] it doesn't have a negative impact on it, unless it's unobtainable, there's not enough time, and then, then you can have a negative stress. [P8]

[...] we just need to do it, you just need to do, and I was, I, I don't know how to do it, so I can't do it, no, but you have to do it [...] so it was quite difficult coming in, not knowing anything, not being able to do the job to the level that I would like to do it [...] so I was just staying for hours and hours, trying to do the thing I wasn't competent at, because it's not my job usually. [...] you just look at these invoices and you're being like oh, I don't really know what to do, I'll just put that one down there, and look at this one, oh I don't know actually that one either, look at the different one [P8]

Uhm... probably, the only, I can only think of one which actually happened, probably when my mum, uhm, were struggling for money, and she had so much stuff going all at once. So that, that would be horrifically stressful. [P9]

Having lots of things going on, uhm, in a very short amount of time which doesn't give you a lot of time to kind of step back and think 'right, I've got to do this, this, and this' [P9]

Not particularly. I, I don't, the things which I do have to do aren't, I wouldn't say stressful just because, uhm, college is a lot of, uh, you've got a lot of your own time to do your work, so you don't have to go there very often. Uhm, and then with work, it's not shift work, so it's, I get, uh, two times in a day when I can go and clean to in, and it won't take the entire time, so I can say, uhm, half five in the afternoon till eight o'clock in the morning, any time in that I can go into for twenty minutes and do the clean. Or if it's a big clean I'd go and have many hours to just get it done, [...] [P9]

I mean, it was that and, uhm, my dad being, uhm, refusing to pay child maintenance which really didn't help, and then going through all of that [...] [P9]

So I had no real stressful situations because when I had to do sport which is something that I enjoy and something I get a lot, I was generally very good at it [...] [P9]

[...] when I do get stressed, like, if it's, I guess, I need help with an assignment and I'm not getting reply, and that's taking like too long and then I stress out, because obviously the deadline's been fast approaching, and that's my interpretation, I guess, of, like, stress. [P10]

[...] I've been quite stressed just due to, like, obviously I'm not blaming her, but my supervisor hasn't provided, like, much guidance [...] And I just feel like that I haven't been given like enough help. And it's stressing me out, it's like I really don't know what to do, and this is obviously the first time I'm doing anything and I'm always like liked to be guided on something I'm doing the first time, and that's kind of stressing me out. I have a need to learn it all from scratch and, like, I obviously, I, sometimes I don't like doing something myself unless I know what I'm doing, [P10]

I'd rather, like, rely on my family, or really close friends, and that's all about, like, as far as, I guess, the people that I would rely on to help me through a stressful time. [P10]

[...] if I'm not prepared for, uhm, certain situation, or certain day, then that would stress me out, and like having to cope with it, like on hand. [P10]

[...] or, if it is, like having someone to help you through that time can be a big help, and it can, like, relieve that weight from your shoulders. [P10]

I think it's being in a situation where I have no control over the matter whatsoever, although I want to take control, I haven't got, I don't know whether it's the education, or the right words, or the right demeanour. [P11]

I think, most probably, yes. I think so. There's nothing I can do about it, I haven't got the education [...] [P11]

[...] know, if I'm working on a shop floor, or a till, that's stressful to me but then I've never been a manager in charge of hundreds of people in life-threatening god-knows what. Uhm, that will be stressful. Differently because you have been trained, I haven't been, I wouldn't know. [P11]

If I'd stopped learning, I think it would be very stressful, my life, so... work-life balance, so not obsessed with, you know, get, earning enough to live my life with the bit extra, and not getting obsessed with only to get more, more, more. Because I don't want that any more. So I used to be very stressed out about earning a lot of money [...] [P12]

Well... well, I'm older now, and I'm a bit more worldly wise but when you're young, you're worrying about things. Mostly the arguments I had with the opposite sex were to do with money, let's face it. So, stressed about money out, how much things, cost, and all of that business. [...] Yeah, yeah. Money. [P12]

Maybe it's because... maybe it's just because at, you're doing a lot of work, you feel maybe you're not, uhm, doing anything but work, you're always at work, not at home, having not enough time to go and enjoy perhaps like the sunshine. [P13]

Because of my own fault that I had, uhm, left so much of it so late, perhaps. There was a lot to do, more than I thought there was to do. And I didn't leave myself enough time to do it without getting to a kind of stressed. [P13]

[...] uh, money, money issues, or like, yeah, waiting, having two more weeks until payday and not very much money [...] [P13]

[...] there's, uhm, no time to do things for yourself, because as soon as you do your work, it takes an hour and a half maybe if you're commuting. [P13]

[...] I feel like I'm quite a laid-back person and I, I can realise when something is going to, uhm, maybe, make me feel stressed, and whilst I deal with it, I know it's coming then it's not a stressful... [P13]

I don't think, it's not... it's just because the way I imagined it when you first said that to me. There was no other people there. But that, that wouldn't be... that would be stressful, actually, yeah, that would be stressful in a long-term, because you wouldn't be able to have conversations when you'd be, you would be by yourself [laugh] [P13]

Because perhaps you don't believe in yourself to get it right, to do it, to get it right. [P13]

I didn't have my, uhm, my wallet, or did I have...? I didn't have any money, so I couldn't get taxi. [P13]

[...] and lot of politics at the moment within, with money, uhm, a lot of their quality research money was taken away, which angered them [...] [P14]

And also there's a, uhm, distinct lack of leadership from professoriate [...] [P14]

So it's quite a broad... running events, running conferences, it's quite a broad spectrum which you can't be good at all of them. [P14]

I mean, in the UK it doesn't help working people, predominantly doesn't help working mother, because they're still predominantly the carers [...] [P14]

See, you don't have [inaudible 25:58] a lot but you don't have the village anymore, do you? It's just, you don't have anyone to help any more. But for instance in my family by [husband] be in Poland they still have the village of some sort, there's more grandmas you can share this with her, all helping out and things like that [...] [husbands'] sister, her mum and dad come and pick her child up every day, look after [...] They've paid for her house, so she's mortgage-free, uhm, they've been able to do what they want to do, and not worry about having to financially pay for it. So, because it's obviously paid for. Uhm, at weekend they can go out together, because her parents will baby-sit [...] it would be useful if there was more... I suppose, the family union, we'll be closer together. [P14]

Uhm, no financial, we had no financial responsibilities whatsoever, because we left everything in the UK, and that was it, we were no... no worried to pay a mortgage, or... [P14]

And obviously then you had the externals, both grandparents, oh, two set of grandparents, uhm, they didn't have any financial burdens, they had flats, they had work, I think, you know, just got it, so it's theirs, so they had no... didn't have the mortgage or anything. [P14]

Something stressful... uhm... oh, I had to deliver interdisciplinary research week, that was stressful, because I'm not a very organised person, and I'm not trained in events organisation [...]

[P14]

Probably being in financial difficulties. Knowing that we've got children depending on us. [...] Uhm... because of commitments that we've got in terms of mortgage, and, uh, yeah, providing for them in the way that you would want to be able to [P15]

Uhm, we're comfortable, like, financially we are comfortable, is, we have to be careful, but, uhm, and I think, so this is hard having job from a full-time job salary to, like, a part-time salary, but we manage. Uhm... everybody is fit and healthy, we both have jobs that we're happy in, we live in a nice place. Uhm, I look at other people, and I think I've got nothing to complain about really [laugh]

[P15]

Whereas I think, you know, stressful situations can, depending on the resilience of the person very quickly bring people down and perhaps they can't get out from that so quickly. [P15]

I think feeling,] drawing on previous, uhm, previous situation the feeling of not having support network. Uhm, so if you're feeling, perhaps, that you're dealing with something significant, you have to do it on your own. I, I know, I'm really fortunate with my family and think that we are really close, and I think, yeah, feeling like I've got them would help me to deal with it. [P15]

Uhm, but I'm, I'm in a, I'm in a comfortable situation, I don't have any financial worries, I haven't had any financial worries for a long time, I've been very lucky. But, and I think that can be really stressful, uhm... for people, uhm... [P16]

I think having financial worries would be stressful. I, I do often think about how lucky I've been in comparison to, so if I was starting that again, if I was an undergraduate here, I... all the debt that

you incur for being a student, trying to get on the housing ladder because rental income seems to be very, very high, almost as high as mortgage payment. [P16]

It's, I'm coming to an end of my funding for my three years of my PhD, so one of the things that has been worrying to me, has been what income I'm going to get. [P16]

I think having financial worries would be stressful. I, I do often think about how lucky I've been in comparison to, so if I was starting that again, if I was an undergraduate here, I... all the debt that you incur for being a student, trying to get on the housing ladder because rental income seems to be very, very high, almost as high as mortgage payment. [P16]

I would think, yeah, if you've got financial worries, if you've got a lot of things to do, a lot of other people in your life to look after I think that could be quite stressful. [P16]

No financial worries, feel like I'm making contribution in some shape or form to whatever that I think is reasonable, in that I'm doing something positive. [P16]

[...] I've got choices that I can make, uhm... I suppose the only thing is I'd like to have somebody to make them with me but, you know, I'm capable of looking after them myself [...] [P16]

[...] not having enough time to do what I need to do – that would be stress for me. [P16]

And I feel like I've got enough in me to be able to solve it. [P16]

I think what makes us up is very complicated, so, uhm... my life hasn't been, you know, I've had good support, good, family support, been issues along the way. [P16]

[...] if somebody has something that is a really stressful situation, believe in themselves that they will get over it, uhm... but, it, you know, feeling what you're feeling right now is right for you, so there's nothing wrong with that. But not that you can't get better. Hopefully you can see some, some light at the end of the tunnel sort of thing. [P16]

[...] uhm, never any time to yourself, never any time to relax [...] and there's never time to switch off, then that will be very stressful. [P17]

And I guess also, uhm, the fact that I don't have young children, uhm, I don't have those kind of caring responsibilities that you were asking me about, means that I have probably a lot more of free time, outside of work than other people might do who do have those responsibilities. [P17]

Uhm, and if you're working very hard which is something I associate with high level of stress then you don't have that time to relax, and that time to devote to relationships, it's really important.

[P17]

Uhm... and I think, my partner is very supportive of my work, and this kind of, you know, he loves cricket, and he's really interested in history, and he's really interested in my job, and, and everything I do. [...] So if I didn't have that, if he wasn't supportive, or if he was totally uninterested then I think that would make it a lot more difficult, uhm, if I didn't have kind of sound support. [P17]

[...] and you never have time off and you feel yourself a bit strung out. [P18]

[...] you don't have particularly the same community you might have there. I know some of the lecturers live local, so they're friends with other lecturers. You become a bit of, I wouldn't say interlope because I don't feel like that but you do... [P18]

That could be stressful when I start to feel a bit isolated and want someone to talk to, and, uhm, teach whatever, well, that's fine. [P18]

[...] particularly how confidence in my, myself because again, as an academic, I've had people before say '[participant's name], you've got every right to stand up to that person just saying no' [laugh]

[...] it was time I really remember which is ridiculous but worrying about my job, and one, another problem in academia is that my boss knew about it, fully about it but he didn't have any power to do anything [...] [P18]

[...] we're financially stable, she had a permanent job, I was looking for a permanent good job, and... came down here, and that was fine. [P18]

Yeah. I can, and I will because I have time to do it, and, uhm... I have time to think and focus [...] [P18]

I'm very grateful for what my partner gives to me, and what I give to her, uhm... because it's that, you're just there for no right, and I think it's just very difficult when you're away from family [...] It, it's just not the same, it's being able to... when I grew up you could go to a next door neighbours, you could go to see your Nan, you could go to whoever it was your best mate, uhm [...] [P18]

[...] but what's not nice is when people don't have those people. [...] That's why social networks are so important, or communities. [P18]

When I, when I suddenly lack confidence about what I must do, and then I would start, then that would cause me a great deal of stress. [P19]

[...] then I only had half an hour to do an hour's worth of stuff, and I went into that mode where I got quite anxious about it. [P19]

I wasn't really adequately supported, and, uhm, I don't think, uh, so I think it was, uhm, it was about nobody pulling me back and saying 'you need to give time for something else', or 'you need to withdraw from this bit', [P19]

You know, and you know, I'm quite lucky with my life, you know, I have nice other half, I've got my daughter, we're settled, we've got, we've got mortgage. Uhm, you know, it comes fair enough not to stress about money, uhm, I've got lots of friends and family round here, so I, I'd probably in comparison to a lot of people I'm quite lucky with the life I have and... [P20]

Uhm, might not have any support from friends and family to look after the little one. I would imagine that quite stressful, so... [P20]

I don't know, just being, uhm, I think it would be really lovely in the matter, you know, I wouldn't like to win the lottery or anything, but it would be lovely never to have to worry about money. [P20]

But then I was running around without support, arranging everything, trying to get things straight with insurers, trying to, and organise flights home, and travel, and sort of letting the family know, and stuff like that. [P21]

[...] having to be a grown-up, on my own dealing with a difficult situation, where I had...yeah, away from home as well, so, you know, none of my usual sort of support systems in place, you know, no family who could have sorted it down and help. Anything like that really. I felt really lonely, there was, yeah, it was the, because, yeah, I, I guess lonely [...] [P21]

Yeah, yeah, so he was, you know, so there was a lot of worry about how we were going to get in home, and, you know, just, just being away from home in that situation was, makes it, yeah, some family being ill is already hard, but doing it away from home where you haven't got base [...] [P21]

Actually, that was, after my mum got ill in November, I was really... I guess, quite tense and like, like I had very little headroom for stuff going wrong, so I'd, you know, people were getting in my way on a pavement, for example, and I [inaudible 26:18] or step out awkwardly, and normally, you know, just kind of try and avoid them... And I'd get really crossed about it because I just had no, no spare capacity to deal with things [...] So there's like, it was like, that was driving along in a car where you've not get enough headroom. And you're fine so long as the road is smooth, then the moment you get a little bump you hit your head and it really hurts [laugh]. [P21]

So, no, because, because, yeah, I've got good support at home. You know, doing, doing the PhD, you definitely need supportive family with that, because it's... yeah. [...] my husband's absolutely great with that, and really important... Yeah, if he wasn't that would be really difficult, it'd be real tension there [...] [P21]

Sometimes they're gonna be quite, gonna seem quite resilient, robust, powerful sort of people. [P21]

Uhm... so I've got a very supportive husband as well, so he is quite, you know, I talk to him, and he would notice too, he, he knows. I don't have to notice that I'm stressed, he, he absolutely knows, uhm, in a nice way [laugh]. Not 'what's up with you today?' [laugh] Uhm... if he were not in a good place at that time then... and not having someone to turn to, that would be... uh, that would be impossible. I just can't, well, I can imagine because he had periods of depression, and there's, there is, there is no one to turn to, that is worse, that worsen [having] no one to turn to. So... yeah, there's a, there's a definite element of support there. [P21]

[...] and no support from senior management, so... it just wasn't a nice work environment in the main [...] [P22]

Money [laugh] Yeah, stress, uhm... you know it's probably it, really. [P22]

Why is it stressful? Generally for me it's around energy levels, and, and time taken, so for me it's be stressful if I'm told that I'd be at home at 5, and then something happens at five to five and I'm still here. [...] And finances become stressful when you haven't got enough. [P22]

Most stressful thing? Uhm... it's not having any money, as a single mum, not being able to pay my rent [...] if I can't pay my rent, we've got nowhere to live [...] We've no roof over our head,

we've got nowhere to put the animals. I essentially can't work, we could, so it'd all be a spiral of decline. [P22]

No, I don't believe anyone can float their life, can oh, oh, whatever... you know, unless you had millions and millions of pounds, and everything just didn't, and it doesn't all centre around money, obviously, but I suppose for me as a single mum a lot of stress centres around finances and, and paying for things. [P22]

Uhm... Not so much these days. I mean being a single mum, I suppose. Uhm, I've been doing that for, he [son] is 14 in August, so almost fourteen years, so, uhm, to start off was incredibly stressful but you just kind of get used to it, uhm, so not really. It's all really money, and work. [P22]

So, most of it was centred around finances, really. Uhm... because we needed money from the old house for the, for the new house, so that what's made it stressful. [P22]

Not really, because there was no time, so just had to get it done, and then once I'd got it done then I could relax. [P22]

When we, we ended up with Hugh, uhm, he was a puppy, someone just left him with us, and then he was very ill, and he almost died, and suddenly I had an incredibly large bill, and I was only working part-time because [son] was having some problems with his dad, and, uhm, and to us that was immediately incredibly stressful, we had this dog, I couldn't pay my MOT, I could hardly afford to pay my rent, I had to pay up that bills [...] [P22]

Hmm... it would be one where there's never, a stressful life would be one where you've never got enough time or resources to ever finish, or complete, or do what you want to do, so uhm... it might be that you, you've, you've never got quite enough money to meet your, or even if you've got just enough to reach rent, you're worrying, write up until the last moment, so there's never enough time, you're always worried that you've never gonna catch the bus to work, or... that would be a stressful life, overall, I think. [P23]

[...] I'm healthy, I have, you know, I'm young, I have my health, so, and I've, I have enough money to be able to do the things I want to do, and I have family and friends that love me, so... there's no particular element that I would describe making my life stressful. [P23]

And, and for another of my close friends... my old friend is running his own business, so he finds that stressful because it's the constant worry of 'I've always got to find something, a new customer, so that I always have enough money to be able to pay rent'. [...] But he sees the stress element more because you need money to live [laugh] so, so I can see why it might be stressful for him. [P23]

I know that I can dedicate my time to that. I know that I have the time to do that. Uhm, that's how I know that I'm not stressed. [P23]

Uhm... partially it goes back to they may not have, uhm, learned skills to break down the problem... [P23]

And I also think that there are factors that increase the stress levels, such as having a smaller team than you might have at another university with the same number of students. So that, that can also be stressful because you feel again that you have to do, you, you understand there are those that need help, and you want to be able to provide that. [P24]

And... we feel that there's a great disparity now with the changes in the economy over the last 2 or 3 decades, between, uh, the sort of housing situation that we have, compared to what we expected would be our situation when we were growing up. And, uhm... so our finances is a big sort of factor in terms of stress. [P24]

Uhm, and I also think, because I work part-time, I have less opportunity compared to colleagues to meet, for example, with academics. And so, if I had more of that opportunity it would be much easier for me to meet and have a really good discussion on what their own expectations are. Whereas a lot of what I do has to be by e-mail because I just don't have time to do that. And so, you have to put in, you have to fill in the blank spaces in terms of what someone expects from an e-mail, you know, you can have a few exchanges, but it's, it's less defined, I suppose, so yeah, that pressures come from me, too, I think, yeah, in that respect. [P24]

I think also, uhm, we, we felt as parents that it's been extremely challenging [...] we can't afford to move to an area around here that is, where she would be then able to go to a good state school. [...] So we took the decision to put her in the private school, so the pressure, the stress, also because, you know, we're using a lot of money that would be quite useful for other things like housing and stuff like that, uhm, to educate, because it's really expensive. [P24]

[Lack of money] So... that does impacts on a lot of things because that impacts on, uhm, relaxation activities that you can do... Uhm, it, it makes you think about, you know, whether you ever go out for a meal, or have a chance, you know, to, to do things that are more relaxing, I suppose. [...] So yeah, I think that does impact everyday..., uhm, because if we had more money, and we were in, in a bigger, in a house, for example, uhm, then, uh, yeah, we would have more space, uhm, but also it could be stressful in our flat because of neighbours, and noise, and people being inconsiderate sometimes. So... yeah, that does impact everyday... yeah. [P24]

What I find more stressful about my job was that I couldn't have any time off in term time. [P25]

I can feel overloaded sometimes, and sometimes that represents stress, if I've got too much to do, so my whole time's taken [...] [P25]

You know, it's, that was just, you know, because I wasn't stupid, I just needed a bit more help, have a disability but if people import... I get angrier because that's stressful to me [...] [P25]

So people are, they're stressing me, and not helping me. [P25]

So it all happened a bit quicker than we think but we are going to ultimately move out together so... but like I know, that I can just, my friend who, we met at her wedding, she only lives like ten minutes away. [P25]

You know, you forgot about it, and you always went to your friends next door, and, you know, play and like that. [P25]

Because they know that they're capable, but some things, because they've not got those certain skills can stop them. [P25]

They were really pleased for me, they like my boyfriend [...] You, you know, I've never been married, I haven't got any children, so they were like 'this is your chance of happiness', so they wouldn't stop, the sort of fact that, that my parents made it so easy for me, but I was scared to death, I didn't know how to tell them, you know, and sort of, my sister 'you've got to come round', Do, do you know, like my older sister is like I needed that support you know, you know [P25]

And I have got good friends, and I have got on at work. [P25]

But you see, so I think that's put me in a better place as well, but... but this is the first workplace in my whole life, where they've known before they've offered me that job that I had a disability.

So I feel like I'm finally, you know, getting somewhere in life, and that I'll be able to succeed because... because they're accepting me for who I really am. [P25]

But the another day you can just... you're up, I don't think... not that I don't wanna get up this morning, I'm so stressed, I can just stay in my bed, you know, I was tired, and when I'm tired... [P25]

Oh, well, I mean, she... uhm, just unfortunately she's one of those managers who doesn't lead, uhm, very well. [P26]

[...] it's actually been really great so... you know, she shows me so much support emotionally and financially [...] so she sent me a signal like on the phone or something, I think it was just before the move, or just after the move that she's had a really good feeling about me being here [...]

[P26]

I suppose I have never given myself enough credit in the past for that to be the case, so... uhm... [P26]

So, you know, I love travelling, going to new spots and stuff on my own, or with, you know, ideally, with one of my really close friends. Obviously, I have those and it's fine, we have a great time. [P26]

I haven't even looked to the lines [laugh], why did I do this to myself? I haven't, how can I be prepared, I'm not prepared! What I'm gonna do? That's re-occurring nightmare [laugh] [P26]

Well, actually, funny enough, there was one of that I used to use quite a lot, and it was pack of cards, so there, there were days when I felt like I was fine, all my cards was stacked up on each other, and it was fine but it was fragile, you know, one, and as often would be the case, one sort of strong wind too much in one direction, and all the cards would fall on table, and there would just be a mess. [...] It would be, you know, it's that sort of fragile strength that I had, I suppose, at times would mirror real confidence, and some people wouldn't know any difference unless I told them. So quite often people are a bit surprised when I say 'oh, yeah, you know, I have confidence issues, or I did have...' or all of that [...] [P26]

Some people excel in one task, you know, and the others maybe won't... Uhm, we've got all different skills, and I suppose the stress that comes out of that. [P26]

And, uhm, yeah, just having a healthier base or people to talk about those kinds of things is really important. [P26]

### **Unmanageability**

It's just how you're able to deal with it and make sure if it doesn't become too much for you. [P1]

I think a, a small bit of stress is OK,I think, it's how you deal with that. [P1]

Typically a kind of feeling being overloaded by uhm issues or things to do, so... [P2]

I'd say mainly there, I think it is the time pressure, having to have something done by a certain point, or criteria, something uhm... yeah, having something expected of them at certain time and being, not being able to do it , perhaps. [P2]

I would say it's, uhm, also the brain being overloaded by things that, uhm, tasks, tasks to complete... [P2]

To put it simply, you having a lot on your plate, uhm, and almost not knowing if you're able to finish it. [P2]

If you can imagine, like you're walking towards, you know, like in a race where they have big kind of flags and then like the ribbon you run through, it's like a walking towards that, and then you pick up the pace but it's still far away, and you can see it but it's so far away, and then like someone flicks on a little time race 'oh, you've got ten minutes to get there', and it's like 'oh my god, I wouldn't get there in ten minutes'. [P3]

Uhm, yeah, it was just, it was stupid, it was kind of packing too much into my day. But then I didn't feel like I had a choice. [P3]

Uhm... when, when I think of stress, I think of not being able to manage things effectively. So if there's a lot going on, and if I'm not able to manage it, uhm, the way I would normally manage stuff, I find it stressful. That's how I would put it. [P4]

Uhm, usually, if, if I'm having some, some issues, whether it be personal, or financial, if, if I can't see a way out, or see a way to manage it, then I would class it as stressful. [P4]

But I'm working my hardest, and I'm still, you know, I, I can see well, I can still meet the deadline, then I feel like that's fine, but I think as soon as you pass that line where you, where you, where,

for example, something gets in the way, and I'm not able to meet that goal, of what I expect, then I feel like it can take over because all other emotions suddenly get involved [P4]

But when it comes to being in a stressful situation where is that bad stress, and non-manageable, I'd say it's a, it's like a ticking time-bomb in your head, like you just don't know when you gonna kind of break down. [P4]

Uhm... just, they may describe them being sad, or not being able to cope. [P4]

Oh, it's usually about a particular thing because I feel like, sometimes if we've got like one or two things going, if it was just those, those two things then that would be fine, but as soon as there's another thing that adds more the time constraint, or something like that, then it could create more stress. Because if you only had those two things to focus on, it probably would be more manageable, but as soon as something else comes in, gets involved, then, yeah, I think, I think it's all about how, how much we can manage. [P4]

Uhm, I think it's sometimes if you feel overloaded with things [...] [P5]

[...] you felt really stressed because of what was going on, and, and you were, didn't know whether you're gonna cope with it [...] [P5]

[...] repeating situation that you can't find a solution to, or [...] Not being able to find a solution within a time frame and that is necessary. [P6]

Uhm, constant pressure, reports needed in time frames that were, uhm, un, un, unachievable. [P6]

There's... decisions that have to be made every day about what you're gonna to do, and suchlike, they're not stressful, it's like not being able to resolve... in your own mind. [P6]

Uhm... so it's whether you are able to, uhm, have the coping mechanism to stop life becoming stressful. [P6]

I think that's like...in my head I know that I'm stressed when I'm like just trying to do too many things at once, and I can't focus in on something. [...] Uhm, yeah, I think it's just a bit of kind of a brain confusion, because there's too much going on. [P8]

Uhm... so something where... it's an unrealistic expectation, uhm, and you're not given the resources to do something [...] [P8]

When you, when you know in your own mind that it's not achievable, but you're being pressured to do it anyway. That would be pretty stressful. [P8]

I mean, I'm quite good at prioritising, but I think if you're quite stressed prioritising things becomes quite difficult because you know that everything needs to be achieved, and there's not enough time to do it [...] [P8]

Some negativity, and just... being weighed down by things that are unachievable, or difficult, or sort of negative. Yeah. [Laugh] [P8]

So I found that really stressful, and I think that's when it becomes negative, if you physically, or mentally are not able to do the thing that you are having to do. [P8]

[...] but being put in a position where you are unable to do what you're asked to do, left with no option but do it, that's negative stress. [P8]

Uh... I guess it's a bit like quicksand, because you're sort of trying to keep on the top of it, but you're sinking a bit. [P8]

[...] you're in a ship that is sinking, and the whole project is just throwing cups of water out of the boat so that you don't drown. So already, you, you're going in, and it's stressful from the beginning, because you know, you're sinking [laugh] so you're just trying to not, not drown, and doing everything. [P8]

[...] I work best under pressure, so for me the stress is the pressure, and as long as it's manageable then... yeah, I think, unmanageable stress is obviously not so great, but it's not necessarily so much that you can't deal with it. [P8]

When you, when you know in your own mind that it's not achievable, but you're being pressured to do it anyway. That would be pretty stressful. [P8]

[...] like when you start the job you know that it's gonna be stressful, but it doesn't have a negative impact on it, unless it's unobtainable, there's not enough time, and then, then you can have a negative stress. Like a negative effect one. [P8]

So I found that really stressful, and I think that's when it becomes negative, if you physically, or mentally are not able to do the thing that you are having to do. [...] being put in a position where you are unable to do what you're asked to do, left with no option but do it, that's negative stress [P8]

Uhm... trying to do lots of things at once, and feeling like you not could be able to do it. [...] Because, I think, of the time restraints. [P9]

Uhm... because, I know, I, I only really have stress by stuff which I won't be able to do in time, or I won't be able to complete. So... not being able to do something [...] [P9]

Uhm... because, I know, I, I only really have stress by stuff which I won't be able to do in time, or I won't be able to complete. So... not being able to do something. [P9]

I guess, like feeling like upset with myself, I let myself down, frustrated with myself that I couldn't get it right, a little bit like sad [...] [P10]

I guess, with a lot too many responsibilities, and that's driving them to a point where they carry on, like, do all of them at the same time, and that's leading them to all these other consequences which are making their lives even more stressful. [P10]

[...] if a little thing goes wrong then, like, OK, but that's fine. It can be fixed. [P10]

And like not, yeah, like every other thing doesn't bother me, and I can find, like, a solution to it, or I can just think of a way around it. [P10]

Because like some, it all kind of went wrong, and that was too much, like, going wrong with it [...] [P10]

It's, it's, it's a bit sort of, uhm, it's when you can't take this anymore, I can't take it anymore. [P12]

[...] if you can't see way forward, a solution to something, you have to have accept it, or else it's gonna be stressful for you for the rest of the time. [P12]

And I'm worried that, that sort of... I can walk with that stick but I didn't, I just brought it, just in case there was something that I couldn't handle. [P12]

Yeah, you, you stress yourself to a point where you reach a boundary [...] Might be sort of, might be there's a bit of a way of doing it but that's, I push myself to the limit of it, and then I won't do it if I've reached my limit. [P12]

It's not realistic. It's not realistic. [...] Yeah, yeah. So you've got a higher ideal, but you can't do it because it's not possible, yeah. [P12]

Yes. But, uhm... when you feel like you've got an illness like I don't only feel it, I have it. Then it just, you could get negative and think, well, that's another thing I can't do. [...] I'm doing some spring cleaning at the moment. There's a box like that, so I lifted it up, and put it down, and then... I tried to lift it back up to put where I'm gonna, and I can't do it. And I think, well, I lifted it to put down, but I can't put it back. And I'm thinking, oh, that was easier, I used to be able to do that, why I can't I do anymore? [...] But for that minute I was stressed – could I do that? I can't do it anymore. [P12]

Yeah, it could be that you've got more tasks than you think, uhm, is manageable. [P13]

Yeah, I would say like those things individually wouldn't, wouldn't make me stressed. It's like if they all were to happen at once, maybe that nothing is going right, yeah. [P13]

I don't think I'm the, I've, I'm quite a, I feel like I'm quite a laid-back person and I, I can realise when something is going to, uhm, maybe, make me feel stressed, and whilst I deal with it, I know it's coming then it's not a stressful ... [P13]

So, like I've said, say earlier if one thing was to go wrong then OK, walk, walk with it, uh, fix it, but then if like four things like go wrong at once, then like 'what's going on?', 'why, why me?', 'why is everything happening at once?', I don't know what to do, what to start with. [P13]

Too many bits, we have too many, perhaps, too many things to process. You, you can't physically, you can't physically do them, but you have to physically do them [laugh] [P14]

So they became stressed because they couldn't do something, perhaps, the whingers. [P14]

Like all in one go, ha-ha, I don't know what to start with. [P14]

[...] she was obviously upset, she obviously didn't know how to deal with it [...] [P14]

I think it's too many duties, I think that's... I could probably, you know, work out how to survive, well I did, I did it all. Uhm, yeah, it's just additional, just the extra duties, and it's quite... to do a five day event, like every day two or three events, it's quite a lot... when you're doing work on 1 FTE. [...] So again too much, we're doing too much, trying to fill the, the void, the silence [P14]

Uhm, tension, a feeling of time limits, maybe, and, uhm, too many things to do at once. [P15]

If you try to manage, perhaps too much on your own that you're stressed about [...] [P15]

I never feel like I stopped with my career, and I, so if I get a bit of pressure but only it makes me think 'well, OK, I can deal with that, I can go on with it' [...] [P15]

Uhm, I think it was just so many things out of my control that I, I knew I couldn't fix it, I couldn't do a PowerPoint or something that would, you know, I knew it was kind of beyond repair [...] [P15]

Feeling like I'm not in control, got too much on, not eating properly, not having enough time to do what I need to do – that would be stress for me. [P16]

And, and, the very nature of the fact that the person feels stress means that they can't deal with it right then and there. Because if they could they wouldn't be stressed. [P16]

[...] you feel you've got too much on your plate, too much to do [...] [P17]

Just, I suppose, mentally feeling, or thinking I, oh, I can't get everything done, uhm, so there's an element of kind of despair there [laugh]. [P17]

[...] that you feel you've got too much on your plate, too much to do [...] [P17]

[...] we both get stressed about that, or if we feel that people are kind of demanding things about us that we can't do with at work or that we don't feel able to do. [P17]

But that sense of failure and that sense of, uhm, 'I can't do this thing' was really, really stressful for me, uhm, because I had found, generally found things fairly easy up to that point. [P17]

OK. Uhm, I mean yesterday afternoon I was, I, uhm, was meant to be kind of doing a particular aspects of my job, so something to do with the case studies and I spent about three hours answering emails, and I looked up at sort of six o'clock and I thought I've just spent the whole afternoon, uhm, answering emails, I haven't done the thing that I was meant to do. Again, it's, it

was all about, uhm, kind of competing demands on my time meaning that I couldn't get the work done in time available. [P17]

So I talked about me and my happy place is waking up in the morning and, uhm, feeling 'oh, I haven't got too much stuff to do today', I don't feel stress in the negative way. [P17]

Uhm... for me, I get Twitter updates on my emails every day, I get LinkedIn updates, get colleague email me, teachers, students, uhm... and it's, quite easy you can slip into losing... not managing your workload because you take too much on in your enthusiasm but then you never, you end up working the weekends and you never have time off and you feel yourself a bit strung out. [P18]

So with work, research it's when I say yes to too many things, so the moment I, I've just won an award for some internal funding, so I've got the project, I've got PhD student, uhm, the society I'm involved in, I've just been asked to review a book on ethics for the 2nd of June, uhm, we've also got teaching programmes, and dissertations to type up, and things like that. [P18]

[...] you hear about so many people don't sustain things for whatever reasons [...] [P18]

Sort of. And it comes back to, and I keep, you'll hear me say over and over again, it came, comes to the sustainability side of it again. [P18]

I: OK, so for you like stressful life would be... when you have like a lot of responsibility? And you can't kind of manage that?

P18: That I can't manage. I don't mind the responsibility because I can... the responsibility I have at the moment, be in researcher, be in teaching, uhm, the work at the uni societies, I can now manage it all, at the moment. [P18]

Uhm... maladaptive is then, perhaps, I'd know if I took on too much, well, like that. If, well, if there's... in incredibly stressful environment that I was working too long hours [...] [P18]

I'm digressing but essentially what I'm getting at is... is that fine balance if you take on too much? And I've done it in the past as well. You take on too much [...] [P18]

[...] yeah, but it's just taking too much work... because work some... not all of academic work's so much fun [...] I love my job now, and won't have it any other way, but it is bloody stressful. [P18]

So for me it's taking on too much, so saying 'yes, I'll do this, yes, I'll do this, yes, I'll do this', blue-eyed boy, I'll be brilliant, I'll do this. [P18]

I've actually come across two women, two academics recently who talked about taking their laptop to bedroom with them and like 'oh, I've got too much work to do, I've got to take my laptop to bed, I haven't got time for running, or anything like that' [...] [P18]

Uhm, so not, not coping with, uhm, with the responsibilities, or with workload, or with, or with a relationship, so letting things get on top of you, I think, uhm. [P19]

It's like a knot, in a piece of string, I'd say, where the things have got too tied up, and you can't, you can't release it. [P19]

[...] it was a, there was just a, there was a huge amount to do, there was probably more than I could manage, I did. [P19]

[...] yeah, what else cause me stress, I don't know, I mean ordinary life sometimes, having too much to do, some days, some days not, not keeping on top of the things [P19]

Yeah, I was, uh, I used to have more, I used to have another job where I was, I had enormous amount of stress, I was in a leadership role with a lot of stress, and, uh, I didn't cope very well probably. [P19]

Letting life get on top of you, letting, letting work or commitments, or your own situation become too, uhm, become too heavy, that you can't carry anymore. [...] suddenly all you can think about is you can't manage, or you can't cope and that's, uhm, yeah. [P19]

I find it, I find it enjoyable, and, uhm, I might be challenged, but I don't find be challenged stressful. It doesn't make me feel like I'm, uhm, not coping, or, you know, there's too much to do. [P19]

[...] whereas, uhm, for me it would become stressful when there's, uh, a feeling that I, I'm not, I can't cope with it [...] [P19]

[...] there's too much going on and because there's so much going on everything grinds to a halt so it's like that. [P19]

I: Uhm... and how would you describe a person that is not stressed?

P19: Uhm... coping. I mean, maybe, uhm, calm, uhm, yes [...] [P19]

And, uhm... and you start to, uhm... or even if you're doing something else, at the back of your mind you're thinking about that one thing, you can't switch off something. That's when it starts to tip, I think, becomes too much probably. [P19]

And not be able to deal with what's really happening, you know, in your life at the moment. Instead, you're, you're either panicking about something in the future, or you're reacting to something that's happened in the past. And probably a bit of both, and that's, uhm, and that's distorting your ability to cope with what's actually in front of you. [P19]

Oh yeah, must do, I would say, people, yeah, because it's, uh, especially, uhm, well, in, in the sense of the, uh, the vertical sort of thing, line managers, and then people they're managing, people can easily feel their managers putting too much work on them, or that they might not be listened to, or that their line managers sort of, yeah, that can create a lot of problems. And then the more horizontal aspect, say in an office, you know, one person's behaviour impacts on another, or you see somebody else not working very hard and you've got too much to do, that creates, so I mean, it can, it can impact all sorts of ways [P19]

[...] whereas at other times I got so stressed about something that I procrastinated and then in the end there was too, I couldn't do it properly, because I'd not left myself enough time, and it all... [P19]

When I did my Master's degree which wasn't long ago, I found, I changed from my, when I first was at the university, when, you know, I was 18 [inaudible 38:16] always last minute, I would leave my essays until the very last, possible term, and then I would panic, and I wouldn't, you know, there'd be too much to do. [P19]

Uhm... like to the point that you feel like you can't cope, for example. [P20]

And I was, I didn't want to, because I didn't want to leave the... so, there's, there's an element of duty in there as well as wanting to, wanting to do something right, and either being unable to, or having to do so at some cost to myself, those, that's being this... [P21]

Yeah, because it's, if you can do something then you can resolve the thing that's causing the stress and you can change it. [P21]

And I'd get really crossed about it, you know, because I just had no, no spare capacity to deal with things, so I was, I was in a position where my ability to, to deal with what was happening around me, that was outside of my control was really impaired, because, and, yeah, and it was very much reduced by the state I was already in. [P21]

And, you know, I kind of had the luxury of being able to make that choice and go, OK, it's going to take a lot of my time but it was feasible. And actually if my mum was still being around I was going up there and I wouldn't have done and I would have handed off that marking, but I kind of wanted it to be consistent, and because it was just about feasible to do it [...] [P21]

[...] it's like running on a treadmill, and you kind of, you need to [reach] do the off-switch, but you can't reach the off-switch because you're too busy running, you know, it's sort of, and, because, you know, it's a badly designed treadmill where it's not right in front of you, it's behind you, or something. You actually have to stop and go back and switch off, and you can't because the thing is still moving [laugh] [P21]

Uhm... quite shutdown, actually. Sort of, like, like a smaller brain. I get very literal [...] I don't get those things, I don't get the subtleties of that. [...] I think there's, uh, there's a real closing in on ability to deal with things, so... for example, just dealing with the complexities of a... of a sarcastic joke, or something like that, uhm... [P21]

You know, sort of... so just really, not completely powerless, just, you know, still able to get up and put in front of the other, a bit going through the motions... I think, when it's... because, it's, you know, if you're already dealing with a lot of stuff to the stress, just sort of small everyday things are, are not so small to do. [P21]

[...] but sometimes in combination with other things that's just kind of, there's too much going on, and, and it's not really just about time, it's about if they not taking that time for themselves [...] [P21]

You know, like, you know, so the whole beyond the scope of, of solving that problem, it's just a, things had started seeming too much, yeah. I think I went, I think I did go to have a cup of tea and calm down and try again later. It's, uh, but, yeah, it was sort of, it definitely needed time because I can't, it just seemed too much to tackle. [P21]

[...] sometimes it'll be, you know, struggling with it, struggling with, and then it'll go sort of critical, and become something you can't deal with gently, it's... [P21]

It's really hard to do those if it's got to the point where it's breaking, when it's got to, when it's got the extreme levels, or it is really bad, and it's out... break completely. It's really, it's much harder to row back from that than it is from the bit where it's, you know, it's all a bit tense but it hasn't, it's not, it's not, it's still in that kind of coping, you don't really realise you've got problem. [P21]

Uhm... and, uhm, generally stuff just becomes stressful as, as you feel you can't deal with it. [P22]

But sometimes if I get hemmed in, just sort of losing and then standing there just, I'll literally put my hands over eyes and just shut it out, close it off entirely, and get sort of stuck for a bit. [P21]

These lovey people came, and stopped, and helped, and looked after me for... yeah. It was, yeah, completely failed to cope with it, you know, did nearly smashed to get out of there, but, yeah, sort of, yeah. [P21]

[...] feeling stressed because you've got too much work on, or feeling stress because you think maybe you're not doing your job very well, or feeling stress because you've been given too much to do. [P22]

Usually my stress comes from frustration of not being able to finish or fix a problem, so... when I was working with the rental company, my biggest stress there was the fact that I would face the same problem every day, and no matter what I changed, nothing would change, nothing would ever stop the problem form happening the next day. [P23]

Uhm, so... a stressful situation for me would be if I am trying to deal with problem or situation and I can't see the way to fix it. That I can't see how to resolve that problem [...] [P23]

But if there's, uhm, a blockade that's stopping me, even if, even if I had all the skills in the world, there's someone there saying 'no, you can't do that' to every single thing, that would stress me out. [P23]

And if I must do a job, and I can't solve it, that's when the stress comes, but for other people if they asked to do a job and they can't solve it then they may decide 'oh, I don't care'. [P23]

Uhm... which was the same when I worked for the rental company and I, I was comfortable dealing with that, I didn't mind having 10 different people ask me 10 different things, I could prioritise that, and I could, you know, I could answer those questions. [P23]

And to dates, I haven't found any problem that I can't fix. I've, maybe I haven't been able to fix it the way I think is the best way to fix it but I've been able to fix it to get the problem solved. [P23]

Uhm... the, the things that might come up, you know, if I was to have a, you know, I've had a cut on my arm or something, I just see it as of how do I fix this, how, what, it's like if a car breaks down, you know, you scratch the car, and it's OK, well, my car's now damaged – is that a real problem? No, not so much. But can I make it better? Yes, I can polish it out, and so for me that's how I deal with most of the day-to-day stuff, and so there's nothing there that causes me too much stress in that sense. [P23]

Uhm... I don't know, uhm... I guess maybe because they can't see, they don't know how to break something down, or they can't compare it to something [...] because they can't, they either, they can't see the solution, or they, they don't know what solution they want, or they don't know how to break it down, and decide which elements are actually the things that are causing the stress, there's so much on. [...] So it is, I think, if you can't break down the problem, that would make them more easily stressed. [P23]

[...] they don't know how to break it down, and decide which elements are actually the things that are causing the stress, there's so much on [P23]

[Not stressed people] They know that there's nothing to worry about because they know that whatever is coming or has come, they can deal with. [P23]

Now, I feel better because I know what's in there, so I know how to, I was able, you know, I'm able to start working through, and equally I know that there is no more than what is already in there. I know that there's, that may be new things but I've found what the current situation is. And I'm comfortable that I can deal with everything is in there. [P23]

Uhm, I would think so, yeah. So I can imagine when people say 'I've got too much on', you know, so stressed out, so much going on. [P23]

Uhm... sure, yeah, I definitely get stressed at work but I try to... if I feel, if I feel comfortable enough at that point to face that problem then I'll face it, and I'll try to start solving it. [P23]

I know that when I'm stressed I can't function as well as I should. Because I, because my brain tries to think about too many things at once if I'm actively trying to solve the thing that's stressing me [...] [P23]

Because you can go 'OK, right, the deadline, it's now due tomorrow' but that's on me, but I know I've left enough time because, you know, it's so stressful getting it all together but I know I can meet it, because I've given myself the ability to plan for that. [P23]

So there's different lines of accountability, and, actually, to meet all of those, it's sometimes impossible within the number of hours that you have. [P24]

If I feel there's too much to do in a particular period of time. [P24]

When I think of stress, something that, that I can't handle, so I can't deal with situations that are out of my control. Uhm... I can feel overloaded sometimes, and sometimes that represents stress, if I've got too much to do, so my whole time's taken, and like it was, it was work and then I had to look after my parents and I was tired and I was driving, and I couldn't, and at that I felt overloaded, and that stressed me out sometimes. [P25]

[...] but I'm quite emotional person, and that, I would just cry, you know, when I couldn't deal with things, whereas what happens when I could deal with things, a bit more in control which, I don't know if that's a good thing, or not, but, but yes, normally when I was overloaded, uhm, my university work overload, that, that did stress me out because I found that difficult. And I never thought I was going to be able to do it [...] [P25]

It's when I struggle and I can't do things, and I'm having to fight for my right, basically, just to get through things, you know. [P25]

So people are, they're stressing me, and not helping me. So then, they're making me, you know, like I can't cope [...] [P25]

[...] so if ever felt stressed, as I say something upset me and I couldn't handle it, I will go and sit by water. I will go and sit by water. And that calms me down, it makes me feel, feel like I can sorts of go through with my issues, and just do it. [P25]

You know, if it wasn't, and I was alright, and I wasn't stressed, and I wasn't getting that stressed about it, or feeling like overloaded then I would be alright but then it's like I fear because it almost becomes like I can't manage things. And that's when I get... [P25]

Uhm, some people get stressed if they have too much of work to do, if it's too busy, uhm, 'pff, I've had a busy day, you know, at work' [laugh], you, you know. [P25]

Do you know, I can't... if I can't deal with it, and I can't cope with it, then I feel totally out of control, and that's what stresses me [...] [P25]

Yeah, I think so. I, I felt like... to me stress can make me feel, if I can't handle a situation, I can't deal with it [...] [P25]

The, I just couldn't handle... what was going on in my life. [P25]

[...] you, you know, they'll be like 'I can't cope, it's too busy, I can't go and do that job because it's too busy all the time'. [P25]

Uhm... so if I'm stressed, I'm just like if I can't cope [...] I used to go and sit, if I was a bit like, feeling a bit like I can't handle this all [...] [P25]

Then I can't cope with things. [P25]

So, well, to me, if, you know, if it's, if it's going on and on. And then it causes me to, to not be able to deal with things, then that's when I get, or I feel that I'm stressed. [P25]

Yes, so I think if it's like I said, I can't deal with it [...] [P25]

You know, you think, you burst into tears for no reason because you just can't handle anything what's going on. [P25]

Yeah. I, uhm, was in a little bad way, actually, and, uhm... I just thought I can't cope anymore, and I thought I needed some help. [P25]

So I thought if I can't be who I am, people can't accept me for who I am, they must have a point. What's the point being here, you know? And that's quite a hard thing to, to actually do everything, can't cope, you know [...] [P25]

It's just got to me, so... I'd just basically given up, just sort of 'I can't do any more', you know. [P25]

[...] and then I thought, you know, I just had that feeling I just can't cope. [P25]

Do, do you know, I'd feel knotted, and like... tense, then become like tense because I can't cope, you know, any more. [P25]

Uhm, you know, you're short-tempered because you've not slept properly, uhm, so you're rude, and, uhm, and every little thing is sort of like... you can't handle normal life. [P25]

It's where... yeah I think 'stressed out' more, is more, I've got too much work on at the moment. [P25]

[...] or, you know, if you can't, you can't handle things, you're not resilient, you know, you'd be a bit like this because, uhm, some people, I don't think. [P25]

[...] so yeah, stress is a bit... yeah, it can be a bit too much for me, but I suppose it's for everyone, isn't it, sometimes. [P26]

### **Over-focus**

[...] sometimes, you know, making our heart beats slightly more, or you know, not sleeping, or not being able to focus on something, like watching a TV programme, or a film maybe, that kind of stuff. [P1]

But... some... sometimes if someone maybe sits at their computer, there is [inaudible 13:09] just goes on with work without talking to anyone, I may, I might think there's suspicion that they're stressed out about something. [P2]

Uhm... how to describe? Well, head down, can't be stopped, just going about their business I'd... said they're more stressed than next person. [P2]

[...] whereas the stressed people would just walk round, hunch back, head down, going to do whatever they had got to do anyway. [P2]

That's a good question. I think, I'm focused too much on the task at hand rather than having a meaningful conversation with them. [P2]

I certainly think that people who are constantly under stress probably don't take care of themselves as much as someone who isn't stressed, and can focus on other things. [P2]

[stressed people] They may overthink things a lot. [P2]

That's really stressful because you've got the entire build-up and the whole journey of getting there, you'd just overthinking and overthinking [...] [P3]

And if someone talks to you, you will be like 'don't talk to me', kind of like I'm, I'm wrapped up with this rope, and I can't, I can't think about anything else other than being wrapped up in this rope, and what I need to do to get out of the rope. [P3]

I appreciate the times when I have little stress, uhm, everybody has stress like bills and stuff, and that stuff to me is always at the back of my mind. [P3]

But don't talk to me because then you're taking my mental engagement away from what I am doing, and from what I'm investing my time in. It's, my box, or my bubble is that my head, it's what I've got, it's my focus, where I've got my focus centred. I don't want to focus on you, or I don't want to focus on the person you're talking about, or whatever you're talking about, I don't want to focus on that. I'm focused on what I want to focus on. [P3]

[...] because obviously stress is because you want to focus on what, focus on. [P3]

Little things like going shopping, or like having like a pizza, or like, that kind of stuff doesn't make me that happy because I, in the back of my mind I'm conscious of that time. [P3]

Uhm... other spheres of life don't matter to me when I'm stressed. It's just a bit sad, but it's, it's like I said about the border in my mind, the brain space I have decreases and just fills with that task ahead [P3]

If I'm stressed I would try to like do some yoga which... a lot of I do, I have to concentrate on my breathing to be able to do it. Uhm, and I'm trying, I might do some mindfulness, or meditation, so it's, it's a lot of focusing on the breathing. While, uhm, I feel like when you're in the happiest day, a more relaxed day, you're able to stay in that longer. [P4]

Uhm, yeah, so I'd probably, like I've got, all, all the thoughts in my head of what needs to be done, or what's happening at that time. [P4]

And then, I had that thought in my head, how I'm gonna come up with hundred, five hundred pound a month? From where? So, it was playing on my head, playing on my head [...] [P4]

So [laugh] not only do I feel stressful a longer period of time, because, yes, it's in the cupboard, but it's also in my head like bouncing around, uhm... [P4]

So you know that you've got a deadline to meet, so you're constantly thinking about meeting that deadline, and making sure you're working up to that, to finish that. [P5]

[...] uhm, you know, and, and things are going in your head all the time, that you need sort of stop, but you can't always [...] [P5]

[...] or he'd be, you know, sleeping a lot, and he would find things really difficult, he couldn't even concentrate on telly, or anything like that. [P5]

I think, you now, because I have to take [grandson] in the morning, so you've got that on the mind, you've got to get up really early to take him to school, and that's extra source of stress you put on yourself because you know you've got to get up because you're responsible to get him to school. [P5]

If you're in a, so stressful situation you can be quite focused on just that, and maybe sharp with other people, you know, not doing things about the people, you just get focused on that one thing that you feel it's stressful. [P5]

I can always go into like a nice book. But I think sometimes if you're under stress, and you can't concentrate on something like that, it's not... I think that's what happens sometimes if you get yourself under too much stress, then simple pleasures don't mean anything. You can't cope with them, you can't, they don't seem worth doing because you can't concentrate on them, or... something. [P5]

[...] constant thought about the same problems, churning over and over again [...] [P6]

So I couldn't just sit down, but I'm not somebody who... is constantly on the move, is constantly thinking the next thing to do, is, uhm... is, uh... never relaxing in front of the TV. [P6]

Somebody showing stress could be shouting, agitated, uhm, expressive, throwing their arms about, uhm, or could just be very quiet. Uhm, because they're trying, still trying to find out the solution in their own mind. [P6]

It might be just reflecting on the same problem over and over again. [P6]

Uhm... I can go very quiet, uhm, yes, I can sink into my own thought process if I'm not careful. [P6]

Uhm... I can probably understand, how they can ... internalise a problem, and keep re, regurgitating, stating it in their own mind. [P6]

I would delve over it, I'd be a bit depressed about it. It'd be on my mind, would be churning around [...] [P7]

Uhm, or they don't think of the bigger picture. Uhm, I think if you're only thinking about what you need to achieve and nothing else, then I think you can kind of get sucked into just trying to, you know [...] [P8]

I think people don't look after themselves often as well as they could do, so often there's an incentive of money, or something like that, and people are stressed out, because they're focusing on getting a lot of money, or, you know, achieving something that they want to achieve [...] [P8]

So if you're focusing purely on the end goal with no consideration of yourself, then how you're feeling, and you're stressed, then it can be quite a negative experience. [P8]

I find that quite stressful because if you don't get it done quickly then it'll still be eating away at you trying to get you to do it. [P9]

[...] my eyes kind of don't work, in a sense... Like I'm, rather than looking, I'm just kind of inside my head thinking about whatever I've got do this, got do this, got do this. And, so it's like, the ideas are in my head, uhm, almost making up for my brain, are like this, but is, I've got do this, but I've got do this [P9]

[...] I guess, that made me stressed just like what I've done wrong, how am I going to fix it, all these thoughts running around my head, as long, as well as like I ever, like, kind of responsibilities in my life [...] [P10]

[...] just being constantly going throughout the day, just like thinking about it. [...] Uhm... I guess, it's kind of kept, I kept thinking about it, and thinking about it, and thinking about it, but I wasn't actually doing it. [P10]

[...] when it's like in your mind, I think it's just like, it's very much like internal with all these thoughts maybe going around your head. [...] you've got all these different thoughts going around your head, and all these different, like, the roles and responsibilities, and I think, I do think it is like different to an extent. [P10]

You don't know what you do, you can't put your mind to anything, you're always, you argue with yourself, and you have the, or I'll do, I'll have all these conversations with myself, it's like a dream on a loop. [P11] concentration and cognitive

So it's a bit like that because stress, you can't, I mean, you can hopefully not think of it for a second but it comes back soon, watching the telly, having breakfast, going to the loo. [P11]

[...] so not obsessed with, you know, get, earning enough to live my life with the bit extra, and not getting obsessed with only to get more, more, more. Because I don't want that any more. So I used to be very stressed out about earning a lot of money, and I don't, you know, just reduce you, you know, you don't have to have that, you can just get on without now. [P12]

I was teaching, marking, and at the weekends I was thinking about other things to do, so my whole life was around this, this activity. [P12]

Uhm, you're driven to doing something all the time, then you stop. [P12]

Your head is full. [...] It's, it's too full, and so you do something to empty it a bit. It's difficult explaining this. Do you know what I mean? It's like your brain is stuck on the side of your skull, and you got to get it down again [laugh]. [P12]

Well, she, she's, you know, her, her forehead used to be clamped up, concentrating, concentrating a lot, uhm, intensity, and concentrating on something. [P12]

Well, as I say, it's in your head. Your head's not full anymore, it's a bit, it's a bit, it's gone down. [P12]

Because I don't sleep when I get obsessed with something. You know, you get obsessed with things when you're stressed out, so... [P12]

I suppose cartoons spring to mind that you maybe would see in newspapers, with sort of typical stress character with the post eighteen full, have full head and like that stereotypical image of stress and tension, of that 'arrgh', clenched fist, sort of wiry hair, big eyes, bloodshot, but [laugh] [P15]

But, uhm, I would say I... I don't know, I'd probably just feel up, yeah, uptight I suppose is the word, and just kind of 'what, which one next?', you know, which one next? [P15]

Yeah. Yeah, I think so. Uhm... because you can't switch off for it necessarily. [P15]

Public facing me probably not, no, but private me, individual me, just me has things going on in the back of my head [...] [P16]

No, that's just, that's just, that's just literally thinking about it. And, and consequently not being able to move away from that [...] No. No, that's just, that's just, that's just literally thinking about it. [P16]

And I, I am someone who finds it difficult to totally switch off from work [...] [P17]

You don't have, you've got the commute occupy you, so I cycle and I get the train halfway, and... that's quite nice because that gets me my head out of... the books, the computers, and it also gets me exercising, gives me thinking time. [P18]

You take on too much, and... you can't read a word in front of you just because your mind is distracted elsewhere thinking, shit, I've got like deadline tomorrow, shit, I've got like deadline tomorrow. But, what I'm supposed to be doing, this is deadline a day after on now, what I'm supposed to do, what I'm supposed to do [...] [P18]

I remember the time, instead of thinking about other things, you're thinking about work, or you're thinking about what is stressing you. So in those situations I couldn't engage with that person appropriately, uhm... because my mind is elsewhere, I'm looking over the shoulder, thinking 'oh shit, what about those blood samples, what about those blood samples, what about those blood samples?' Uhm... and it's distracting. [P18]

And it's in the back of mind, but I think I'll put off until tomorrow, but really I'm worrying about it, and then... so actually you're causing a bit of the stress for yourself by not dealing with the thing you should deal with. [P19]

Whereas some people I know, so, they maybe haven't had that, uhm, do you know, insomnia, whatever they end up, end up things being worse, because physically they can't switch off what's happening. [P19]

I wouldn't be able to think about much else, they would be going round and round in my head [...]

You know, you'd feel as though you'd just, uh, yes, everything else just happening around you, but really it was the things you were stressed about that was happening. [P19]

[...] but you know, there still was a sense of uncertainty, and, uhm, going into, in the, uhm, event I went to, your thinking is, uhm, it was the main thing I could think about. So a bit, you couldn't just relax and enjoy other things happening, you were thinking, gosh, at some point I'm gonna have to say something and then what do I say, is it going to go wrong what's going on? [P19]

So, on the outside I was gonna smiling at everybody, chatting, on the inside all I was thinking about is when am I going to do this, how am I gonna to do it, and that was, uhm, is, is, uhm, am, am I seeming like I'm relaxed and OK, or am I seeming like a desperate to go for a drink [laugh]. [P19]

[...] when you stop thinking about other things properly, you know, and really your mind is just focused on this one thing. And, uhm... and you start to, uhm... or even if you're doing something else, at the back of your mind you're thinking about that one thing, you can't switch off something. [P19]

Yeah, I think it's, uh, anxiety is a major thing for other people, I suppose it's linked to stress, isn't it, I mean, I think other people, yes, allow their, uh, allow their minds to become, uhm, yeah, like I said again it's the narrowing down, isn't it. [P19]

It's completely self-defeating, procrastinating really, because you, you don't really... it'd be one thing, if you left it and didn't worry about it, but, uh, it's at the back of my mind the whole time [...] [P19]

And I sort of, I've gone home worrying about it, and you, you can't switch off completely in a matter [...] But it's not the case that you do that, you go home and you forget about it, uhm, as much as you like to think so. [P20]

[...] and you can't switch off from it, you know, because you're thinking about it all the time. Uhm, well, not all the time, but quite a lot of the time. [P20]

Uhm... I guess some of the same things that I was, you know, that... sort of that disengagement. Uhm... and narrowing in on the range of things you do. Like, so sometimes, you know, you ask people whether they would come along for a coffee, and they, and they don't [...] It's that, that brain narrowing the focus. [P21]

I think it's the sound in my head. It's, is stuff chasing around in there? Or can I switch off? Am I preoccupied? Or concerned or thinking about next thing? Or is there, you know, if I stop, are my thoughts racing? Or can I kind of sit and watch the birds and chill, or just... sit in there and I wonder, so... Or, and also are things... yeah, it's two, it's two things. Kind of, is it quiet and peaceful, not completely empty [laugh] I hasten to add, but, you know, sort of am I, am I kind of on my own in here, or are there sort of load of other things, load of worries, sort of all clamouring for attention in there? [P21]

[...] it's that time to pay attention to those things rather, it's having those senses back actually, it's, it's having those senses available to what's happening [...] just sort of, it's almost like you're, your attention is bigger to those things, it's not, completely opposite to that closed down, narrowed focus thing [...] [P21]

[...] that's the, it's a, the difference to that, yeah, I was gonna say, like an empty airhead like a sort of, the space for mind, mind just gently wander and ramble about at times, but when it's stressed there's, there's just like a load of horses galloping around in it... you, start focusing on the galloping in your head bringing [inaudible 1:16:35] on the road and in front of it. So it's, yeah, I have, I have occasionally told myself 'mind, mind in the car' and it might go... And it's not in the car, actually, outside the car there, right [laugh] rather than inside but, you know, I go pedantic with myself, yeah [laugh] But certainly mind on the road rather than, yeah, than on the things in your head. [P21]

And then I'd get home, and that I'd be like 'oh, god, I've got to do all of that again tomorrow' [...] and constantly thinking about something else. You're always going 'right, what would I need to do tomorrow', trying to fix, you know, trying resolve this, and that would never work, so... [laugh]. [P23]

I: OK, and how do you know that you are not stressed?

P23: Uhm... because I'm happy [laugh] I feel well I feel well, I don't, you know, when I, when my mind, when I stop thinking about a particular thing if I'm reading for example. I know that I can pick up a book, and I can start reading, and I know I won't get distracted because I'm thinking about something else. [P23]

Uhm... So Monday morning when I woke up, I had a shower, and I started thinking about everything I had left and worrying about which bits hadn't been done, or what may have happened from that. So I knew that I was starting to get a little bit stressed then because I'd start again, so that [instead of] just enjoying me shower, I was starting to think about something what I wasn't directly doing at that point. [P23]

I tried to get myself to stop thinking about it. Which worked for about two minutes... and then I started thinking about it again. [P23]

Sometimes because... they have their stresses narrowing their vision, they're only seeing that one thing, and they can't see the other interconnecting pieces that might help them. [P23]

I feel well, I don't, you know, when I, when my mind, when I stop thinking about a particular thing if I'm reading for example. I know that I can pick up a book, and I can start reading, and I know I won't get distracted because I'm thinking about something else. [P23]

I think, I think it, the financial stress for us does. So there's always in the back of our minds, uhm, the fact that we would feel much happier in different accommodation. [...] And that's always in your, in the back of your mind a little bit. [P24]

[...] I kind of think what happens if I wake up, and one of them has died. I don't, you know, what would I do? And, and that was always in the back of my head, that used to stress me a lot. [P25]

[...] but it worries me a bit. So that's always at the back of my sort of mind, but I'm not, it's not going to an issue point at the minute [...] [P25]

Yeah, I... I can't sleep, you know, it stops you sleep, because you start going over and over things in your mind, and you start...so it's, it's always there niggling at the back of your head, and you sort of can't... it's constant, you know [...] [P25]

[...] it's there in my mind all the day long, night when I'm going to sleep, and everywhere sort of thing. [P25]

Because that's all well and good that I've been given this sort of reprieve, I suppose, but at the same time I obviously want to be there for my mum, and there are times when I do get down to London as, when I can for those reasons. Uhm... but yeah, it's very stressful situation because, obviously, I'm trying my best for the course but that's at the back of my mind, uhm... [P26]

Uhm, you've got all these worries going around in your head, I mean... [P26]

And just letting it kind of wash over you more so than honing in on it, and honing it on that event that's coming up, that's gonna be stressful, those things... [P26]

## Appendix 7. Study 1a. Lay interviews. Quotes representing *Unpleasantness* (Theme: Negativity)

### **Uncomfortable, disturbing or unwanted situations – difficulties, obstacles, problems**

[...] and that you're asking them to do something realistic rather than giving them, you know, number two, an objective that is too unrealistic and is gonna cause a lot of hardship. [P1]

I think if plan things properly, you're not gonna have any mishaps and then won't have any stresses or worries [...] [P1]

[...] and then having a job that is like... really, really difficult [...] [P3]

[...] I mean, on the individual basis, what they would class as more difficult will be stressful. [P4]

[...] something gets in the way, and I'm not able to meet that goal, of what I expect [...] [P4]

I think if you, you know, with your parents, we've both lost two our parents, you know, they, and we've had difficult times with that, and because you're looking after them, you're more aware of that. [P5]

Sometimes you can tell, can't you? I think if, if somebody you know is at work, works with a hard, you know, difficult job, maybe, they would come home, and you would most probably know. [P5]

Uhm, and really my job isn't that stressful anymore because it's quite easy, what I do now. [P5]

I had a bad time last year, it was quite poorly, I think, it was just the aftermaths of the operation, and we had, we were going to have rough time with, you know, [daughter] was going to have rough time with the boys, while we were involved in that, because I've always looked after [grandson]. So that was a really rough time then [...] [P5]

Now, if I would go with him, I would always find that really difficult. [P5]

Uhm... major changes happening within the organisation, uhm, being out there to find the solutions, fairly isolated, uhm, very little support, because we were trying new things that nobody else had tried in the country, so, uhm... that constant pressure, really. [P6]

Because, you know, you'll try to find, you try to do something, and an external factor comes along and interrupt your thought process, or suchlike, or, uhm, to achieve that solution. [P6]

Yeah, that type of thing, when things go wrong, I find that stressful [...] [P7]

[...] so, uhm, take a holiday, for example, you're looking forward to it, you enjoy the trip hopefully, you enjoy the holiday, but any moment, let's say at the airport, suddenly comes up as a delay, so the stress goes completely the other way. [P7]

As I mentioned, as I have children, little obstacles come up every now and again, uhm... maybe a health matter, maybe, because I'm very much of believer in self-help, and natural health. [P7]

So, obviously we're talking about someone who's on the bad side of the uh [stress]... uhm... How would I describe them? [...] Uhm, in need of help, uhm... perhaps offer 'can I help you?', 'is there a problem?' [P7]

[...] when the odds are against you, or it's a bit more difficult, uhm [...] [P8]

[...] I mean, it was a, an assistant accountant position, so you had to have, really, accountancy training to do it, and I'm not an accountant, and I found it so difficult [...] so it was quite difficult coming in, not knowing anything, not being able to do the job to the level that I would like to do it. [P8]

Because it's like I've done it for a about year, like, and half, nearly two years or so, and like kind of, it's the same thing, and like it's very, very easy, it's not stressful, it's like a repetitive, it's just kind of repetitive, and mundane, and a little bit boring. Like I don't associate stress with it, but then I equally don't really look forward to it either [P10]

[...] I go to this yoga class, and, uhm, I thought that would be very de-stressing, and no stress. But it's actually challenging, it's difficult to do. [P12]

Uh... so... I think of work mainly, if you're stressed at work, things are not going your way, and everything just get into you, the little things that are building up [...] [P13]

Something, something you feel when maybe you feel like everything's not going right, you're not happy, some things, uhm, everything, things aren't going easily and, uhm, you're having to, uhm, work, perhaps, really hard, but... I don't know [laugh] I think, well, my goodness, and when things just get to you [...] [P13]

Uhm... it's like... I would say it's like, things, things like, o yeah, not going, not going your way. It's like, it's like living by the beach and it's always sunny nine to five when you're at work and when you leave, it's raining, uhm, and just, everything just doesn't, it's not going your way, it's not, uhm, making you happy. [P13]

Because life just generally, it doesn't always go in a way... just, yeah. [P13]

So, just like... almost angry, but just annoyed with everything that's not going right. Annoyed that things are not going right. [P13]

Myself and my husband with our oldest went travelling for a period of time, and that was fairly, that was very stress-free. In terms of... just woke up, like, walked around, you know, I don't know, it's just been, it's very simple, there's nothing complicated about it, it's just like the basics. [P14]

[...] I've only got myself to look after, uhm, but I can imagine, you know, looking after children, families, thinking about other people, that kind of thing, uhm... would be quite difficult. [P16]

And I don't think that I work as hard as that, so therefore I don't think, uhm, that my life is as stressful as other people's. [P17]

Uhm, and that does happen on work days if I, if I've not got any particularly difficult meetings, or, uhm, if I've got, I, I know that I've got plenty of time that day to do things that I want to get done, and I think 'oh, this will be a nice, kind of fairly relaxing day'. [P17]

And then I, yeah, I tried to do some of it, so, yeah, that was difficult. Again, it's, it was all about, uhm, kind of competing demands on my time [...] [P17]

Uh... what sort of life is stressful? Life with great deal of ill-health, disability. You could have a great deal of stress, just managing your life could be very stressful, difficult, because things other people do with ease, you, you have to think about, navigate carefully [...] well, take an example of a disabled person travelling to work, they might find it a great deal of stress - will I get on the bus, will, will the bus, uhm, will, will somebody give me their seat, will I, uhm, you know, all the things that nobody else worries about, they could become very stressful, so I think living with, uhm, some sort of disability must be very stressful thing, and, uhm... [P19]

But, uhm, objectively I think, I don't have a terribly stressful job, or terribly stressed life, really, at the moment, so it's fairly straightforward really. [...] So I mean that's, uh, the comparison is quite, it's massive really, I mean, now I'm, I'm in a, in a job that is really straightforward. [P19]

[...] you get put in the situations that you're not expecting, and you want to do as, as well as, as you can to fix whatever the situation is. [P20]

Uhm... stress is... thing... stress is like... just not going according to plan for me. Going off the, off the beaten track. [P20]

But then as I said I don't have a complicated life, I don't, I don't have, you know, the same sort of, uhm, all the work you've got to do, and I, I don't have that in my life. [P20]

[long pause] It's like trying to crawl through brambles... because you're trying to get somewhere, trying to achieve something, and it's just so prickly, so... to do it, you know. [P21]

Uhm, so yeah, real struggle to get any sense out of the insurers. In the end, yeah, so that was sent home, and I moved in to a hotel in Bordeaux, uhm, sort, trying to sort everything out over my phone [...] All sorts of, they were blocking me every time, just impossible to... They were basically... basically they wanted me to give up. [P21]

And just kind of, and trying not to show off to much stress to him as well, so there's a, there's an element of, well, it's having to be in charge, and just kind of having to be a grown-up, on my own dealing with a difficult situation [...] [P21]

With that one... so the, yeah, so, so actually the work were, the work ones are the kinds of the fighting through brambles, situations like that are kind of... [P21]

[...] trying to get it done in certain time, three-week turnaround and I was having technical problems getting things up, set up to work with it. So it's kind of, that was completely getting in a way of something I knew I needed to get done. [...] And I can't remember what went wrong but

it's, you know, just [...] It's just... I don't want to be doing this, it was very much, I don't want to be doing this, I want to be doing the actual thing not the stuff that's getting in the way. [P21]

They got, you know, it gets in a way with things like that. It's not, it's not like it's a difficult solution. [P21]

[...] and I would, uh, always be on call, and people would always be asking me for more information, and I'd be always facing the same problems, and for me that's what, that's stressful. [P23]

I think if you, you know, you want things to be right, so by it not being right – that's stressful. That is, for me that's stressful. [P23]

While when I get stuck in traffic, I know I'm stressed because [laugh] I want to keep going, so... [P23]

A good experience to, to know that I was looking after my child, uhm... but also quite isolating, I felt at times. Uhm... and difficult to then, to get back to your career later on. [P24]

And I never thought I was going to be able to do it, and it was trying to get help from someone to help me, and I just sort of faced barriers... to, just getting help. [P25]

And if people are stopping me and are putting barriers in my way through no fault of my own then that's when I feel angry, and upset because it's, you know, that I'm fighting all the time to, to just get through. [P25]

[...] I had issues with my weight, and, you know, so it was like a hard year, you're trying to work, look after your parents [...] [P25]

There's a very relaxed atmosphere, it's a very easy job, people that I work with are great. [P26]

[...] when it's one of those type situations I really just push through and plough through [...] [P26]

But, uhm, you know... that's one thing but the other thing is just in a way, without sounding kind of a bit harsh, it's, it's, it's the logistics of me being here and her being unwell at home. [P26]

### **Uncomfortable, disturbing or unwanted situations – social interactions**

Maybe you can't talk to your wife, or your husband, though... they might be a contributing factor to your stress, which is why you don't want to talk to them, or the stress might be because you had disagreement with them about maybe something that you've done with one of the children, or the difference in opinion on what you should do with one of the children [...] [P1]

And you don't have to worry about money, and you don't have to worry about going home and having an argument with someone at home because your family is just perfect for you. [P3]

I don't like it when stress about other things, like someone starts telling me that they're stressed about their car being broken down, or something about, oh my god, don't stress me, I don't want that. [P3]

So that became a sort of stressful situation between us, because I'd always say 'oh, we can't go on holiday' because Jake's at school and we've got to look after him. [...] So that was creating stress between us. Because he was saying 'no, no, we don't...', you know, 'they're not our responsibility, we should go, just go'. [P5]

I think you, I think that just sometimes going out can be a stressful situation, with people. Uhm, I'm, personally, I'm not good when I go into a big group of people that I don't know anybody. For me that's a stressful situation because I, I'm, you know, part of me knows that I can cope with it, but part of me feels 'no you can't talk to these people' because you don't know them. [P5]

If could find just one person that I knew, that would be fine [laugh] then I would be away [laugh]. But I was going to be into a situation where I wouldn't know anybody, I would find that really stressful. [P5]

So to me in, that would be a stressful situation with, with people, uhm... so I think I've got better with that, and I spoke, I spoke with, we don't, we do things like that but not so much, but... yeah, I mean, I have got better, but that, that, that to me is quite a stress. Yeah, that would, for my, that would be my stressful situation: going out. [P5]

So the, the stress of all of that, uhm, and it was, yeah, having to sort of coping with other people's grief [...] [P5]

Grandchildren, uhm... you know, when I'm saying that I'm trying to work something out because of my thought process has got to be, to find that solution, somebody comes along, says, 'oh, yes, but when can we go off and do this?', I think oh gosh, you know? 'Yes of course, we can, but can you leave it for five minutes while I'm trying to get to the end of this problem that I'm going through? Uhm... and then they, uhm, they come back about 'well I want to do it now, really', so, you know, grandchildren can be a stress, like... I, I like to live in a little bubble in a way, I'm quite happy in my own little bubble. [P6]

So I think just living a generally relaxed life which for me could be not around too many people to annoy me, uhm, and... in a way I'm happiest when I'm standing out in the street corner just collecting with the bucket. [P6]

It started, it started with bullying, and in the end, probably ended with bullying, because, uhm, nobody wanted to listen about what I wanted, it was like to actually be line managed by somebody who hadn't got a clue what they were wanting to achieve, kept changing their mind, uhm, actual noticed which they meant different things that to happen, to actually get to the... right outcome, the, that, uhm, that was expected to be delivering, really. [P6]

Uhm... oh, having a boss that is obnoxious and you can't find another job [...] [P7]

Sticks and stones may break my bones, but words will never hurt me. It's actually rubbish, because the stress, we, I think, is actually mostly created by words. You might have been, had a very negative parent that perhaps wasn't beating you, but kept saying 'oh, you're no good', or 'why are you doing rubbish at school?' Instead of helping they'd given you all these negative

words, and words, which is just piece of black and white in a news, or in a book, or a newspaper, will snap you. [P7]

[...] if, you know, the people aren't doing what you've said, I find it stressful having to tell people how to do things again and again [...] [P8]

[...] but then there's a builder building things at the moment, and the cleaner being difficult, so it's kind of liaising lots of people to try to get the house ready for these people that are coming back. But the tricky thing is sort of, the builder's really awful and annoying, doesn't listen, and the cleaner's really awful and annoying, doesn't listen too. [P8]

So I know, if you, almost if you have a boss that is really awful and that makes you really stressed out, you can't answer back to them, so you're likely to sort of vent that stress elsewhere [...] [P8]

Uhm, I think she found it stressful in social situations, so just speaking to people, I don't think she... she finds it comfortable [...] [P9]

I'd say, I guess, like, uhm... it depends, like, I guess, on the person. I'm not comfortable relying on people, I guess, I don't know, like, intimately, or that aren't close to me. [P10]

So, I don't have responsibilities for them, but they do inflict themselves on the running of the house, and my life which I didn't expect them, it to happen at the moment. So it's all be leading up to my stress levels [laugh] [...] They're perfectly responsible adults outside the front door, but it's what I call the front door syndrome. It's a family home, so they refer back to childhood, so instead of having a 28-year-old, and 25-year-old in the house, we have an 8-year-old, and a 5-year-old. [P11]

[...] which would be fine if you don't have managers, because managers and directors have another, you know agenda. They're not there to help people, and we were. So you have this eternal fight but I really... [P11]

[...] but it's just stressful that other people don't care. Whether it's some, a pedestrian walk across road watch, looking at their phone, or someone in their car, their vehicle not using their indicators on a roundabout. [P11]

So I don't, I mean, that's, that also puts me in a stressful situation because I sometimes don't know how. While I know people thinks, I can read people, I'm not always the best one at what I say, I think I've said it the right way. [...] Oh, it matters. I don't know if you've ever been in a situation, it's not what you say, it's how you say it. And that has been the full of many arguments and stressful situations. [...] Not put a blame on somebody, or not sound forceful. [P11]

Uhm... you know, I mean, it must be awful, you know, if you're in a, a wealthy to-do family, and you have to meet the queen every 5 minutes. That must be stressful. [P11]

I suppose, let's see, stress... stress, I suppose it's something to do, yeah, I suppose it could very well be my niece. You know, I've said the two kids live up high. She's been house-sitting, so she

hasn't been around for a long time, she's just come back home, and I've just got to calm down, go with the flow, and let it just happen. [P11]

[...] you don't just say well, I'm in this space, OK, you know, I have to put out [inaudible 53:28], I'm doing what I want, when I want, and how I want. If everybody did that all the time... it's even worse than a student house. [P11]

when I was working in, at schools, it was the other teachers used to stress me out. [...] Interacting with people. The students are OK, they're being cheeky to me, sort of, uhm, I'm, I'm very humorous, so I find that's quite a good vehicle. [P12]

And then I went to a place, and they were pried before they got on the plane, and oi, that's stressed me out. We've got pried before we get on the plane. [P12] more like invasion of privacy?

I thought well I'm afraid down there in the underground. You know, in London sometimes I used to be because I lived in London. And at the peak times there's lots of people trying to get in the, the Tube, you know, the, the train, and they, they're jostling you, I think. You know, it's in, I call it high density situation, so that like... that is probably a factor. [P12]

Well, in London it was stressful for me, because I was a student in London, and as I said the Tube [...] So, you know, its, you know, density, you know. I'm, I like, uhm... I mean, Bournemouth is getting quite full of people but when I first moved here there weren't too many people here. [...] Uhm, so, I'm kind of like the sort of... I'm not frightened by being around no people, you get what I mean? And I keep saying frightened, but it's not really frightened, it's just inconvenience, and, uhm, what you call that, hypervigilant – that's what I'm, that's what it is. I'm not particularly frightened by all the people but I'm hypervigilant about what they might do, yeah. [P12]

Yeah. In crowds, and, uhm, that can be fun, being in a crowd can be fun, but they can also, if they're just a crowd of strangers, really... then, there I'll be, gonna be a bit worried of those. [...] In crowds... uhm... there's been quite a lot of tragedies involved with the crowds in Britain [P12] threat to integrity

It was stressful looking after my mother when she was an elderly. Because she was very independent, and she wouldn't want me to do anything. Anything. You can 'oh, look, that might be easier' – 'no, I've got to do it my own way' sort of thing. A bit like me, really, I would be like [laugh], but, uhm, so it could be stressful if you wanna help somebody who doesn't wanna be helped. I found that stressful. [P12]

And I'm dealing with, uhm, managing your relationships with other people that work in, that work in the Students Union and the university. And together, as a team, it can be quite challenging sometimes. [P13]

Uhm... how it's like a longer term things, having to work in a team of people, perhaps, when, you know, when you really don't get on with one of the people. [P13]

Uh, so it could be deadlines at work uh, money, money issues, or like, yeah, waiting, having two more weeks until payday and not very much money, and then someone at work has annoyed

you, or something like that, and then everything happening, the feeling that everything is happening all at once. [P13]

Uhm, and then you go home, and you've got your kids screaming at you... [P13]

Uhm, and I guess if, if it was so, back to the work situation, if it, you've got to look at whether the causes of your stress are other people [...] [P13]

P14: Dealing with academics is very stressful, uhm, because some of them are quite, they've got big egos, so, and then the politics with the management, and obviously research projects are often their passions, when you're trying critique it, not massively, but it's quite a sensitive area to try and critique, it leads to a lot of conflicts, and lot of politics at the moment within, with money, uhm, a lot of their quality research money was taken away, which angered them, uhm, and our department has been used as the scapegoat [laugh] so people are quite rude.

I: OK. So, it's stressful, because people are...

P14: Are horrible, yes [laugh] [P14]

[...] she's obviously become as she got older a more complex soul, so there's lots of difficult situations that she is in that you've got to try and work out how to help her in this social setting of starting school. [P14]

We're just trying to coordinate six different houses, trying to pay a bill, or, or... work out the legalities of certain contracts and things, that could get quite stressful. They don't always listen. [P14]

Yeah, work stresses me out sometimes, like the other day an academic made me cry, because it's so, they're just so spiteful... [P14]

Like we're just low-hanging fruit, rather than having the balls to go up to someone in power, or lobby against, their management to lobby against OVC , they just pick the admin [laugh] it's like, and it's like... for their own insecurities, to be owned to, because from what I can see, for the last twenty years even though they think of themselves they are industry, they are not. Because it's been twenty years, and they haven't had any publication, or any research project, or anything, so I'm sure, so their own insecurities... so that was quite stressful. [...] so that was quite... so there is just always a relationship element in anything that's stressful, or I find stressful. [P14]

Uhm... but I am probably, because I have to, I'm, I'm the front, so I always need to be active before they go through the process, so hopefully they'll calm down by the time they'll get to my colleagues. I'm sort of the frontline. And it probably wasn't that horrible, you know, I've probably been, they've should, I've been probably told worse. [...] Or they make comments like 'oh, you, you're [inaudible 08:49] our career', or 'you're always pregnant', well [inaudible 08:52] at babies [laugh] OK, I'm sorry that's disturbed your business continuity, but [laugh] [P14]

Also the UK is very expensive, uhm... and people can be pretty sort of snobby or mean, whereas in all these other countries, oh, they may well have been, we just didn't know [laugh] we didn't understand! [P14]

It's not like, I don't know, that sounds horrible, because I love talking to people, and I love be, but I don't know. Just people are a burden, aren't they... [laugh] [P14]

Uhm... probably, I think that's got something to do with kids, to be honest, I think, and yeah, not them, it's people, because they're lovely, but obviously you have to conduct yourself in a normal world at the same time. [P14]

And then you've got, it's just so many, too many managers, honestly, and everyone wants something that's slightly different, or contradictory to each other. [P14]

Uhm, well even if I drew a comparison to my own situation like eight years ago, when I just lost my grandmother, my previous marriage had gone wrong, because my husband was drinking heavily, and my mother was diagnosed with breast cancer. [P15]

[...] my current headteacher is going through marriage breakdown right now [...] [P15]

Uhm, yeah, but it can be associated, you know, you can, with personal things as well, uhm... like hobbies or pastimes, so I, I, I'd, uh, I'm a netball umpire and so I need to make sure I'm on time for my netball games but I can get quite, quite stressed by certain games and the attitude of certain players. [P16]

But I was stressed when I was in New Zealand, when I separated from my husband, uhm... [P16]

And you have to make decisions, and sometimes those decisions, many, many, most of the times they're absolutely fine and the players go along with them, but when I first started umpiring I used to have to, I used to have to develop what I would call quite a thick skin because the players would, would like 'oh, come on!', you know, abuse the referee, really, the umpire in some decisions, and that would undermine your, that used to undermine my confidence because I'd think 'did I, did I get it right?', and then I would think about that for a few seconds afterwards which meant that I was not concentrating on the game which is where I should be, and that again... [P16]

I remember being, sorry, I remember being a team captain, and, uhm... we used to, when I used to play in Buckinghamshire, we used to play at different venues, and telling all the people where they needed to be, and... what time, and everything, and then people would still turn up late. I remember one girl turned up to play, and she was wearing a thong, so she hadn't even got her decent sport shorts, knickers things to wear [...] I suppose the lack of appreciation really from the individual, can't even remember her name but I remember what she looks like [laugh], yeah. [P16]

It can be really what I would call 'aussie', really, you know, uhm... not sort of abusive of the umpire but, you know, saying 'come on, that was 3 seconds', you know, because one of the things you can't hold the ball for, for longer than 3 seconds. Uhm... psychological war. [P16]

I suppose, outside of work, uhm, kind of having a row with my partner maybe might be, that's stressful [...] [P17]

And then, you know, just as I said kind of, it's not just about work, it's partly about day to day relationships can, you know, are stressful, because humans rub up against each other in the wrong way often, even with people you love very much, you can still find being around them very stressful, uhm, and so, yeah, I don't think it will be possible. [P17]

Yes. Uhm... I've had, I've been quite lucky, because pretty much every job I've worked in, including ones when I was a student, afterwards, I only really worked with someone who is difficult, I work here now, I've been here three years now, and my first two years I taught with them... [...] they are good at teaching, and... anyway, they are quite, they were quite manipulative and controlling. And me being someone, a young academic, and them being someone in their mid-fifties, uhm, who doesn't have a family, is not married, uhm, who's had issues in the past with other staff members, uh, it was just difficult [...] [P18]

But I think [inaudible 16:14] main thing for me losing control, knowing how to handle manipulative others, particularly how confidence in my, myself because again, as an academic, I've had people before say '[participant's name], you've got every right to stand up to that person just saying no' [laugh]. [P18]

Uhm... it's not just managing myself, it's how managing other people's thoughts and perceptions, and... it's just another one I found working from home is quite difficult. Perceptions. Sometimes it's in my head I think 'god, is he pissed with me?' [P18]

Say, if you're in situation with a, an argument with somebody, you don't know why, I was going to [inaudible 02:44] to be very stressful, because, you know, it's uh, or, yeah, feelings of being mistreated, or, or, or overlooked, or being, uhm, being, uhm, ignored, that's all would be stressful situations, being harmed in some way. [P19]

So then I turned rush, and when I actually arrived they'd been there for a quarter an hour, and they'd been annoyed, and I could tell they're annoyed, and I was, I apologised [...] [P19]

It's, uhm, well it does, because other people's stress influences us as well, because we're often bouncing off the other people's stress. We're sitting in an office, and somebody's stressed, it creates stress for other people, you know, it's, uhm... [P19]

And then the more horizontal aspect, say in an office, you know, one person's behaviour impacts on another, or you see somebody else not working very hard and you've got too much to do, that creates, so I mean, it can, it can impact all sorts of ways [P19]

I'm, I'm a very much, uh, a tick-box girl. I come in, uhm, and, need to do this, and do everything properly. Not everybody who you work, or... that you live with, does everything the same as me. And so I find it quite stressful if people don't do the correct way. [P20]

Uhm, and that's how they deal with it, uhm, which, which sorts of has a stress effects on us as well because it's not, not nice dealing with self-harm cases. [P20]

[...] I've, I've worked with people before, they were at the point where they think 'I can't work with this other person anymore', and they're, they're really, really emotional. [P20]

I don't know... it was very, uhm, it's very broad, block management is a very broad subject, and meetings could be very aggressive. Uhm, so, uhm... people will turn up just to give you a hard time, just because they retired and they'd got nothing better to do, and there might be an ex-judge, or, uh, you know, or a surveyor [...] [P22]

Yeah... so, uhm, it's, yeah, so sometimes I get stressed when people do something that I deem to be... stupid, not, not because they're stupid, it's because I think of what they have done at that particular time was stupid. [...] Yeah, so I think... for me, I... so if someone does something I don't think it should have been done that way, particularly if it didn't fix the problem, then that's stressful because... or particularly it's very, it's stressful for me if I can see a way that I think would have fixed it. [P23]

I also feel that her personality, my daughter's personality, uhm, goes towards the Asperger spectrum a little, uhm, whether she has that or not, I'm not sure. Uhm but that, that could be quite challenging at times. [P24]

Uhm... we also have, myself I have quite a poor relationship with my parents and sibling, so that can be quite stressful at times. [P24]

Well, I felt things... feeling pretty unfair because my daughter was taking a different attitude to me, she was like 'well, it doesn't matter' because she was sort of... [...] So it was feeling unfair that she was taking a different view about things. [P24]

So yeah, I think that does impact everyday..., uhm, because if we had more money, and we were in, in a bigger, in a house, for example, uhm, then, uh, yeah, we would have more space, uhm, but also it could be stressful in our flat because of neighbours, and noise, and people being inconsiderate sometimes. [P24]

[...] sometimes when you come across students with mental health issues, uhm, and it's trying to decide how can you deal with that and sort of calm them down, but it's, uh, they get quite mad, and they get upset, and it's that, but, but you know it is not directed so much at you so I don't find my job stressful. [P25]

No. Not really. People, it's a lot... I think I'm... like I was bullied, uhm, through school, and I was, I had bad relationships, so that caused me a lot of stress, so... mainly I have had, it has been issues with people, but the weather, the weather stresses me out [laugh]

Uhm... being bullied is stressful. [...] the fact that, you know, you've got to go back and face them again the next day, and, and sometimes bullies are just, you know, they're there, and they just don't go away and it can cause such an impact on you in your life. [P25]

Uh... queueing. Queueing, people find, I think, people start tooting if they have to queue too long, and now that does annoy me, you know, like bad customer service, that stresses me out because

I think, you know, doesn't take too much to be polite, you're being paid [laugh], you, you, you know. [P25]

It, you, you know... people picking at little things. My manager used to pick a little stupid things and that used to stress me out, you know, sort of like if I, if I put, like I made a spelling mistake, and she was like 'your grammar's awful', you, you know, [laugh]. Yeah, I really, she'd make a big thing about it. So if I put a sign on the door, she'd write all over it and then stick it in my inbox instead of just speaking to me. So I think them petty, people are petty, and people don't, managers who don't manage well. [P25]

I didn't go back for half to two days of once because it really was bad. But that's because he'd be swearing at the staff and that sort of, and I can't [inaudible 27:44] where there, where the managers swear at staff, you know, an also, now I don't mean actually there's that, and I was in [name of the company] in those days because I'm a trained chef and stuff, so... so I'm used to a bit of pressure. [P25]

I don't think that would happen, I don't think you can have a... not unless you didn't go out of the house, deal, deal with people because people they don't drive properly and that annoys me [...] [P25]

I don't think there would ever be a world without stress. Because I think there's too much going on in the world. You know, these, these horrible people, these accidents that happen, I mean, you can go out, and I could be quite happy going out to the beach and then I can see someone get hurt. [P25]

It wasn't until I'd say I went to high school and started getting bullied, but there was any, then I even knew was stressful but as far as we were concerned when we grew up children were children. [P25]

I think as good as social media is, I think it's taken away children's their childhood, they, they're too alert to what's going on-line, the bullying goes on-line, it's, uhm... [P25]

Because there's always someone... who'd annoy you [laugh] because often we're just people [are] so different, aren't they? You know, so many people, so the people have been brought up differently, people have got different issues, people have got different models. Uhm, what one, one person thinks is, is not right, another person might think acceptable. So you can come across issues with other people because you disagree, and that can, you know, perhaps be stressful sometimes. [P25]

You know, I'll take it and take it for a while but then I just lose, lose, you know, sorts of like if someone bullied me, when someone stresses me out, and I won't say anything, I'll let them bullying me, I'll let them do that, I'm like that. [P25]

You, you know, so I'll, I don't like not talking to people, I hate it when people ignore me, that would wound me up, that would stress me out if people didn't speak to me. And I'm, I then like do things tick together, you know. My boyfriend, and I hate it, he ignored me once because he thought I'd

been seeing somebody else which I hadn't. So that's, he was a bit paranoid he thought I'd cheat on [him] and he just ignored me. [...]That's, you know... But I do get quite angry if people ignore me [laugh]. That stresses me out [P25]

And he gave me a bit talking to, this is, you know, are you really happy in this relation because if it causes you this much stress then... because my neck just seized up as soon as like I get stressed. [P25]

You know, and then you've got the children dealing with abuse, and, you know, how can you come through things like that? [P25]

You know, I think it was around a thousand of nasty sunbathers, and then a family came with, like, noisy kids, and that annoyed me a bit [laugh], you know, go away [...] [P25]

I don't know what had stressed me out, I'd think I had a terrible boyfriend at the time then, and, another one. [P25]

[...] people didn't accept like I was, I think it was work, I was going to work, and you, you work as hard as you can, and then people are just throwing it back that you don't this, you don't that, you know, you're like that. [P25]

I mean, I was walking from work when I first started it, and I saw three children. I started getting anxious, you know, children nowadays are not as nice as, you, you know, towards adults that we were. I think, you know, oh God, I don't want to [inaudible 01:26:24], you know, they're not gonna move, or they're gonna be cheeky, all that lot. [P25]

But then, one day I'd had three drivers like caused me stress. Well, they really wound me up, you know, they put my [inaudible 01:26:51] really quite angry and upset. For no reason, you know, I was just down there shopping. But people kept, you know, doing stupid things in the cars, and park, car parks that annoyed me, you know, that just, would just that [inaudible 01:27:08] people just pushing in, and [inaudible 01:27:11] your space when you're back trying, you, you know, going that, in that. [P25]

The people that you come across, they can cause the issues, people get jealous of what you've got, or what that... and then that stresses you out, you know [...] [P25]

I know, and I understand it now, but when you've been... you know, told you don't fit in, you're not normal, you're stupid, you know, you know. My last, last manager said 'well, admin's not really your forte'. And then she said to me before I left 'oh, you know one of your parents will die soon if you move to Bournemouth'. And I was like 'really? Is there really a need for that?' You, you know, this is what I've been. I handed my notice in, went into work, I'm sitting there, and I'm busy doing my work, and then my manager came in and basically told me admin was not really my forte, and that one of my parents was gonna die before, as soon as I left. [P25]

And some people, they don't, they don't realise that other people are a bit more sensitive. And some people, just they speak what, exactly what they're feeling, and they don't think how that might affect another person. [P25]

Children can affect the parents, I think, because you've sided with one child then, you know, it's sorts of like against you, I don't know, but it feels like, you know, which parents go and get things right [laugh]. One of the parents [inaudible 01:35:34] I'm going to go dad, you know, or you're going to mum, but... and they're like 'now you tell me!', you know. [P25]

So if you don't treat me right then that's gonna, you, you know, that's gonna cause me stress, and, and it's gonna, and it's gonna impact because I would be really annoyed [laugh], I'm really gonna be like angry with him, you know. [P25]

The stress never kind of... I mean, obviously, when a relationship comes to an end, and all of, you know, when things don't quite work out, then it's a, that's a different type of stress, and I never really relate that to things outside of that, I suppose. [P26]

#### **Uncomfortable, disturbing or unwanted situations – uncertainty, novelty, unexpectedness**

Uhm being .. you know I, I worry... you get very anxious and you worry about the future and... [P1]

Yeah. I think, I think, it's because maybe the first time you do it you don't know if it's gonna go wrong, don't know if you gonna lose the classroom, if they not gonna listen to you... [P1]

I think sometimes being unfamiliar is something what creates stress. [P1]

Today I'm going to a new environment that I've never worked in before... will be challenging, but it will be a little bit stressful as well. [...] Because it's different. It will be something that I've not done before... [...] [P1]

I think, I think it's maybe something that you've not foreseen happening and, and your anxiety level is sort of coming crazy [P1]

[...] if you're in a new job, uhm, and you don't know what you're doing, that's really, like to me that kind of scenario is really stressful, being in a new place where I don't know anybody, and I know that I've got to do a good job or something [...] [P3]

[...] if the tiniest thing happens in my day it will just ramp the stress right up, just because I wasn't anticipating it. And I like to be able to see what's going to happen. [P3]

Perhaps that's why I've always had it because I always do worry about the future, and, because I like to look into the, into the bigger picture, and you don't know what's gonna happen in the future. [P3]

I have a lot of extracurricular things, and I currently do not have any lectures, it's all self-managed time, and I have a lot of random things that happen once, or happen once a month, or something like that. So for example, like I said about my student ambassador work, I work like once a month sometimes, and it just stresses me out a little bit. Or sometimes, my brother can only make the gym at random times, so I have to go when he can go. Uhm... it's, it's basically that, to be honest. This having the little things that take away my time, and just don't fit into a routine because they are not regular. [P3]

Just not knowing where he was, I think, that's the trouble. [...] You wonder what's happening, or where he is, or what he's involved with, or who he's with, and... [P5]

You have to allow them to, but, I think because he's slightly more vulnerable, 11.5-year-old, than some of them, there is an added worry. And also because he's epileptic you never know, if he's out, if he's gonna have a seizure or anything. [P5]

Because I think I just wanted to go out and find him. [P5]

Uhm... major changes happening within the organisation, uhm, being out there to find the solutions, fairly isolated, uhm, very little support, because we were trying new things that nobody else had tried in the country, so, uhm... that constant pressure, really. [P6]

As I said stress can be caused by driving, it can be caused by things that you not expected to actually happen. [P6]

Sure, and that would be very stressful, as you have to adapt to a whole new life, but uhm... [P7]

[stressed people] they would be poorly, they would be edgy, yeah, nervous, uhm, perhaps not knowing what they're doing [...] [P7]

[...] the stress is like when you're relying on other people to do things, and they're slower at doing them, or they're not doing them in a right way, and then you end up doing more than you anticipated that you'd be doing. [...] things come back that you don't, didn't think they were gonna come back, and then, and you haven't left yourself enough time to compensate for that. [P8]

Yeah, I think when you don't know what you're doing. [P8]

Not particularly [stressful]. Because I'm on my own, and I know what I have to do, and I can just kind of get there and get [it] done. So, it's, it's not changing as well, it's the same, uhm, it's the same building each week, it's the same jobs, and, you know, once it's clean, it's done for however long. [P9]

[...] I was literally just kind of stranded, like, what am gonna do? Because I just didn't... I think I didn't know... I was a bit, I was quite scared of what was gonna happen, because I just didn't know what... what I could do. [P9]

If, if, if you, if you that you've got a stressful situation to deal with then the anticipation can be stressful. I think, uhm, if you don't know what's gonna happen, I think that could be stressful as well. [P9]

Uhm... normally situations in, like, normally I'll, like, don't know what to do in a situation. [...] or like you don't know what to do exactly, and that, like, that is kind of like a stressful situation for me, uhm, that's like my interpretation of stress. [P10]

And it's stressing me out, it's like I really don't know what to do, and this is obviously the first time I'm doing anything and I'm always like liked to be guided on something I'm doing the first time, and that's kind of stressing me out [...] I don't like doing something myself unless I know what I'm

doing. And that's kind of like conflict, like when I'm doing it for the first time, am I getting it right, or am I getting it wrong, stresses me out. [P10]

It's like I don't want to feel that way, I want to feel positive, and I know, I want to know what I'm doing. [P10]

Yeah. If a certain, yes, if anything just like, occurs and I'm not, I guess, I'm not prepared... That's kind of like stressful life, I guess. [P10]

Uhm... like for about a week or two with my dissertation, I'm not gonna lie... Like I was just so wrapped around it, like, I just didn't know what to do, and I just like put it off, like, I didn't try to tackle it. [P10]

And it's not maybe like physical as such, but it's just like, it kind of drives you to the point where it's just like I don't know what to do, because you've got all these different thoughts going around your head, and all these different, like, the roles and responsibilities, and I think, I do think it is like different to an extent. [P10]

[...] I think it's being totally out of control, not knowing what's gonna happen. [P11]

But sometimes I'm afraid of something, and that's very, that's where my stress will come from, maybe. [...] Yeah, fear of the unknown, really. [P12]

[...] they haven't done it so you've got to do it. So you've got extra to do than what you've planned. And that's stressful. [P12]

P12: Well, just now, coming to the, here. I need the chocolate.

I: Why is it so stressful?

P12: Because it's new. [...] until you're actually doing it, it's a bit stressful whether sort of, uhm... apprehension before comprehension. You are apprehensive about something but once you're doing in, you can, you can, you can take it on board [...] [P12]

Well... a sort of, uhm, thinking it in the future. That can affect your health. You know, not having a view of what the future might hold. It can stress people out. [P12]

So it's, it's not seeing your future, plans in a way, can be stressful for people. [P12]

[...] uhm, you don't always see it coming, it may come out of the blue, you don't obviously, you don't spot it coming [...] [P13]

Because of my own fault that I had, uhm, left so much of it so late, perhaps. There was a lot to do, more than I thought there was to do. [P13]

I think, maybe a surprise element of stress makes it a lot worse as well, makes it feel a lot worse. [P13]

[...] something that you've never done that before... I guess. [P13]

[...] it's the first time I've done something like that, uhm, and it was quite stressful and I was very nervous [...] [P13]

Uhm, so like, so like I'll finish my job in three months and perhaps, maybe, when I think about it I'm, I'm a bit stressed about that I don't know what I'm doing afterwards. [P13]

It's not, it's not stressful that I need to find another job, it's stressful because I don't, I don't know what I want to do, then I don't know where to go, travelling for a while? I don't know. I want to go back into my degree industry, I want to do something related to what I've been working on this year. Too many options, and maybe, I'll, I might make a wrong decision, and maybe for the wrong reasons? [P13]

That's what... you know, funny thing, well I'll describe it... you know, what I said earlier, like you just don't know what to do, you don't know where to start with. [P14]

Uhm, but you couldn't, you know, life throws you something that you, you were not expecting, and you haven't chosen. [P15]

Yeah, I think so, but then, it could be if you're suddenly faced with a particularly stressful situation that maybe you haven't encountered before, it could come as perhaps more of a shock, like I say for myself. [P15]

And then suddenly I had all these things coming at me, I was like 'wow!', this is an, this is unexpected, because things don't happen like this in my life [...] [P15]

Uhm... perhaps not knowing the next step forward, what, what to do next. And... I think it's, yeah, it's that whole thing of 'yeah, what next', how do I do this, maybe, a confusion as well with it. [P15]

Yeah, I think when my marriage went wrong, uhm, and I felt so sad that suddenly it was, because I didn't get married thinking it was gonna go wrong, I got married thinking this is for ever [...] I think because it was so unexpected and it was not on my radar [...] [P15]

[...] thinking what's gonna be family life was just crumbling around me, and thinking I don't know where I, how this happened [...] [P15]

And then, the procedure I had to go through at the university meant that I had a viva examination, a transfer and that helped me a great deal, and that was quite stressful. Mainly, because I didn't have any experience in going into a transfer, viva before I actually went into a... I've never hadn't to do that, so... [P16]

Uhm, well, I had quite a lot really, you know, becoming single, you know, that kind of thing, wondering what's gonna happen to me. [P16]

I think that for me that would probably mean not having any kind of a plan, any kind of a direction. So in other words, something just happened to me and everything has changed. I think that would, would make me feel quite stressed. [...] so all that unknown, uhm, all those unknown issues were kind of quite stressful for me at the time, uhm... So I think, I think being without a plan, even though it might not be terribly specific but... yeah I think that would be quite stressful for me. [P16]

Yes... not knowing what I'm gonna do next. And that could be next as in the next project, or the next... day, I think. I wouldn't like that. Not knowing, not having a plan. [P16]

If I had stressful life I think I would have, uhm... uncertainty in my life, I think it would be frenetic, lots going on, juggling many balls. [P16]

I, I do feel happier when I do know what's going on, and when I feel I'm in control, that's for sure, so... but... [P16]

[...] and that went on for a lot longer than I thought it was going to, and so that was... [...] But it wasn't a particularly pleasant experience. But I knew full what it would be like, just not how long it would last... [P16]

Well, I think it's because if you, if you're stressed about something, you're worrying about it, and, uhm... and until you know what you can do about it, until you've come to a conclusion, that affects you in all sorts of ways. [P16]

[...] I think it was working with someone difficult was stressful because I was, I didn't know how to conduct myself, I still wasn't familiar... because that's the thing with academia that there's no real set rules, I don't care the, well, the Code of Conduct exist, they do exist but the amount of people I know, not in this uni, across, across this country, other countries, they, yeah, the, the, you play, that's part of the autonomy, the independence – you play to your own rules. [P18]

But then you'd also... the fear of the unknown, isn't it? [...] when something happens like that, you suddenly think, you don't, you're not expecting, you don't think about it, uhm, and even afterwards it's like well... [...] Uhm... I think sometimes it's just, it's that fear of the unknown [...] [P18]

Uhm, another one might be... financially... you prepare yourself to something. Ain't the ones that you struggle but the ones that you don't see coming. [P18]

Now, if you, if I've had kids [whistle], I'd be, again, that's just another completely new stimulus that creates stresses, [P18]

Uhm, so I suppose that you must... stresses yesterday, little jobs that... you plan your week, or whatever is you want do for the day, but then these little jobs have ways of jumping up and like that. [P18]

[...] when there's, uh, yeah, when they're uncertain as well about outcomes in, you know, relationships, or in a, you know, in a, in uhm, in a, or interaction with other people, and that sort... [P19]

It was stressful because I'd been uncertain about what was meant to happen, uhm, was I going to do something wrong, and had I misread the original thing, had I misunderstood something. [...] but you know, there still was a sense of uncertainty, and, uhm, going into, in the, uhm, event I went to [...] [P19]

Yeah, that's a, you want to see if like everything is alright, and not, not knowing exactly 'am I getting this right?', am I, am I reading the situation right. [P19]

Uhm... It [job] can be occasionally [stressful] because you, you get put in the situations that you're not expecting, and you want to do as, as well as, as you can to fix whatever the situation is. [P20]

I'll find that stressful doing that, because [laugh] I'll be in the middle of nowhere, and I'll be like what's going on in the world [laugh] [P20]

What the... This is, I mean, this is, this where my stress comes in because I'm a bit, uhm, there's what, you know, they can't tell me if my, my retina's going to detach. They, they just can't tell. I might be lucky, I might not. Uhm, but it is unknown for me that's stressful, not knowing if it's gonna happen, or, or when. If they could tell me, yes, your eyes gonna detach on this day, this time, the I would be able to prepare myself for it, but it's there not knowing, and it could happen at any point [...] [P20]

Bordeaux is a horrible place to drive to, and not knowing what state he was in when they'd taken him in there. [P21]

This was, yeah, this was unexpected. Yeah, that's, it was just...yeah, yeah. [P21]

[...] you know, in an unfamiliar situation, an unfamiliar location, and also never, never have dealt with that before. No, a lot of unknowns about how we were going to get home, when was he going to be able to go home. Uhm, yeah, loads of unknowns around something that was serious [P21]

[...] but when you don't know what to do or how to do it [...] [P21]

[...] there's an element of uncertainty there of am I even going to be able to get this working, or am I going to have to give up [...] oh, gosh, yes, the... the unknowns, the worrying about the unknown things that could go wrong rather than dealing the future one, yeah, sort of... Lots of anticipating of things going wrong. [P21]

[...] until I got my check-out report for my house to say I can get my deposit back I was still stressed, until I found out about that. [P22]

It's not, not death that would frustrate me, it's being dead because I can't comprehend, the same like I can't comprehend the infinite universe. [P23]

Uhm... being stressed is like not being able to know what to do, uhm, not knowing where to start, to what ends, that, uhm, that would be, yeah, stress is like, or being stressed is like not knowing what to do, like being lost. [P23]

So for three weeks I hadn't really done any proper work, and coming back in on Monday was stressful because I didn't know what problems were going to be in my inbox. Because people only ever get in contact with me if there's something they needed doing. I didn't know what needed doing, what had been done by my colleagues, uhm, how big the problems might be. [...] Because I didn't know what the problem was, I didn't know the scope of it, what I was facing. Now, I feel better because I know what's in there, so I know how to, I was able, you know, I'm able to start

working through, and equally I know that there is no more than what is already in there. I know that there's, that may be new things but I've found what the current situation is. [P23]

[...] I still knew that there were things I didn't know about, and therefore there could be anything, and it was not knowing, I think, that was most stressful for me. So until I'd managed to look at everything, that's when my stress levels went down. [P23]

And then, then it's a big problem because then you've got to do like an emergency, reshuffle of everything, and then that might cause other problems down the line. So, stress is useful when you've got enough warning [laugh] [P23]

[...] it's, it's actually a huge pressure for everybody, and you have to, uhm, put on that child, as well, and we have conflicts in our minds whether that's an appropriate thing to do. [P24]

So that was my fear that was something bad was going to happen... that I couldn't control. [P25] anticipation?

Yeah, and not knowing. Not knowing what's gonna happen. [P25]

I was trying to finish off my old job but I was like... I was scared of leaving my parents, you, you know, I was thinking 'am I doing the right thing?' [P25]

[...] definitely she has lovely attributes, and you can have a laugh with her and she's absolutely fine and then [snapping fingers] she'd gonna change from being, you know, into that, you know, overly, uhm... what is the word I'm looking for, just overly disciplined manager. [P26]

You know, you know, because I was, one interview I had, actually in one of the museums [...] so because I knew, I knew the lady herself so it wasn't an issue, but if I got in a room and I've never met these people who are asking me all these questions, back in the day that would be really stressful. [P26]

Yeah, but, uh, I don't know exactly why, because I mean it wouldn't be just interviews if it, it was happening in social occasions, you know, like house parties, or... you know. If I knew I was going to a house party with, say, a group of friends from work, it was fine because we were all together but ultimately there would be an occasion when I'd be standing and talking to someone I don't know, or, you know, and there was always those insecurities that... [...] you know, if I say something that's just weird, or not taken in the right way, or... you know, uhm... [P26]

I don't know... I've never really, sort of really, worked it out. I mean, I think it's just because... I don't know [laugh], I think it's just the unexpected, isn't it? It's the unexpected, it is the... it's probably just the, an insecurity that lies under [...] [P26]

Well... not really. I mean, it does at the beginning, obviously, because, there are new persons, I'm going through all of those emotions, you know, when I go on dates and stuff, and then... [P26]

### **Uncomfortable, disturbing or unwanted situations – out of comfort zone**

Uhm... stress is like a... I don't know uhm a, a stormy day in a boat. So it can be, it can be out on the sea in a boat and you can feel lots of turbulence and it's a very uncomfortable place for you to be. [P1]

[...] that might be outside your comfort zone a little bit, that did make you stressed [...] [P1]

But, obviously, the more I become comfortable with what I'm doing, and my training has been, you know, delivered the stress levels should drop. [P1]

They still, I mean if you're asking someone to do something that they're comfortable with they shouldn't have any stress created, because they're comfortable enough to do, it's not being creating stress. [P1]

[...] I think whilst I probably if you'd seen me 12 months ago you'd have seen quite a grim place it were and then I had some 4 or 5 months of some support from work and got to better place. It was a bit of a surprise that they, they said 'we're making you redundant', and because I probably wasn't in this better place, uhm, by September, October as I'd have been in March last year. [P1]

That would be my stressful situation, whereby I would feel out of my depth completely. [P5]

I mean the stress can be caused by, uhm, people wanting to take you out of your comfort zone. [P6]

Uhm, probably in a dark place psychologically, uhm, could be, uhm, expressing signs of rage, anger, uhm, could be unable to, uh... compute and therefore not... extreme stressed would be somebody who couldn't move on, couldn't actually take a physical step. Uhm, I've been in that place before, uhm [...] [P6]

Bad stress, when the situation is you don't want therefore you have to think about making them better. [P7]

Yes, yeah. Let's say I'm here as a dad, and if your children are not well, you want it to go away, so you have to... bring in to yourself what is the right procedure. [P7]

What kind of life... would be stressful...? Uhm... hmm, that's quite a broad spectrum there, because I think someone who's doing a job and not enjoying might be stressful. [P7]

Uhm, I think she found it stressful in social situations, so just speaking to people, I don't think she... she finds it comfortable, like, uhm [...] [P9]

But to me because I haven't really been terribly stressed, really, because at the end of the day, you can always get out of any situation I have ever been in, and I didn't like. [P11]

I suppose, because I wasn't, I'm uncomfortable with organising events, because I am not organised, I think. [P14]

[...] I've recently had some work done in my house which has stressed me out quite a lot! [...] But it wasn't a particularly pleasant experience. [P16]

Uhm, but I'm, I'm in a, I'm in a comfortable situation, I don't have any financial worries, I haven't had any financial worries for a long time, I've been very lucky. [P16]

Yeah, but that for me is what stress is like, an inability to focus, and then panic, and think of the worst case scenario, and it's always a worst case scenario. Is it bankruptcy, is it lying in bed all day and just turning to a vegetable, is it... losing my job, because I just one day wake up and I just don't have motivation to get out of bed... [P18]

I just relate it to negative things that are going on in my life. [...] Whether it's health, or, uhm... anything else that's coming up is, is stressful. [P20]

Yeah, yeah, it's, it's, as I said, I'm not a, I'm generally not a stressful person, it's, it's just like... little niggles, and that for me is my, that's [participant's name] stress, so to speak [laugh] [P20]

[Not being stressed] Uhm... yeah, so I think sort of being comfortable [...] [P20]

We are in the university, we're sending this out to potential students, it's just ridiculous, and that's, you know, but that's kind of minor irritation [...] [P21] psychological discomfort?

Uhm, so, yeah, going to visit him, uhm, just trying to sort out things with the insurance. The insurance [insurers] were being complete and utter nightmares [...] [P21]

Uhm... stress is something that puts you out of your comfort zone, essentially. [...] Essentially stress is something where you find yourself in a situation that you don't feel comfortable with [P22]

They become, again, they become stressful, I would say, you begin to feel like you've got no control over the situation, or you feel very, very uncomfortable with it. [P22]

Uhm, so... someone who is not stressed will be someone who, who knows what's going, who is, who knows what's going on and is comfortable with themselves at that particular point, and everything that's going on around them. [P23]

[...] when I first started, that was a little uncomfortable, and stressful, uhm... and particularly thinking 'oh, everyone is looking at me' that kind of thing [...] [P24]

P25: That, that now I would rather die than go on a rollercoaster.

I: Why?

P25: I hate them, they frighten the life out of me. I mean, I would, I could cry. Uh, that's I have this really bad fear of like heights and stuff, used to feel right when I was younger [...] And I think there's, there are things, you know, like... but there's, it's, I've always said I'd rather die than go on a rollercoaster [laugh]. [P25]

So I just got scared in there, and it's sorts of like, yeah, I might feel stress, oh, I've got to go across Bournemouth, but I've, I've got, you know, it's like sort of, good little makes you, you do things out of your comfort zone. [P25]

Uhm... well... I mean, it just got really, really uncomfortable, and, you know, I had to... I had to do my best to sort of, you know, really focus on my answers, and not, I suppose, not have full-on panic attack. [P26]

### **Threat to goals/values**

If I'd spoken to you last week when I hadn't had my job offer, it would have been very stressful, because I probably would have thought right up I've been trying to find a job for 4 months now and nothing's happened. [P1]

I think, yeah, I mean most people would be stressful about losing their job [...] and looking for a new job is quite an anxious thing to do, there's a lot of rejection, uhm... and then you get your interview and that hope, and you know, hope rises into a sort more optimistic manner of things and, and then you get 'a not' back, maybe having interview and told that you don't get the job and... [P1]

If I'd spoken to you last week when I hadn't had my job offer, it would have been very stressful, because I probably would have thought right up I've been trying to find a job for 4 months now and nothing's happened. [P1]

I... it's a bit like I have to get everything done, uhm, because it's expected of me to done so if I don't meet that expectation, so that I would have failed somehow, and I'm just trying not to fail. [P2]

Uhm... and I might not tell people that I've made those plans, so for example I say to myself 'after work I'm gonna go to this and this' but then someone says 'oh! I'm, I'm coming round to yours later, we're gonna do this', and I think 'oh my god, no!' and now I'm stressed because when I'm gonna find time to do that stuff that I had in my head I was going to do? [P3]

So I say for example 'I have to do 5 hours of work in a day', or 'I have to go to the gym that day', and if I don't then I start getting stressed. What you've done today, what you've achieved? You're gonna start slipping behind. [P3]

Uhm... I think that the only thing that makes me happy is feeling like I'm on schedule with stuff [...] And knowing that I'm completely on time, I'm on schedule, and it's fine, and I have time to catch up. [P3]

There is a part of me that is always concerned, and worried, and stressed about 'we don't make it in the future'. [P3]

And even if... I don't like putting plans in because something comes up and won't stress me too much. I have put in protective measures, so I don't get too stressed. [P3]

[...] where you, where you, where, for example, something gets in the way, and I'm not able to meet that goal, of what I expect. [P4]

[...] uhm, worrying about your home, whether you're gonna lose your home, uhm, you know, we, we were fortunate that we were not in that situation, but I think... and also if you're, uhm, under threat maybe of redundancy, and you know, if your job is changing. [P5]

[...] or if you're relying on other people, and, and the stress is like when you relying on other people to do things, and they're slower at doing them, or they're not doing them in a right way [...] [P8]

Uhm, and then also I think it's stressful, stressful to know that something you're putting a lot of time and effort into is not going in a positive way then. You know, the end of, result of all that time and energy isn't going to be a positive thing, it's going to be some sub-standard. [P8]

[...] I think if you're quite stressed prioritising things becomes quite difficult because you know that everything needs to be achieved, and there's not enough time to do it [...] [P8]

Obviously there are still days where I'm like I'm so tired, so stressed out, it's not working how I wanted it to work, but... [P8]

Because there's hundred and one things that she's gonna do, and she's gonna, if, if she messed it up then... at the time money was a really big problem, so that would have really kind of messed up our lives, so it was really, it was a hard time, and stressful, because if she did stop working out all these different things then, you know, the whole kind of, let's say, lots of different comps which had to keep spinning, and if one stopped the whole thing will stop. [P9]

Uhm... that was when I got my first-year A-level results and found out that I've been kicked out of my school. Uhm, and I had no plan B. So I was, I was kind of expecting, you know, A, B, C, and I got D and two Us, and I was literally there like 'what? no' [P9]

[...] I guess it's like, just like, say it's for instance like you won a jackpot in a casino, but you can't collect the money. Like there's that barrier and you can't collect it, and... like, I guess, that's like you're so, like you want it, but you just can't have it. [P10]

And if I can't be productive in a day, then that stresses me out, because I feel, I guess, there's that frustration I guess that I haven't, I guess, done enough. That's like kind of my life stress if I haven't done enough [...] [P10]

[...] or doing, like, something wrong when you know, you maybe, you could have learned it beforehand. And I guess that's a stress to me basically. [P10]

Like, uh, like for every single thing mattered when I started secondary school. And like, I was, like, so upset if something went wrong. [P10]

Just in case like, like something happens, just for the next three hours and I can't, like, do work, that would stress me out a bit. [P10]

Like I guess it's back to that point of last, like, I've done it wrong, and then that makes me, I guess, stressed. [P10]

Uh, I guess, I interpreted it as my fault [...] And it was all mess, and I was just like OK, this is like my fault, I take it all, just admit that. [P10]

[...] I had so many comments saying negative things, and like, I guess, that made me stressed just like what I've done wrong, how am I going to fix it [...] [P10]

Uhm... because I was worrying I wasn't going to make the deadline, and maybe even if I did that work would, wouldn't be the best... quality. Uhm, and that, if I messed it up, what I have been doing for the last three years, why did I leave it so late, I'd just been annoyed with myself that I let myself get into that situation, really [P13]

Because you're nervous, you might mess it up. Because... because you're worried about what might go wrong. [P13]

Because perhaps you don't believe in yourself to get it right, to do it, to get it right. Uhm, not mess it up. [P13]

Or, or you, or you dwell on the part you messed up, but every, everyone who was there probably won't remember it. [P13]

Uhm... oh, yeah, last, couple of weeks ago, I was on my way to work, so I was, I was driving. I had a really important meeting and I got flat tyre. Uhm... and I was stressing out, stressing out, because, uh, the meeting was important, I didn't have the contact number to the person I was going to, uhm, uhm, going to meet with, so I couldn't let know, and, uhm, I was just like, oh, everything is going wrong, why that have to be today? Uhm, yeah, that was it, that was it. Uhm... and then I didn't have a spare tyre, so I didn't have a spare tyre, I pulled up, I had a inflation thing, but I'd used that a couple of month ago and I not replaced it [P13]

Although she doesn't work, so she says she feels that's... she can't work, but that stresses her out. [P14]

So it's no, like oh, the roof from my head is gonna be taken away if I don't work. [P14]

So I guess I felt a little stressed at proving myself then, uhm, and thinking... again, I got, it's pressure on myself that I want to move forward with my career at time when I'm not working full-time. [P15]

[...] you can then become stressed because you haven't done what you've wanted to do by the time that you thought you would. So, for example, uhm... so I think the PhD is challenging, I spend a long time within my PhD finding my focus, and then I became quite stressed about it because I was thinking how am I ever going to get this, you know, it became a worry for me [P16]

I'm, I, of late I think I'm more of a worrier, uhm, but I am quite a confident person, so I'm confident in my abilities but I do sometimes worry about how I'm gonna get there, so... [P16]

It's probably this week about this businesses that I can't just get hold of, and then... well, a part of my pilot, I'm thinking... getting quite anxious about that, uhm... [P16]

I'm wondering what it is, what I, what, so... how did I feel... I, I felt anxious because of the impact on the rest of my, my plans. Uhm... and what will happen if they don't get back to me, if they do

get back to me? Can I close it off, can I do this? So it's that kind of, uhm... so how did I feel? Pissed off [laugh], uhm... [P16]

So... uhm... so it's kind of, it's stressful in that I don't want to, I don't want to give up on, on something that I think it could work, uhm... [P16]

And, uhm, so, and, and I was pretty anxious about that because it was such a lot of money in terms of, it was the price of a house. [P16]

I associate being stressed with somehow kind of me having failed at something, uhm, or not, uhm being as competent as I should have been. Whether that be at work or kind of outside of work, in general in life. [P17]

[...] and so I think that's made me, uhm, yeah, it, it means it's harder when I try to do something, uhm, than, the... if I, if I'm failing, or if I'm not, not doing it to the level I think I should be doing then I find that difficult. [P17]

But that sense of failure and that sense of, uhm, 'I can't do this thing' was really, really stressful for me, uhm, because I had found, generally found things fairly easy up to that point. [P17]

It was. It was but in a good way. Uhm, so... it was, I think in competitive sport there's always an element of stress because you could lose. [...] Uhm, and so there's a kind, there was kind of something, because there was something at stake it was stressful, [P17]

[...] it was time I really remember which is ridiculous but worrying about my job [...] [P18]

I: So what is the most stressful situation you can imagine? Doesn't have to be anything that you have lived through, just, you know, the most, most stressful thing.

P18: Hmm... It's really stupid but bankruptcy for me. [P18]

Uhm, so I suppose that you must... stresses yesterday, little jobs that... you plan your week, or whatever is you want do for the day, but then these little jobs have ways of jumping up and like that. [P18]

I remember being on the phone one day to our solicitor, she was really good, I said I have the money in my account now, I will transfer it if you want because I don't want it to kind of fall for after all these months and all this time. [P18]

I ended up in a state of stress where actually all went, all went to be at wrong, so... [P19]

And, uhm, and because it was stressful, and, and slightly threatening because if it all had gone wrong I would have had to resign and withdraw, or something. [P19]

I ended up in a state of stress where actually all went, all went to be at wrong, so... [P19]

[...] as much as the thought of losing my sight, uhm, the initial, before I got to that point, I think if they'd turned round and said you can't drive that would, I worry about that because I've got a young daughter, getting her round from A to B would be a lot more hard work [...] they thought,

it ought be right and fine to drive, so... but before that the build-up to, to going, I was like this might the last time I could, can drive, and that, that sorts of builds up a little stress in me. [P20]

All sorts of, they were blocking me every time, just impossible to... They were basically... basically they wanted me to give up. [P21]

[...] trying to get it done in certain time, three week turnaround and I was having technical problems getting things up, set up to work with it. So it's kind of, that was completely getting in a way of something I knew I needed to get done. [P21]

[...] I don't want to be doing this, I want to be doing the actual thing not the stuff that's getting in the way. [P21]

[...] the unknowns, the worrying about the unknown things that could go wrong rather than dealing the future one, yeah, sort of... Lots of anticipating of things going wrong. [P21]

[...] stress for me would be about not saying the right thing [...] because my job was really important to me, so I wanted to make sure that I'd done everything to the best of my ability, but also that I can answer all the questions that were put to me, so... [P22]

While when I get stuck in traffic I know I'm stressed because [laugh] I want to keep going, so... [P23]

[...] it feels like, again, a disparity in terms of what people are expecting, and how I might achieve that, like, like blockers sometimes, the things that are blocking what I want to achieve. [P24]

But that's certainly when it's not going where you wanted to go, you know, you're just, it's frustrating [laugh]. [P25]

So then sort of [inaudible 01:01:07] that the student, they, you know, the disabilities, you know, can stop people, and that can, like, make people stressed. [P25]

Or frustrated, or things aren't going your way wherever you want them to. [P25]

### **Social-evaluative threat/threat to self-esteem or image**

Even if I got a job offered this week, I've got another interview on Thursday for another job which I'm really nervous about. [P1]

[...] whereas if you said 'you've got to do it tomorrow' it would be an unrealistic thing and it would build up your stress level and you would be worried you that you would be letting people down. [P1]

If you said to someone that 'we've got to do a presentation' or some public speaking, a lot of people wouldn't want to do that [...] [P1]

Last night probably because I got rejected from one of the job that I'd applied for which I thought I did really good interview on the Friday last week, so I probably last night felt quite stressed when

I went to bed. [...] being bounced back on the other one was probably a big disappointment yesterday. [P1]

Yeah, uhm... I don't think... because I quite like being in a small group of people, I'm very sociable in a smaller group of people, I think if you put me in front of, say, 80 people, and you become a centre of attention, like your wedding day. it was a happy event, but very stressful to have to get up and do the groom speech, and, you know, those kind of things I would always try to avoid. [P1]

For example when you're working on a group projects, and you're behind, you'd probably be stressed, you don't want let people down, uhm, or... [P2]

Uhm... probably having to stand up in front of the thousand people and talk about something I haven't prepared. [P2]

I wouldn't like to stand in front of the crowd and have people laughing I've got no idea what I'm talking about, or that I don't know what I'm talking about, so... trying not to displease the crowd, I suppose... or not to embarrass myself. [P2]

She's like, she is kind of a perfectionist, she likes to get things done properly. Uhm... and she always wants to do that, and when she doesn't she gets stressed. [P2]

I... it's a bit like I have to get everything done, uhm, because it's expected of me to done so if I don't meet that expectation, so that I would have failed somehow, and I'm just trying not to fail. [P2]

[...] the thing to me that first comes to my mind is having to... constantly having a vision of yourself to other people [...] [P3]

[...] if anybody wants to deviate from that way of doing things, or interrupt the way I want to do it, then that can be stressful. [...] so I've worked out a solution about how to, uh, how to maximise the street collections to raise the most money, and then somebody would come along, and would say, uh, but I don't want to do it like that, I wanna do it my way. And that then makes me question the way that I'd thought of doing it, and the process I thought of doing it, and challenges my thought process to find out what is the best way to do it in the first place. [P6]

Uhm... they feel they failed in some way, failed themselves, failed their family, failed others [...] [P6]

But they accept how they've let other people down, and they could find no other solution to it. [P6]

And I just wonder whether because I'm so confident, if I get my confidence pricked, does that add to stress? Because I know what the answer is, generally, and I voiced it all around, and I've got it there, and then somebody comes and says 'I wanna do it in a different way', and I think 'oh, god!', I feel deflated then. So I wonder whether that adds the stress as well? Being overconfident could add to stress. [P6]

[...] the council suddenly say you, you forgot to pay this tax, or that tax. You know that they're incorrect, although you know they're incorrect, it's stressful to have that, for example. [...] Because you feel the record should be correct, you have evidence that you paid it. [P7]

You don't like to disappoint your children, you don't like them to feel you being negative, so I just go with an honest reason, perhaps, just say I'm not really keen on going, uhm, yeah. [P7]

Because you're not able to do things at the level that you'd like to do them, so... I'm quite thorough, and if don't find that I have enough time to do things as thorough as I like, then I'm worried that I've forgotten something, or something hasn't been done to the right level of sort of skill, or... [P8]

[...] I find it stressful having to tell people how to do things again and again. So repetition, or having to come across as... you know, unfair, or unkind, because you're trying to get things done... effectively. [P8]

[...] then you catch the plane, and everybody's looking at you, because the plane has been waiting for you. I guess that, that is what stressful is like [laugh] So you get on the plane and then you're like [panting], and everybody has been delayed because you're the person that was running between the planes, so... [P8]

And, and then yeah, it's that combined with knowing you've inconvenienced lots of other people as well, I think [...] [P8]

[...] so if it all go wrong, it's not necessarily on me, it still doesn't reflect well on me, because they'd like everything to finish before they come back, but at the same time when they ask me why it's not done, I can say 'these are all the things I'm trying to do to make it work' [...] [P8]

So I had no real stressful situations [...] and I never had any, any 'oh, no! I'm not as good as this person'. [P9]

Because they, they would have no stress about what people thought about them. [P9]

Uh... I think, appearance-wise, it would be stressful, uhm, if you cared about what other people think. Uh, I mean... as example, my sister wouldn't go out of the house without make-up. Meanwhile, I would go out looking vaguely homeless [laugh] [P9]

Yeah, I, I think that's a big part of stress. That having what other people think of you [...] [P9]

Uhm, I guess it's just because I want to do stuff right at the first time, and being wrong for me is quite a stressful situation. Like as soon as like I do something wrong, I mean, I'm like upset, or stressed. Like, I want to be, like, I guess, right in what I'm doing. [...] be able to do it correctly rather than just wing it. [P10]

I'll still obviously learn from my, like, mistakes, but it just makes me stressed that I can't give it the first time, and then I think other people will stress even more that they've got something wrong, to, like, to a greater extent [...] [P10]

Uh, I guess, like I let them, like I let myself down, and like frustrated with myself. [...] Like thought was running, ran in my head just like, uh what would they think of me, blah, blah, blah. [P10]

I've been disciplined at work, my last job at John Lewis, a couple of times, and to me it's traumatic because they have made, I'm doing a good job, and they're accusing me of something really stupid [...] [P11]

I mean that could put me in a really stressful situation because everybody wants to be better than everybody else. [P11]

Uhm... Exams, and also the children, if they don't get it one way, you've got to think about another way, so you're gonna doubt yourself, and, uhm... [P12]

This is what stresses me out, when they say 'are you pissed?', you know, 'are you drunk?' And I say 'no, I don't drink', I limp, you see, and people think I'm drunk, and, uhm, that, that ignorance stresses me out, you see, they're so stupid, you know. [P12] social interactions?

People, no, before we go on, people's ignorance stresses me out. [...] so they say that 'you're English, oh, you're like that', you know, you, you're like that. So that stresses me out because they don't treat people as individuals, individuals. They just put you in that box – that stresses me out. [P12]

[...] if people are labelled, or put in a sort of box like that, then that's, uhm, that's, uhm, prejudice, you know, really. So you, what they call a stereotype, that's it, a stereotype, like, uhm... You know, if you're in your 50s, you've never been married, you don't have kids, you must be something... else. But that's not true, you know, I'm just I'm just living, I've lived in a bauble till, say, till I'm 54, or whatever, the kind of, you know, didn't want to participate in that sort of thing. [P12]

And also because I, I was a bit of a perfectionist, I suppose, in those days. I expected myself to do a lot of things, as well. So I had a very... too, it wasn't a realistic expectation. That's stressful for me, unrealistic expectation. [...] Yeah, it was, it was my expectations of me plus the thought of other people's expectations of me. [P12]

My, my cousin, she's very, very, uhm, very girly girl, she's very short, and so she wear very high shoes, and she get stressed out when people talk about her height. [...] So she's stressed out about her body image, I mean. [P12]

And also, uhm, expectations, you know, what people expect of you. [P12]

I think there's more expectations on them. I didn't have many expectations on me. My brother's in a different situation because, uhm, he, he went to a posh school, with a lot of expectations, you know. My, I mean, the school I went to didn't have even school uniform but my brother had this school uniform and he had to be right, and... it wouldn't have suited me. But, uhm, so he had a set of, uhm, expectations put onto him which is quite stressful. So, uhm, I think expectations on younger people is a quite significant, and a very... very influenced way at outside things, like the things on the computers, and things like that. [P12]

Uhm... it's like, I guess, actually, yeah, so it's like going up on a, on the stage in front of ten thousand people and having to give a speech [...] Or, or... uhm... or just everyone, everyone's just looking at you. [P13]

[...] if you're in front of that crowd, of that ten thousand people, they're gonna, that's not the time to mess up. [...] Because that... [laugh] because you should have practised, it should be perfect, and by that point you should know what you're doing, uhm... [...] it's that, it's just that just how it is, isn't it? You don't mess up, you're not supposed to mess up, like in situations such as those. That's not the time to... [P13]

Maybe that, maybe, maybe not them, maybe they don't restrict you, but you think that they restrict you by... you thinking that you have to sort of, like, [meet] expectations... [P14]

Of which we did try and address, but unfortunately, again, the process, the HR process is just so anti-human, you've got the performance review which is quite, something quite stressful in itself, which causes stress to get worse. I'd it though like [laugh] when you feel like you're being watched all the time. [P14]

And I know that I am a perfectionist as well, so sometimes when I want things done to my standards, and it's, and I know that I can't necessarily do it like that. [P15]

[...] so I had to be interviewed by, uhm, a panel of people from sort of high and upper education to say whether or not I can do that role, so I had to do a big presentation, present data, uhm, and then I had to go and do like a master-type inspection [inaudible 26:09] the team, the inspection team. So I guess I felt a little stressed at proving myself then, uhm, and thinking... again, I got, it's pressure on myself that I want to move forward with my career at time when I'm not working full-time. [...] I think I was a little bit stressed in terms of, prior to the interview really, I was stressed by how can I make this as best I can, and perform as well as I can. [P15]

And I used to practice but there were people who were better at it, so... so, yeah, that did use to stress me out. [P16]

I: OK, uhm, what is the most stressful situation you can imagine?

P16: {Laugh} One that I haven't had yet, probably my viva! But, oh, my PhD viva. [P16]

No, not, not that, no. I wouldn't... yeah, it's a funny thing, doing a PhD, it's quite de-stressful, it's challenging. But the thing is, it's, I don't compare myself to other people, I just think it, this is my PhD, so if it doesn't work out the way I thought it would, that's just the way it is. [P16]

Because... of the... level that it was at, and because I wanted to do a good job, because they're good players. [...] So... you, you appreciate you're doing a service. It was just because I wanted to do a good job, really. [...] Well, I, I, so it was, it was stressful going into it because I was worried about it, because I wanted to do a good job [...] [P16]

Uhm... because of the perceptions, because of who I was dealing with. I was dealing with A-levels board, board members so you're wanting to do a good job. [P16]

[...] I often struggle with something called the impostor syndrome, uhm, so feeling like I am, feeling like I somehow got to where I am because I've just been lucky, and people haven't realised, uhm, that I am actually not as competent as they think I am. [P17]

[Laugh] Oh my goodness! Uhm, the most stressful situation I can imagine... Job interviews are quite stressful. [P17]

[...] if I, if I'm failing, or if I'm not, not doing it to the level I think I should be doing then I find that difficult. [P17]

Uhm, and I wish that I could, I wish that I could emulate that, I wish I was more like but I'm sometimes like 'oh no, people have asked me to do this thing and I might not be able to do it'. [P17]

Uhm, so that element of kind of there being a weight of responsibility on you as an individual is stressful, uhm, your team will expect you to do things, especially I sometimes used to open the battings where I would be the first person walking out to bat, and, uhm, that was, yeah, that was a kind of weight of responsibility and that was stressful [...] [P17]

Uhm, it was because I thought I might be late because, uhm, I was buying theatre tickets [laugh] [...] Uhm, so there, so there was an element of stress in that situation because, uhm, I thought that I was gonna be late, and that makes me feel a little bit stressed, I suppose. [...] I think because I feel I've committed to being here, and I've committed to doing this, and, uhm, I feel like it's, it's rude to be late things if you can avoid it. Especially because it wasn't for something, it wasn't for some crisis, it was just because I was buying theatre tickets. Uhm, so... yeah, I, there, there's a kind of, there was a kind of social expectation and I suppose I' uhm, was stressed because I kind of worried that, of the way that I'd be viewed if I was late. [P17]

[...] there was a kind of social expectation and I suppose I, uhm, was stressed because I kind of worried that, of the way that I'd be viewed if I was late. [P17]

Uhm... yeah, I guess, a bit useless that I had, uhm, you know, I kind of thought maybe I should have been able to do those things more quickly than I did. Uhm, so... yeah, it comes back to that kind of self-esteem thing maybe. [P17]

As I kind of said it can be a motivating thing, uhm, a motivating factor and, uhm, helping me to push on and get the work done. Because I feel there's that expectation on me to do it. [P17]

I'm just thinking about taking exams, I suppose that's the first thing that comes to mind. Uhm, I know that my final exams at Oxford were really, really stressful. [P17]

I see myself as someone who is quite a perfectionist anyway, uhm... one of the things that causes me stressed. [...]I always see things through to the end but there's a bit in the back of my mind that 'god, you're slow, you're slow' you're slow', and I'm quite a deliberate person anyway that likes to do things properly. [P18]

[...] so for me that's another example when I feel stress because I feel like I'm letting other people down because I'm losing control, and that's the responsibility again [P18]

For me, I'll be letting myself down. I'm never gonna go bankrupt and that sounds really smug [...] but for me I'll be feeling like I failed. [P18]

However, when I know who, uhm, people are passing me who I normally recognise as me passing them, or keeping up, it's suddenly, the curtains come down and kind of I feel stress because I'm not doing what I should be, I'm too slow, I'm too slow, I need to go faster [...] When I get stressed I lack focus and I cannot pace myself. I think 'it has to be done now', 'you're doing it slow', 'you're a slow person', do it now, do it now, do it now [P18]

Uhm... it's all appear now, perception of what other people think, and what I should be doing, and... [P18]

For example, the first time students complained against my... oh, yeah, it was, it wasn't a very good dissertation student and he made a complaint against me, I was crap in myself. [P18]

And it's fine but then it comes I want to do the best I can do, I will see that project through or else I'm a failure, and I will do to the best of my ability. [P18]

I think sort of situations for lots of people when they, they have to go public, were they to be exposed in some way, or, uhm, judged in some way, you know, evaluated, where they're having to put themselves forward either by saying something, or by, you know, in a particular role. [P19]

I am... would get me... I've been, I think I'm... some public things, some, some, uh, sometimes there are things I'm actually good at, but some things like doing public speaking, or something I may find very stressful, uhm, although I'm quite good at it generally, but I'll still have a disproportionate sense of my own whether I can do it or not, so sometimes I get stressed. [P19]

[...] whereas, uhm, for me it would become stressful when there's, uh, a feeling that I, I'm not, I can't cope with it, or that I'm..., or that I'm, I'm really failing people's expectations [...] [P19]

Uhm... yes, pretty, quite recently, I think, but yes, it's, uhm, I was, uh, yes, I was, uh, did, uh, it was the other day, actually, I got slightly stressed but, uhm... There's somebody, uhm, it's a bit personal, but just the background of it, somebody, last week I asked out for a drink, and, and, uhm, and he said yes, and so there's sort of, uhm... But then, we were gonna arrange the date on Tuesday, and then I got a bit anxious thinking there's been a long time since I'd been in a relationship with someone, and I've thought well, is this going to be, uhm, how is it going to be, how do we arrange a drink, am I gonna have to say something? [...] Uhm, and, uhm, yeah, was I going to get embarrassed, or something, you know, all sort of thing that was going on in the background. [P19]

[...] you're just like, you know, if you're like at a quiz, or something [...] that would be stressful [laugh] Being put on the spot, giving answer to something. [P20]

[...] being told what to do, and I have to do it, and it's... sometimes it's just pointless, just sometimes it's making, uhm, it's undermining my own, my ability to make my own judgement of other things, so... [P21]

Uhm... you know how it is, thinking, I was just trying to think, being, being in front of students, you kind of want things to work and sometimes that's, it's kind of stressful, but actually you're only human so... you know, when you're trying to something up and running and the tech won't work in the beginning of the lecture, or something, it's, it's kind of a bit awkward [...] [P21]

Yeah, so, so none of it, so it's not great answers which is always, well, that's stressful [laugh]. It gets pretty stressful, actually, marking something where you, where it not, where it's just a really rubbish essay that's, you know, kind of, that's, it's my job to teach them this, and it's really hard not to take it personally, and there's... [...] Yes, they have to meet you half-way, you can't inject it to their brains, but I just want to, wanting it to be right work for them, and be sure that I'm doing, doing a good job, yeah. Yeah, perfectionism is stressful [laugh]. [P21]

Hmm, one where's more to do than you've got time to do to your own satisfaction. [P21]

Uhm, I don't know... maybe it's because, well, I've said that, that perfectionism and caring is a real problem. [P21]

[...] it might be someone's not happy about what they're being instructed to do or they, they feel like they're being spoken down to, or, uhm, I could still relate stress to that. You know, feeling stressed about your job because you don't feel like you're valued [...] or feeling stress because you think maybe you're not doing your job very well [...] [P22]

Uhm, I think someone else being critical of everything I do, uhm, makes me question who I am as a person, and, uhm, am myself worse, so I think that's very negative. [P22]

[...] I like to try and do the best I possibly can everything I do. Not to the point where I try and stretch myself too thin, but I just like to make sure that if I must do a job then it's done properly. And if I must do a job, and I can't solve it, that's when the stress comes, but for other people if they asked to do a job and they can't solve it then they may decide 'oh, I don't care'. But because I can, I want to get that result, that, I guess, maybe why I get stressed, but some other people may not get stressed. [P23]

I think that because I work part-time, uhm, sometimes I feel an expectation, maybe from others, maybe something that I perceive myself, that I need to achieve the same things that somebody who is full-time achieves. So... it is stressful for that reason, I think. [P24]

[...] when the child was, was born, we had to make a decision about who would look after her, and so, although it wasn't a natural inclination, uhm, my wife was earning much more than me, and her, her job, I wasn't working at the university at that time, I had a job as a career advisor that was less secure in terms of funding, so, so I left work for 5 years to be a stay-at-home father. So, psychologically there were big changes then to be made and it was quite challenging because

we live in a very old-fashioned county where being a full-time dad, and not at work is quite unusual. [P24]

So many people do it sort of half and half, uhm, but to be just dedicated to that is quite unusual, and I found it to be quite isolating at times. A good experience to, to know that I was looking after my child, uhm... but also quite isolating, I felt at times. [P24]

[...] I had to do a speech, and I completely couldn't say anything for some reason. Something like that would, would, in front of like thousands of people, that, that would be stressful for me. [...] I would think, oh, OK, people have, have allowed that to happen because they, they know that I can do this. And the if I couldn't then that would feel, uhm, yeah, at odds with expectations [laugh] [P24]

And I think, normally I take clues from the context of where I am. So if I'm actually interviewing somebody for a job, yeah, I'm gonna think, thinking about it straightaway. [P24]

P24: Uhm, yeah... getting, getting here on time, yeah, so that was the most recent one. Trying to, to, to, uhm, make my daughter understand it's important. Uhm, that was, yeah, the most recent thing [laugh]

I: Right. OK. So, why, why was it stressful?

P24: [...] it's something ingrained in me that, that, that I feel it's incredibly rude to be late, uhm, for meeting with somebody. yeah [laugh]. And also just thoughts about, well, if I don't get here on time, you know, thinking about, this building is quite, you know, then I would have to find you, and, uh, yeah I would feel embarrassed. [P24]

And there's, uh, an issue about image, uhm, because I pull up in my old car, and they've all got like, you know, some people even have like a Bentley, or an Aston Martin, or something like this. And, and so there is for me, yeah, a sense of, of, uh, image and how things look. [P24]

Uhm... another situation would be when I was training to be a career advisor, uhm, and... So I was doing qualification where I'd be talking to a young person, and there'd be somebody sitting in, uhm observing me, and... So that's more stressful because, you know, you are wanting to do it just really well [...] [P24]

Yeah. I mean, I think, so maybe another example... maybe a few years ago I've started going to a club where you practice public speaking, and when I first started, that was a little uncomfortable, and stressful, uhm... and particularly thinking 'oh, everyone is looking at me' that kind of thing [...] [P24]

[...] I'd got teachers telling the whole class I was gonna fail my exams because I was stupid and, and things like that. You know, it's, that was just, you know, because I wasn't stupid, I just needed a bit more help, have a disability but if people import... [P25]

Yeah. But yeah, so, so that, it used to really stress me out, that people just used to, to sort of, like, oh, well, that's, that's, she's not like everyone else, you know, and then that used to get me really stressed because it was, I struggled. [P25]

You, you know, some people are like scared of like, like interviews, make them nervous [...] [P25]

And, and, yeah, you know, it's bit above over the top [laugh] but, but that's, you know, because that's gone my all life, I didn't fit in, I'd been called stupid by my teachers, then you've got bosses, you know, I'd had, you know, managers who, that tries to set me up, and, you, you know, because I just didn't sorts of fit into how they wanted me to do it. And you get to certain point you just, I'm, you know, I don't know if this now... I was trying to be what everyone else wanted me to be. And it was, just wasn't me, and it wasn't right, I didn't feel right in myself. And it was going all against what I was. So I thought if I can't be who I am, people can't accept me for who I am, they must have a point. What's the point being here, you know? [P25]

Which is just sort of, like, I suppose, it's kind of insecurity but whenever I was in public spaces I would just be really petrified, like I'd become quite petrified if it was a new space I hadn't been to before, like an informal gathering, even if it was just down in a pub with a group of friends that I hadn't met before, do you know, a friend of friends, or whatever. [P26]

Those sorts of scenario, and then, you know, meetings, interviews of course, these sorts of things. [P26]

Interviews, I mean, I know they're stressful for everyone, of course, but, uh... [...] I hate interviews. Well, it's the... you know, it's the setup, isn't it, if you, say, have a panel of three people and they're asking all of these questions, and you need to make yourself look like the viable candidate, not the idiot that I am. [P26]

Uhm... me giving a speech to academics of something about subject that I don't know anything about [laugh] [P26]

Uhm, and that confidence then just went, but, uhm... yeah, so I have this recurring dream that I'm kind of back on stage and I've forgotten all my lines. I don't know my lines, I haven't even read my lines. [P26]

And it was like a constant stress really. In and out being stressed, and I'd only really feel relaxed at home, you know, or just in a safe environment of someone that I really trusted and knew very well. [P26]

Uhm... In terms to kind of maybe relating what I felt when I was younger and stuff... Probably the job interview for the museum. That was super stressful. [...] It, well, it was because of the... you know, those, those notions I was speaking before, where, you know, it was a panel interview, with someone from the council there, someone quite high on the council [...] that that was really stressful because of that, I think, and, uhm, you know, in a way because of the job I had the job which was nothing museum-related, I had a sort of like allude to all of these things I was doing in

my previous roles [...] I was totally faking it but I needed a job and, you know, because I knew in my heart, part of me, I don't wanna do museum work for the rest of life either [P26]

[...] these people are judging me, and, uhm, you know, it's all, and ultimately as well because it's not what I wanna do, it's just like a big old ruse, you know, I'm kind of wasting my time, wasting their times, yes, so it would put food on my table but, you know, I have to allude to being this, I really want this, I really, you know, all of those things, and it's just faking them, and I'm not really great at that, I suppose, and that brings stress as well, so... [P26]

### **Threat to physical integrity (life/health)**

Because I think, you know, you, I think, it, it, when you worry, when you lose a loved one I think you worry about the mortality of all of us. At some point we will all die and, and I think when you have grandparents have died and then maybe, hopefully a while away, your parents might die, you almost get that same, 'you, you next' thing and that we are all gonna depart at someday, so that's, that's the worst thing. [P1]

Because it's too busy, and there's too many people and... and I think you worry about things like terror attacks in London as well. [P1]

[...] it might be that it's not that critical what's going wrong, you know, it might be, I don't know, it might be failing your driving test seven or eight times, and that's not a thing which is gonna ultimately kill someone. whereas you could have something else that goes much, much worse like a surgeon that keeps doing mistakes that end up with, you know, people being injured, or loss of life. [P1]

And, probably talking about terrorism again, touch wood, we haven't had any major terror incidents in Europe for a while. That was something that I would be particularly worried about when I started my counselling. [P1]

I mean I had cancer twice, and that's been quite stressful [laugh] [P5]

But afterwards, I think, that's when I get the anxious, anxiety, and then stress builds up because you're thinking back of what could have happened. And you just get yourself into that sort of stressful situation, where you think, oh, you know, things could have been so different if I had left it, or they, or the cancer would have been more advanced. [P5]

[...] it could be somebody, you know, somebody catch you up, somebody who comes the wrong way, somebody gets too close to you when you're driving. [P6]

What if I do something in a different order than I planned to do it, one of the implications of that: are they gonna be life-threatening, or are they just gonna be that I'm going in a different direction in a car, so it's all, so those sorts of decisions, uhm, can lead to stress, if you let them. [...] Doesn't have to be like that, because it's not life-and-death threatening really. [P6]

Uhm, I get anxious quite a lot, I suffer from asthma and COPD, and sometimes I can wake in the night, and think that I'm not breathing properly, and I have to slow my breathing down, even while I'm completely relaxed really. [P6]

Uhm... therefore, if anybody, you know, if my presentation doesn't go up to scratches, not as I'm pitching through millions of pounds worth a business and suchlike which would cause stress, uhm, because the implications are not life-and-death about whether people would want to see my presentation again, or come and hear me on something else, it's a matter for them, really. [P6]

[...] would anybody be the worse off if I hadn't tried to achieve it? The answer is no. Because it wasn't life-and-death. Uhm, and that's where I think stress has become real stress, when there is a life-and-death situation. [P6]

Right, whereas ours are, generally, in this country. Unless you're old and you can't afford to heat the house, die of hypothermia, and I think that's a very sad state for this country as I understand it being in the 21st century. [P6]

Short-lived will be like, say, for example, something chopped my leg off. The initial pain will be horrendous, you'll think you're dying, but I don't think it will take that long to... [P7]

Uhm, living in an environment that you can't, you don't like, for example, where there's conflict going on at the moment. You obviously want to get out of that situation, where all the building around you are collapsing... [P7]

I know I'm in the right, or I know that even if I'm in the wrong it's not life-threatening to anybody. [P11]

I'm, I have a sort of a phobia of going up in a plane sometimes. No, not some much these days but in the past... I, I was really afraid of going up in a plane, and that was stressful to me, you know, all... [P12]

Well, I think that all of that situation is probably the crash and people panicking, and I've sort of, the way I got, thought about this [...] [P12]

But it's also the fact that you crashes you die, as well. And I, I'm of the age group where there were quite a lot planes being highjacked. So, I've got in my mind, my mind 'is that plane gonna be highjacked, or something?', you know. [P12]

Uhm... I've got MS [multiple sclerosis], I think it would be stressful if I've become immobile. [P12]

Uhm, if I go, I rely on taking medication and maybe get addicted to something like that, that would be stressful for me. [...] Yeah, but people don't know enough about this to know whether it worked. So you feel a bit like a guinea pig, don't you? [P12]

[...] I see the people with diagnosis same as me, same time, and they've deteriorated, that's kind of stressful. Because you think 'god, am I gonna go that way?' You know, what I mean? So that's quite stressful, but you know, I don't dwell on it, I just get on with things, [P12]

So, uhm, so assuming, you know, when I, I, anyway , the [inaudible 33:17] I went to the gym, I did things, and then I fell off a bit of equipment, and haven't been there since, because the idea of it is too stressful now. [...] Yeah, that, that thing in the gym, when I fell off the equipment and I saw I can't do this anymore. [P12]

She's very stressed out because she turned the light on, now I'm stressed out because this water coming wrong, and it's affected, and affecting the light. And, uhm, it didn't matter because she got in her house a trip switch, so wouldn't have set fire to the house but in my head, in my mind water and the electricity burn the house down, you know. So that's a stressful event. [P12]

I remember having a chat with my grandmother, and I said 'Grandma, was it stressful as it is in my? For me, when I was a kid, I used to talk to my grandmother about stress, or expectations, and she used to say 'Well, there was a war, the bombs were falling, very stressful environment', you know, not knowing but, uhm... [P12]

I've got an aging mother so I wonder about me being on my own when I get older, that kind of thing. [P16]

You sometimes get anxious when you're going on a flight. As I got older I've, I've not been so excited about getting on a plane, I've been thinking about all the plane crashes that have happened! [P16]

[...] fear of your life, somebody, somebody, guerrilla building with a gun and you're hiding somewhere or, you know, somebody's chasing you, or you're, you know, you're in a war-torn bit of the world and there's a, somebody, you know, you're in a battle going on outside and you're hiding in the house. Things like that, I suppose. Imminent death [laugh] [P19]

Just well, I mean I can give you, I have got like a health example, I can give maybe. Uhm, I've got, uh, my, my eyes are, uh, the gel, I don't know much about it, but my retina is pulling basically. [...] So I get like floaters in my eyes and I get, because I have type I diabetes, uhm, so I get bleeds in my eye, and unfortunately I wasn't good to [inaudible 14:19], I'm not good at my diabetes, and unfortunately now I've started sort of getting consequences of it. Uhm, so they can do an operation, however, there's 1% chance that you'll go totally blind. Now, if you leave it, you can go blind anyway. At the moment I don't think it's worth doing the operation, so... But I get floaters in my eye all the time, and I get bleeds in my eye, so I find that quite stressful. And then you start weighing up in your head: should I have the operation, shouldn't I have the operation? Because actually my life would be a lot less stressful without all those floater and bleeds, and the threat of going blind. [P20]

That's, that's probably where I can get a bit more emotional, uhm, obviously because there's a risk there that I could go blind. [P20]

Uhm... I think probably, probably with my eyes, I think, I am... so I've got an appointment in a couple of weeks' time to get them checked again. And I just, I suppose, and I think about driving, that sounds really awful but... as much as the thought of losing my sight [...] [P20]

So, you know, I'm worried, I'm stressing out about sort of whether or not my blood pressure is going be too high, my blood pressure goes through the roof [laugh] [P21]

[...] mum, for example, she was involved in a road accident, uhm, a few months ago. She was fine but she was involved in that nonetheless, she got hit from behind [...]. So it was, it was a bigger deal for her. [P23]

Uhm, I was in relationships where you, you didn't know, you were treading on eggshells all the time because if you just did the wrong thing or said the wrong thing, you know, you get punched, you get slapped, you get... [...] I had one boyfriend, he just sort of like, he would flub and he's moving his hand in front of me, and that used to stress me out because, you know, you'd just, every time he walked along, you know, he was checking out all the other [inaudible 19:56] and he only hit me then once and I moved straight out, taken to court, and everything like that [P25]

I think being held hostage – that sort of thing. [...] Uhm, I think if someone held me like hostage and I was like that, I think I'd rather die. [P25]

Uhm, the fear of danger, and being trapped. [P25]

No, the last time I had that was when, uhm... when I was being beaten by my boyfriend, and I was going through the domestic violence. [P25]

But then he's like, he can go [mumbling] grumpy, so... have a drink, you know [laugh] another beer or something, so you can't really win, but it's not bothering me like, it's not stressing me, because he's not violent towards me at all, you know, it's not any danger, actually he's just like 'I love you, honey' [laugh], 'I love you so much!', yes, I know you do [laugh] [P25]

### **Threat to important others**

Yeah, yeah, I think maybe losing your home, or potentially losing a loved one, so... I'm lucky that I still have both of my parents, uhm... my wife still has both her parents and we've not suffered any bereavement too close to us, yeah, that's a family, but those are the kind of things you know inevitably will happen. I think those would be the worst thing. [P1]

I think just bringing up a small family [might] sometimes be stressful...and I've had, I have two daughters, and one who was quite ill last year[...] [P1]

Uhm, so I think you worry about your children, primarily, and supporting them and especially not having a job, it's been quite a stressful period of time, uhm I was given some redundancy from my old job, so, that's been able to support us financially the criticality of working was not being there and... and I think, yeah I think probably primarily worrying about bringing up family uhm is, probably, my biggest trigger for stress. [P1]

But I think, uhm... yeah, I think it's worrying about when it might or might not happen. Uhm, my parents live away as well, so I worry, if them both being quite healthy [inaudible 09:02] one will die and the other one will be alone. They've been married nearly 60 years, so a long time to be

married... and how one of them might cope without the other one and me not being on their doorstep to support them. I think I'll worry about that kind of stuff. [P1]

[...] she worries and she, she worries about us, you know, I said I worry about my children, she worries about us as well. Uhm, I didn't tell my mum for four months after I lost my job because I didn't want her to worry about something that she couldn't really do an awful lot about. [P1]

[...] my first one was born with an emergency caesarean, and my wife and my daughter were very close to not being around anymore. [P1]

So I'd probably say, like, if I'm having some financial problems, that's affecting my son, uhm... then I would say that's a stressful situation. [P4]

Uhm, for me it's the... worry of [grandson] when he doesn't come home from school at the right time. I know I get myself in, in a situation... worked-up sort of thing, because I worry about him not coming home, especially when the, when it gets a bit darker, so you know, he's not coming home from school. [P5]

Uhm, I'd had it when my mum, I had to look after my mum for a time, uhm... my brother and I, in the end she had to go to a home because she was quite poorly. And that was quite a worry, because we, I would get phone calls in the middle of the night, to say that she'd fallen over, she fallen out of bed. [P5]

And, and you worry about other people. So you get stressed, because you're worrying about what everybody else's going to cope, however everybody is gonna cope, should anything happen to you. [P5]

I would think it's somebody close to you dying, or serious illness, know that it's a serious illness [...] [P5]

I think if you, you know, with your parents, we've both lost two our parents, you know, they, and we've had difficult times with that, and because you're looking after them, you're more aware of that. [P5]

[...] it would be a part of me that will always worry. I mean, my girls, they're 35 and 33, they don't listen anymore, but they're still a part of me that is, that worries about them, you know, and always, I want to be there to help them if they need any help. And, uhm, with the grandsons, you know, you're always there to help them too. [P5]

That would be the last week when [grandson] didn't come home from school [laugh]. Yeah, when he doesn't turn up from school. Uhm, he can be a nightmare, because he finishes school at 3, and he didn't turn, turn up. I didn't, he didn't turn up till half past four, so he was gone for hour and a half, although he's on the, he's got a phone, and he, but he wasn't answering his phone. Uhm, so that is when I get very worried up, unfortunately, yeah, that's got quite a lot of pressure then. [P5]

Uhm, he's quite, although he's, you know, he's 11.5, he's very, he's tall, but he's quite vulnerable, because, because of his disability. He is 11.5, but he, at time, he's not an 11.5-year-old. He's quite susceptible to..., I mean, bullying. He's, he's been, he's been bullied, uhm... because of his disability, and things. He's also very, uhm, a black-and-white with [grandson]. He doesn't see danger anywhere, you know, so like he is, he is going to be crossing the road now because you have to give him responsibility but there are times that he wouldn't be, you know, he would just, he would just walk cross road, he wouldn't think. He doesn't see danger. Uhm, and I think that's, that, that's what worries you, or worries me about him not, when he doesn't turn up. [P5]

You have to allow them to, but, I think because he's slightly more vulnerable, 11.5-year-old, than some of them, there is an added worry. And also because he's epileptic you never know, if he's out, if he's gonna have a seizure or anything. So for, for me that's the worry, so it's, you know, something's happened to him. And because he is, he is not mine, if you see what I mean, you now, he is my daughter's child. [P5]

Uhm... certainly... I don't think there's anything... I guess it's like, well, when, I think it was stressful when mum, we, I, with my mum, when she died, and that was really hard [...] [P5]

I've had it with, with [daughter], my oldest one, when her relationship was breaking up, uhm, her, they were, she lived in Leicester at that time and we were here, and that was a constant pressure and stress, because I was getting phone calls from her like at ten in the evening, saying, in tears, she was in tears, because she wasn't coping. [P5]

It might be somebody in their family has just passed away. [P6]

[laugh] The most stressful situation I can imagine, uhm, is, is death. Not of me... [...] That people that are close to you [...] Yes, that's a selfish attitude, because, uhm, as human... it is natural to be protective of the ones close to you. [P7]

My oldest son actually has a situation in his health that, uhm, I've tried to address with him, but he is concentrating so much on working, that he's not addressing it properly. [P7]

And because I... having been in management as well, often in most of my career, and being trained into management I'm slow to react, but [...] we had a swimming pool, and both my oldest son and the son of one of our friends, uhm, were basically in the pool, and drowning. And I was very quick. In that situation, which pleased me obviously, I'd launched in the water, and ahhh, otherwise they would have gone. [P7]

And just, I guess, I'll take it like... If it matters to them, because they're quite, quite close to me, and if it matters to them, then it matters to me. [P10]

Oh, I find, I find, uhm, like for instance I was saying about [daughter]earlier, I find that more stressful than anything [...] But I worry about her quite a lot and that stresses me out, like when I think of when someone being horrible to her at school, or any things like that, that makes me stressed, and I get worried about that. So worry, because obviously she's got to be at school for such a long time. [P14]

Three years ago, our son died, and obviously that was the, probably still to this day is, was the most stressful, and is the most imaginable stressful situation. As a parent, I don't think there's anything worse. That was quite, that was obviously incredibly stressful. [P14]

Probably being in financial difficulties. Knowing that we've got children depending on us. Uhm... because of commitments that we've got in terms of mortgage, and, uh, yeah, providing for them in the way that you would want to be able to [P15]

So, to me a stressful life would maybe be things that are out of your control. So maybe if there was a terminal illness in your family that you're trying to deal with as well. [P15]

[...] eight years ago, when I just lost my grandmother, my previous marriage had gone wrong, because my husband was drinking heavily, and my mother was diagnosed with breast cancer. [P15]

[...] I would get about this wound up and agitated because I'm concerned about their well-being. So it kind of, for the people that you care about, you almost absorb some of that stress yourself, because you want them to be OK. [P15]

Or like, same with my daughter, she gets, she's really stressed, you know, she is stressing about doing her 11+ exam for the grammar school in September, and to her it's a really, really big deal, and... So for me there's this is a bit like... it's, it's a bigger deal for her than it's for me, and so then I think, my god, you know, I want her to succeed, what can I do to make her succeed, you know? Because you, I think, for people that you care about you take on that stress too. [P15]

[...] about the my mum situations, and there was, there wasn't a deadline for that, but there kind of is a deadline because she's getting older, you know, so... uhm, it was, it was a kind of a worry for me to think about how, until we, we've sorted her out, if you know what I mean. [P16]

I've only got myself to look after, uhm, but I can imagine, you know, looking after children, families, thinking about other people, that kind of thing, uhm... would be quite difficult. [...] I would think if I had children, I would be quite worried about, you know they would gonna, they would gonna progress, and have families [...] I would think, yeah, if you've got financial worries, if you've got a lot of things to do, a lot of other people in your life to look after I think that could be quite stressful. [P16]

[...] I think being a parent is very stressful because there is the, the endless worry about your children, you never stop worrying about them. [P19]

Uh... most stressful... something happens to my daughter and I wasn't, probably, I wasn't with her. I think, I think that would stress me out more than... if, if she needed me and I couldn't be with her, then... [...] Because, because she is my world. She, she is my world, there's anything else in comparison... [P20]

[...] and then spending all day visiting my mum which was quite tiring in itself [...] Uhm, so, yeah, and, and tired after the day before, and, you know, sometimes kind of stressful with worrying about her. [P21]

But when I was on holiday in France once, my husband got ill, had internal bleeding, we called the ambulance and they came at, sort of about midnight, I think they came. [...] So they'd taken him from a little local hospital to somewhere bigger, and, so the whole thing with worrying about him, that, I think, was probably the worst bit [...] Yes, there was initially, so the initial bit, that real, real peak of it was there him being in danger, uhm, and then ongoing from there. [P21]

[...] and kind of ongoing worry for him, because he's very frail, but, you know, he was, he had, I don't know if you're familiar with, uhm, haemoglobin levels in your blood, but he was down to seven. [P21]

[...] some family being ill is already hard, but doing it away from home where you haven't got base [...] [P21]

I mean obviously if there's something wrong with [son], or... uhm, then I would find that difficult, uhm, but generally it's alright. [P22]

And my wife's mother has dementia which is, uhm, is really challenging because she's been in a nursing home, very unwell for some years. So, uhm, that can have difficult effects on everybody, yeah. [P24]

Uhm, it sounds bizarre but something like a family member being murdered, or something like that. [P24]

[...] we had a miscarriage [...] and it also was quite traumatic in various medical ways. [P24]

Yeah, I mean, certainly when, when we had the miscarriage. Uhm, it was very complicated, uhm, it was quite sort of unusual because, uhm, we had some bad medical advice [...] seeing that was extremely stressful at the time, and traumatic [...] [P24]

I think it depends what sorts of pressure, uhm... when I worked in Leicester, just before I came, I was a carer of my elderly parents. So I was working full-time, and then every night I couldn't, I had to go home to look after my parents. Now that's to me a bit of stress because I had to make sure that parents were right, I had to feed my parents. Uhm, so I couldn't just go off after work and just do whatever I wanted, and that was that pressure that I finished work, straight home, and, you, you know, making sure... [P25]

[...] it is a real pressure when they're, they're not well enough because these are people who looked after you. And now they're sort of like depending on you, and they can't do things they've always done, you know. So that, that to me is pretty stressful. [P25]

I don't tend to be the news watch because... my mum had a breakdown when I was younger, and it was because she sits and watches the news and she will, she gets sort of worked up about what's going on and she thinks it's gonna happen to us, and, you know, things like that. [P25]

Yes, yeah. I, I used to, when I was caring for my parents, so like I'd, I'd get quite stressed about if I woke up one day and they both died. What would I do? You know, I was there on my own with

my parents, my dad's 82, my mum's 76, and I kind of think what happens if I wake up, and one of them has died [P25]

It was, it rose most of, of my life just evolved around them, and, uhm, I went home this weekend, and it was like, you, you know, because it's, you think oh, anything could happen to them anytime [...] [P25]

[...] well I'm afraid he drinks quite a bit and that just sometimes stress me, he, he drinks [...] I have spoken to him, you know, you can, these days, his dad has cirrhosis of the liver... and he's gonna take it after his dad [P25]

Uhm, or if you [inaudible 01:35:42] you don't get home, you know, you know, things like that, but I think if you have, if you both, you've got issues, like I was, obviously, like worrying about, you, you know, my mum and dad [...] [P25]

Uhm... well it's the whole guilt thing, isn't it? Leaving behind your unwell mum to come on a course, you know [...] [P26]

### **Psychological discomfort (negative emotions)**

So I've been referred to occupational health, uhm and been having some stress and anxiety counselling. [P1]

[...] it's something I've started to improve on, less stress and less anxiety, so, so... a good thing maybe not being there... [P1]

Uhm being .. you know I, I worry... you get very anxious and you worry about the future and... sometimes I can, I have, with the counselling I've had, I've been able to deal with things like worry, an hypothetical worry, this is uhm realistic worry, so things that are actually happening that you can deal with, as opposed to things that might happen that you shouldn't worry about until they do happen. So I think I've been more confident in not worrying about something happening till it happens. But I still can get quite anxious if something is happening. [P1]

Uhm, so I think you worry about your children, primarily [...] and I think, yeah I think probably primarily worrying about bringing up family uhm is, probably, my biggest trigger for stress. [P1]

[...] and looking for a new job is quite an anxious thing to do, there's a lot of rejection, uhm... and then you get your interview and that hope, and you know, hope rises into a sort more optimistic manner of things and, and then you get 'a not' back, maybe having interview and told that you don't get the job and... [P1]

[...] your anxiety level is sort of coming crazy and it's just uncomfortable thing. [P1]

Because I think, you know, you, I think, it, it, when you worry, when you lose a loved one I think you worry about the mortality of all of us. [P1]

But I think, uhm... yeah, I think it's worrying about when it might or might not happen. Uhm, my parents live away as well, so I worry, if them both being quite healthy [inaudible 09:02] one will

die and the other one will be alone. [...] and me not being on their doorstep to support them. I think I'll worry about that kind of stuff. [P1]

[...] and I think you worry about things like terror attacks in London as well. And... so I think if you said to me I got to go working in London tomorrow I would be uncomfortable and, and stressed by working there. [P1]

Even if I was doing the same job I was doing in Bournemouth or Poole, and I think if you said to me you've got to go into that job in London now, I think that change of environment to that kind of place would, would worry me and make me anxious. [P1]

I think, I think your body will tell you that it's too much, I think you've got things that are too concerning for you [...] [P1]

[...] and start worry about other things which can affect our planet too, rather than maybe politicians that we should worry less about? [P1]

[stress-free life] I think it almost makes me have everybody walking and singing, whistling and uhm and everybody being happy, flowers that would never die. [P1]

It's not, it's not nice, I think we don't like it. [P1]

Naturally, I think, some people thrive on being nervous, and worried, and anxious about things [...] [P1]

I don't like being stressed, I mean, I think, even going through interviews, whilst you can prepare for them and get yourself ready for them, they're quite stressful things to do. [P1]

Even if I got a job offered this week, I've got another interview on Thursday for another job which I'm really nervous about. [P1]

But yeah, I think it's... you know, I think you don't like feeling of being stressed, generally. [P1]

I think it, it's just, it's not a nice feeling to be stressed, I think it's not nice to be lying in bed, worrying about something that is going to happen the following day. [...] waiting for something to happen that is obviously going to keep you awake, is the more you think about it, the more you worry about it. [P1]

[...] they might almost try to ignore you, because they're worrying about something. [P1]

I think it would be quite... it depends on the situation, I mean, if you were working in a shop and you'd have a customer that comes in stressed, they might have bought a camera or phone that is not working and they're not happy about it [...] [P1]

They might sort of be waving their hands around you, so showing that they're slightly aggressive, they're not happy [...] [P1]

I, I think so. yeah, I think even, because I've been having this cognitive behaviour therapy, I've changed slightly myself, I think saying about these hypothetical worries and, you know, realistic worries, and I don't worry about hypothetical worries now. It's like the car, take the car on holiday,

the car might need the service, but what happens if it needs new tires or it needs a new gearbox ball, we don't know that it does, so we can't worry about those kind of things happening, so yeah, I think that's stopped me worrying about things that may happen. Obviously, I have to deal with things are happening, or we know will happen, but stop worrying about things that may never happen, because you can't do anything about them. [P1]

[...] and I think some people just won't change no matter how much you talk to them, and coach them, and guide them, they will still worry too much... [P1]

Uhm... I look at someone like my mum, and my mum's... my mum grew up in the war and, and my, her dad was killed in the war, when he was in submarine and she's had a lot of worry in her life, you know, my nan had to bring her up as an only child from 2, all the way through the war she's quite a tough upbringing and, and she's got two bouts of cancer, and, and she worries and she, she worries about us, you know, I said I worry about my children, she worries about us as well. Uhm, I didn't tell my mum for four months after I lost my job because I didn't want her to worry about something that she couldn't really do an awful lot about. And, so yeah, I think they, there are people, and I've used my mum as a good template. Uhm, I can see sometimes where I get my worrying and stress from because I look at her and she is probably a worse version of me. [P1]

Uhm... I don't like me when I'm stressed [...] [P1]

And whilst there were days that I worried, uhm, because my job search wasn't seeming to work, uhm, I think we had very good days where you tend to think 'I never had a better day.' [P1]

Very jolly to be around, normally, I've got in the head, I'd always try to see how they can be like that, uhm, there must be something that would worry them. [P1]

But, yeah, if someone wasn't stressed then they'd be calm and very happy all the time. [P1]

[...] or I'm generally quite a bubbly, happy, funny person to be around [...] [P1]

[...] I probably last night felt quite stressed when I went to bed, probably a bit miserable and of back at that, so... [P1]

Yeah. I mean, you know, at Saturday night I was quite happy, so Saturday morning I said to friends 'you wanna come round for dinner?' whereas on another Saturday if you're not perhaps in the best of place, you just want a quiet Saturday evening you might just get a take-away, watch film and not necessarily want any intrusion from people outside your home. [P1]

Yeah. I'm generally not, I'm not that spontaneous as a person, I do consider myself to be a bit of a planner, because I think if plan things properly, you're not gonna have any mishaps and then won't have any stresses or worries [...] [P1]

[...] probably the work I've got is not the perfect job, but it's a job, and, but it perhaps wasn't the one I really wanted and being bounced back on the other one was probably a big disappointment yesterday. [P1]

I've got my last session the very next week and I worry about who I'm gonna be able to talk to once I've stopped seeing her. Uhm, that kind of stuff. [P1]

So you can talk to someone and you say 'I'm worried about this', they might have a different perspective. [P1]

[...] or worrying about finding the next job. You talk to someone that's done that. Uhm, I met a guy last week that was working with me in my old uhm role, and that've been made redundant at the same time. [...] it was a good opportunity to talk to him and say 'this is what's worrying me', and he was saying 'what's worrying me', and we realised that we're actually not doing anything wrong with what we're doing. [P1]

I think people suffering from stress, and anxiety, worry, and depression are becoming more and more. [P1]

So I don't think it's... I'd never want anyone to have so much stress that it makes them that miserable and that depressed, because I think that can lead to much darker places [...] [P1]

[...] and you would be worried you that you would be letting people down. [P1]

[...]someone else just would have [inaudible 40:41] fear just from opening Excel, because they don't know how to use it, uhm... [P1]

[...] and have holiday which is not spot on would be quite stressful and upsetting for somebody [...] [P1]

But, obviously, the more I become comfortable with what I'm doing, and my training has been, you know, delivered the stress levels should drop and uhm my comfort and happiness in the role should improve. [P1]

Yeah, I think you can look at the world in a much more negative way, I think, if you feel stressed about things, you probably worry more about other stressful things happening in the world. And, probably talking about terrorism again, touch wood, we haven't had any major terror incidents in Europe for a while. That was something that I would be particularly worried about when I started my counselling. [P1]

when you're stressed, you do tend to worry more about things that may not happen. And it's those hypothetical worries that you try to not worry about until they happen. But yeah, that, that kind of stuff if you... You know, in the best of places, the world can look much more worrying place. [P1]

I mean, I still take tablets for anxiety, so... how long I mean to take those I'm not sure, they do help, and... [...] and taking some stress anxiety tablets as well [...] [P1]

I think, I'm trying to think of an example. Going on a speed boat, you know it's quite exhilarating and it can be quite an enjoyable thing to do. [P1]

[...] whereas for me or you, obviously from a parachute jumping, it would be a stressful event. It wouldn't be something that I would enjoy, where if you speak to a friend that I know has done a few times and he's loved them and keeps doing it. [P1]

And, and, you know, I think you can be very different body shape and still have stress and anxiety.  
[P1]

the, you know, something's gone on in the house that means you're seeing them with bit more resentment, and not the person that can help you work through the problem. [P1]

[...] you've worried about something, but you've prepared for something, and delivered something that might be outside your comfort zone a little bit, that did make you stressed [...] [P1]

...uhm, I think, uhm, that is most key thing I'd say: if people have stress, anxiety, and I try not to call it depression, sometimes stress and anxiety, I don't know if they're the same as... [P1]

No, because I think, someone might say he's been depressed, but I'd try to say it's stress, anxiety, or worry, and that I, if I was depressed, I would never be happy. [P1]

And I may then ever feel like I'm never happy. I'm happy most of the time, but I was going through a point where stress, anxiety, worry were too much for me, and maybe was making me slightly depressed. [P1]

And uhm... and if I'm not having prepared something I generally panic about it quite hard...[P2]

Uhm... I guess I don't, I wouldn't like to stand in front of the crowd [...] trying not to displease the crowd, I suppose... or not to embarrass myself. [P2]

If they're quite compact, and moving quite rigidly, that might suggest they're stressed compared to someone who is walking happily, chest out, swinging arms, something like that, then that, I'd say they're not at stress. [P2]

Their anxiety might be a big issue with that, if they have anxiety, or any other mental problems, and they're probably more prone to stress. [P2]

I think it's, it's a bit of both. If someone who is worrying, or is always worried about everything, is in a carry situation, they'll probably be all right, but if someone who is normally always happy and carefree, and goes into a stressful situation, or busy situation, I mean, his stress is a bit overbalanced, so I would say. [P2]

Uhm, I wouldn't say angry, but frustrated, perhaps, uhm, irritable, uhm, yeah, just, she's quite agitated sometimes. Uhm, I mean she's not a person to lash out or anything, but I can tell that some, something's working on her. [P2]

[not stressed people] They seem merry, uhm, upbeat, and very happy. [P2]

It's a really nice feeling not having, not knowing that something's going to stress you out, uhm, you can just go about your life, uhm, yes, it's a really nice feeling. [P2]

So it's just a, like a freedom to do whatever, and that's what gives a good feeling. [P2]

I have to keep myself busy almost, even though I do enjoy just relaxing. [P2]

There's probably no reason, why I couldn't speak to them in that situation, but this feel kind of, uhm, just when in bad mood, or when I'm stressed, and I don't feel like talking to them at that time. [P2]

Yeah, I think, if the person is stressed, and they're preoccupied, and they're not gonna put as much as they could into there, work, or the studies, or work... uhm... [P2]

What I'm saying, the people in my 6th form, the people who were less stressed seemed to be happier, with more friends, uhm, whereas the people who were more stressed seemed, just generally, seemed to be less happy, uhm, which is obviously detrimental to life, in general. [P2]

I was stressed out, uhm, I'd snapped at one of them and said 'no, I'm not going', I'd got angry, probably caused some tension there [...] [P2]

Uhm, their general happiness kind of goes down a bit. [P2]

Uhm... I'd say for some people stress-balls seem to help, they just squeeze it a few times, and just let the anger out. [P2]

I think stress has that kind of effect on them, that makes them less happy, so to counteract that, they'd do something that they know will make them happy, uhm, that may be eating, exercise, whatever they're doing, they think that's gonna make them feel better, they'll do it. Just to counteract the stress. [P2]

Uhm... it makes you unhappy, but generally it's for the best, it motivates you to keep going, and it doesn't let you become too lax. Uhm, yes, it's weird, it's weird feeling, now when I thought about it [...] [P2]

Yeah, I think everyone would like the lower level of stress in their life. Because I think, everyone experiences stress and no one really likes it. Uhm, I, I think low, yeah, less stress will be nice for everyone. [P2]

Yeah, it, it was nice to get them done earlier, and not have to worry about them. [P2]

When I think of stress, I think of completely panic, and I think of shouting, so... [P3]

I think other people would maybe feel stressed, or maybe nervous, uhm, but not as much as I feel. [P3]

Perhaps that's why I've always had it because I always do worry about the future, and, because I like to look into the, into the bigger picture, and you don't know what's gonna happen in the future. [P3]

There is a part of me that is always concerned, and worried, and stressed about 'we don't make it in the future'. [P3]

But I don't like to feel, I feel guilty when I feel relaxed because I feel like I should be stressed. [P3]

[...] so you're the best in that job, in that place and nobody else is as good as you, and you don't have to be scared about not knowing what you're doing [...] [P3]

And you don't have to worry about money, and you don't have to worry about going home and having an argument with someone at home because your family is just perfect for you. [P3]

I don't like it, obviously would choose not to be that way but the feeling, I've just panic, I just, I just need my time for myself, and I just need you to just not take my time. [P3]

[...] where I used to work, the manager used to get quite stressed, and when she got stressed, she would sometimes cry out of anger just because she was so stressed [...] [P3]

I think they are, yeah. I think the more stress you get, the more anger you feel because you experience similar things in your body [...] [P3]

Like it's me the happiest, pleasure, I think, being able to have this timescale at the back of my mind of things that I worry about, and having a plan, a strategy for now, or the next month. [P3]

And to be completely relaxed means that you are content with the little that you have, and... OK, OK, so even if you're relaxed and you have a lot, you're still content, and I don't feel like life is about reaching contentment young. I think it's about reaching that old, when you've put in that effort and you've put in that energy, and you, you've experienced that all that stress and you've put in everything you've had, and possibly you can be content. Because you can look back and you have no regrets and know that you've put in everything you had. [P3]

[...] when I think of 'relaxed' I think of just going somewhere really slowly, it doesn't matter, and just enjoying the journey. [P3]

So I don't, the idea of wasting time makes me feel so guilty, uhm, but I don't feel like doing a jigsaw is necessarily a waste of time because you're making a pretty picture. [P3]

[...] I have colouring books, but I won't start a colouring unless I know I can finish it, and maybe that's because I know the, the feeling of contentment comes when you finish that, and you can see the whole thing. [P3]

Otherwise, I... I don't want to look back and regret wasting time. [P3]

That feeling, when you can't do anything because the traffic is there, it's just tough, you're just stuck there. That feeling all the time. And just having almost as if it were a road rage to everybody. Always. [P3]

I think sometimes it benefits for me from, from re-surfacing my thoughts, they can run away, and they can look too far to the future, and I can't stop, I can't stop panicking about getting to there [...] [P3]

[...] I can start worrying about tasks in a job that I don't have because I'm working for this degree to get a job but I don't even have that job I don't really even know what that job is, you know? [P3]

I think, I would probably tell myself, I'd probably, I would probably try, but fail to put some time in to stop myself getting so angry, and, and stress it out at people. [P3]

It's OK when I'm stressed on my own, and if I feel like that way. Although it's not pleasant if I, if it's just me it's fine, it's just me. [P3]

And it really frustrates me that I get that way, and so I think I probably would, I'd, I'd do something, anything to just... just stop the snapping on the people. [P3]

And being content with what you've got it's just... it's like complacent, and it's like, I think it's like small-minded, it's like why, why don't you wanna learn something at school? [P3]

Uhm... I think of like someone being angry, maybe frustrated, not very happy. [P4]

P4: [...] then I feel like it can take over because all other emotions suddenly get involved.

I: What kind of emotions?

P4: Upset, disappointment, uhm, guilt, yeah. [P4]

Uhm... usually, I start to... if it's the bad stress, usually I start to feel quite, quite sad [...] [P4]

Uhm... just, they may describe them being sad, or not being able to cope. [P4]

Uhm, just someone who's, who's happy, who doesn't... I think, I'd focus on that 'happy', really. [...] Uhm, smiling. Uhm... happy in themselves, happy around others, positive... I just think of all the, all the yoga people I follow, that like do yoga on the beach, and I just think 'oh, you must be so stress-free'. [P4]

I'm so glad it came up, because it actually helps me to think of stuff, and that's what I picture now like, uhm, like stress is, is the person that gets like stressed, and angry, and fear, and all sort of emotions. [P4]

Joy is like a glowing ball of smiley, happy feeling [laugh] Relaxation [...] [P4]

Uhm, and I'm trying, I might do some mindfulness, or meditation, so it's, it's a lot of focusing on the breathing. While, uhm, I feel like when you're in the happiest day, a more relaxed day, you're able to stay in that longer. When you're stressed you don't like... I'm less inclined to want to meditate, I'll be forcing myself, whereas when I'm happier I want to naturally. [P4]

Uhm, I feel like if I can't see it, it seems like more... more, more stress, more worries. [P4]

So I started to worry that I couldn't put things together to make a meal, so I started to think, well, OK, I need to really make money [...] [P4]

I should have done that before, I let myself feel stressed all weekend, why I think it's because of the guilt. I, because I told myself, you know, I should, I should have been, you know, saving, you know, I don't know. But it's obviously hard to save when you don't have money to save, but, I don't know, I kind of blamed myself before I allowed myself to find a way out [...] [P4]

No [laugh]. I let myself, I let myself feel stressed, I let myself feel upset, uhm... [P4]

Uhm, they might... do something that makes them happy. [P4]

Treating myself to something at the shop [laugh], but if I don't have money that's not an option, so I don't know what else could make me happy. [P4]

Uhm... maybe go to the gym, but it sounds, you know, if I'm not happy I can't get myself to the gym. But I know that it'll make me, I've, I always feel better, but if I'm not happy I can't get to the gym. [P4]

You know, if, not if I'm at home. If I'm at home and I play with him, I can still feel unhappy. I just feel like I'm putting on a fake smile for him, because I don't want him to see that I'm unhappy, but I'm not happy. If we're out, and I see that, you know, he is playing with other kids or whatever then yeah, I might feel happier, but... I don't know. [P4]

Uhm... you may be more... agitated, frustrated [...] [P4]

[...] so maybe when if you are working, uhm, and you have a deadline, that can sometimes create... panic, in a way, which I think sometimes then you think is, is, what you think is as a stress. [P5]

Getting in that panic that you've got to get this done in certain time. [P5]

I know certainly for myself, it's a worry to me, and that's when I get, uhm, stressed, and upset, and anxious. [P5]

I can feel... I think, if I feel anxious, I think that creates the stress in me, that I know that I can get, uhm, anxious with people, get short, short with people, so like short, not short, short-tempered but little things really annoy me [...] [P5]

Uhm, for me it's the... worry of [grandson] when he doesn't come home from school at the right time. I know I get myself in, in a situation... worked-up sort of thing, because I worry about him not coming home [...] [P5]

And that was quite a worry, because we, I would get phone calls in the middle of the night, to say that she'd fallen over, she fallen out of bed. [P5]

That's been quite, yeah, because I know that I coped with it at the time but afterwards I become, you know, quite wrought up by everything, because I think later on, you think of what happened. [P5]

But afterwards, I think, that's when I get the anxious, anxiety, and then stress builds up because you're thinking back of what could have happened. [P5]

if you were trying to be calmer about it, you'd most probably wouldn't be quite so anxious, or stressed about it, or... yeah, I think before the operation [...] [P5]

And, and you worry about other people. So you get stressed, because you're worrying about what everybody else's going to cope, however everybody is gonna cope, should anything happen to you. [P5]

but I think that, the stress then in me goes into sort of anxiety, and, and almost like a depression, really, because I just, you have to try and get out of that vicious circle of worrying about it [...] [P5]

I think sometimes you do, part of you, perhaps in your subconscious thinks... you know, you've been really lucky this time, let's hope it doesn't happen again. [...] then I think that passes, and you, and you then look to the future, and just sit and, you know, think I've been really lucky, OK, and I've got family and grandchildren, and I, now I just enjoy, enjoy that, yeah. [P5]

[...] because like with [grandson], when I sort of get worked up about him not coming home [...] [P5]

Uhm... I would guess it would be, I mean we're lucky, but I would guess for me it would most probably be if you were worrying about money, uhm, worrying about your home, whether you're gonna lose your home, uhm, you know [...] [P5]

I mean, my life really shouldn't be, I think it's just sometimes I make it stressful by myself getting worried about certain things I'm making myself stressed. [P5]

It would be nice to think there wouldn't be any, any stress [...] [P5]

[without stress] Everything would be quite nice and peaceful [laugh]. Yeah, I think, everything would just be going normal, there wouldn't be any worries about any, or anybody. I think you're always gonna have worries, I think... Probably it's I find that you're always gonna have slight worries about your family. That's, that's my, I think that's, and that's most probably just me, I'm self-inflicting almost, that I'd always, it would be a part of me that will always worry. I mean, my girls, they're 35 and 33, they don't listen anymore, but they're still a part of me that is, that worries about them, you know, and always, I want to be there to help them if they need any help. [P5]

[...] when you find fault with things, you know, like something happens, the silliest little thing may happen, you know, like drop of glass, or break something, and that will get really, I will get really crossed about it [...] [P5]

Uhm, now me, I'd just blub, you know, I'd start crying, and I might want to, you know, and I wouldn't necessarily tell people but I think people perhaps will know because I'd be upset about certain silly things, or whatever. [P5]

I think somebody that's just quite calm, really, you now, and doesn't worry about, can sit [...] [P5]

I can sometimes feel myself, when, especially, when the boys were younger, and they were mess, fighting, or, or messing about, or being... I'd feel myself getting worked up [...] [P5]

[...] my day just goes really nicely, and if I've, if I know that if I've been able to sit for an hour, maybe, and read, that's what I call a nice, calm, un-stressful day. [P5]

I've just become quite poorly in sort of like anxiety and depression really. [P5]

Uhm, so that is when I get very worried up, unfortunately, yeah, that's got quite a lot of pressure then. [P5]

Uhm, and I think that's, that, that's what worries you, or worries me about him not, when he doesn't turn up. [P5]

You have to allow them to, but, I think because he's slightly more vulnerable, 11.5-year-old, than some of them, there is an added worry. [...] So for, for me that's the worry, so it's, you know, something's happened to him. [P5]

Because with that sort of situation I get quite upset, and... with, because I get upset, and then I have to sort of try to explain to him why I'm, why do I get upset, uhm... and that's quite, you know, he gets, if he gets then upset, you know, it's always a vicious thing, we're, we're both upset together almost. [P5]

Uhm, so I don't think it's, it's there all the time, maybe the worries, uhm, perhaps more than the stress. [P5]

I think, well, is this really a situation that is stressful, or if it is something that will be fine, and you don't need to worry about it, so you don't need to get worked up about it, I think sometimes I jump straight into that manic-panic mode [laugh] which brings this, which is then a stressful thing, isn't it? [...] you perhaps wouldn't need to get into that... manic mode. [P5]

I think it, you know, I think it certainly can bring on anxiety, and maybe depression, I don't know, maybe that's why, you know, I wasn't well last year, I don't know. [P5]

Because it's just a, uhm, sometimes it's just a vicious circle, you worries and you get stressed about some, you know, you get stressed about something because you're worrying about it. Uhm... and, and then that worry becomes blown into something, perhaps, you know, all out of proportion it could do really. Your worrying takes over, so you blow something out that is, perhaps, a small worry into something big. [P5]

Because I think if you're under, if you're under stress, I think, your concentration would probably go slightly, because you're, if you're worrying too much about something [...] [P5]

Because one of you is saying 'oh, this is awful and I've got...', you know, 'this is so stressful, and I've got to cope with this', and the other person is thinking 'what just it means? that doesn't seem very stressful to me, why are you getting...?' you know, so you tend to be a bit crossed with each other. [P5]

Uhm, you know, I think it sometimes can lead to, perhaps a slight, you know anxiety, or a mental health [...] [P5]

You know, you're talking to somebody over the phone I did that last year, uhm, to try not to get into situations where I felt stressed, you know, I'm worrying about things too much. [P5]

Or you feel perhaps guilty that you're sitting down for an hour. [P5]

[...] you shouldn't be giving yourself all these pressures. You should be enjoying yourself. I think that's how you get, perhaps, when you get older. [P5]

[...] I was getting phone calls from her like at ten in the evening, saying, in tears, she was in tears, because she wasn't coping. [P5]

Yeah, I don't know, I suppose we all need a little bit of stress in our life, just to, but, it perks us up a bit [laugh] otherwise we'd be really just lovely and chilled, and it would nice to be lovely and chilled all the time, but I think sometime you do, you need that little bit of uhm, a normal day just to think 'oh, yeah, so I, I need to sort that out'. [P5]

And I think that's when sometimes people then, maybe, then get the anxiety and the depression because this stress, something major has happened, that's been really, really stressful. [P5]

Sometimes, you know, these phone, I did phone counselling, mainly because of the anxiety and depression I had last year, but that helps because you're getting somebody [...] [P5]

Uhm, and that creates a sort of anger, whether, you see, stress and anger management could be well the same thing. [P6]

Stress and anxiety could very close to each other. [P6]

Why am I interrupting my sleep pattern to worry about something that will probably never happen anyway, whatever the vote comes in the end. [P6]

Uhm, probably in a dark place psychologically, uhm, could be, uhm, expressing signs of rage, anger, uhm, could be unable to, uh... compute and therefore not... [...] Uhm, I've been in that place before [...] [P6]

Uhm, I get anxious quite a lot, I suffer from asthma and COPD, and sometimes I can wake in the night, and think that I'm not breathing properly, and I have to slow my breathing down, even while I'm completely relaxed really. [P6]

Uhm, stress to me as well can be shown in anger. [P6]

So, uhm... when I've time frame that is acceptable to me to find the solution, uhm, I'm gonna find it, and therefore, uhm, apart from display of anger management, shouting, swearing [laugh]. [P6]

So I don't have to worry about going to get a bank loan, or whether the HPS, I'd just go and buy one if I want one.

[...] I'm sure there are a lot of people stressed, worrying about whether they can turn the heat up when it's cold, whether they can afford the, uhm, increase in the utility bills, whether... [...] People on fixed income, they're gonna be worried about them, because it won't stop there, there will be an increase next year. [P6]

[...] so I think just living a generally relaxed life which for me could be not around too many people to annoy me, uhm, and... in a way I'm happiest when I'm standing out in the street corner just collecting with the bucket. [P6]

I'm sure that I am, it's that gradation, isn't it, what stress really is, how far there the line is anxiety when it becomes stress. [P6]

So, uhm, this continuum about agitation, nerves, anxiety, until it gets right the way up where the stress is, it's quite a long process. [P6]

So, you know, back to slowing down your breathing, not to be anxious about the fact that, uhm, the tiger that is really rallying towards you is your domesticated cat. [P6]

So those sorts of things make me stressed, angry. [P6]

And whilst you're waiting for that to happen, you... you get tense, and nervous, and you worry. [P7]

[...] so the stress goes completely the other way. From being good, excited to being worried about all, you know, we've got to get to the hotel on a certain time, there's a train maybe to catch, and... it goes from good to bad. [P7]

hm... hmm, that's quite a broad spectrum there, because I think someone who's doing a job and not enjoying might be stressful. [P7]

Uhm, but to describe them, though, they would be poorly, they would be edgy, yeah, nervous [...] [P7]

They could look sad... that's not always a given, but that could be one clue. Uhm... they could be shaky, uhm... [P7]

Uhm, sort of in a daze, like they're not steady on their feet, or... uhm...obviously stress is a very close thing to depression, one will cause the other, vice versa, so I think, again, you can pick that up. [P7]

How do I know that I am stressed? Yeah, I would get the same things that I would observed, I would... feel something inside that is not good, I would delve over it, I'd be a bit depressed about it. [P7]

They look happy, posture's good, they're not complaining, positive in their speech. [P7]

The feeling of... you, you're content and level if there is such a measurement [laugh]. [P7]

I like to take things, you know, at the pace that they come, so if you mean running around the hot airport, then you get all hot and sweaty, and you know you're going to sit on a plane afterwards, and you're not gonna feel nice. [P8]

I mean, obviously, if I'm on holiday then I feel fine about it, and I'm like 'so nice not get stressed out' because I'm just on holiday. [P8]

Yeah, I think it puts pressure on things, I think if somebody is feeling stress from work, or from something they are likely to take out any sort of negative feelings they have from stress on other people. [P8]

But it's known that things make you less stressed, unhappy, I think being aware of those can be helpful even if you are under stress. [P8]

But you are having to do it anyway, then it just makes you feel really terrible, uhm, and you're tired and stressed out [...] [P8]

I'm only thinking about that game, and there's no stress for me in doing that. Because, you know, it's just me trying to focus on something... like if, if I'm focusing on something which I enjoy, everything else kind, kind of disperse when I'm focusing on that. [P9]

[...] and it's, it's not stressful for me, anyway, just because I'm enjoying it so much. [P9]

Uhm... I, I, I just feel like it, just be a bit of an awful feeling. Uhm, you've got so many things to do, it's almost feeling inadequacy, that you can't do something. [P9]

So... not being able to do something kind of make you feel rubbish. So, I guess stress is also, you know, kind of related to inadequacy. [...] I, I just feel rubbish. [P9]

So I was just going do stuff and enjoy it, and if something went wrong, and presented a stressful situation, I wouldn't be as affected by it [...] [P9]

So I had no real stressful situations because when I had to do sport which is something that I enjoy and something I get a lot [...] [P9]

Happy. Because if, if you're not going to stress, that means you haven't got any real worries to, to deal with, or if you do, you know how to deal with them, so... I think, uhm, happy is so how they would be. [...] they would just kind of be themselves and just enjoy life. [P9]

Because I just didn't... I think I didn't know... I was a bit, I was quite scared of what was gonna happen, because I just didn't know what... what I could do. [P9]

Uhm, they, they're very, they're much more irate, they're very, uhm, almost aggressive, uhm, and it's almost panicky. [P9]

For me like, stress is like, is kind of, I guess like anger from the inside, for me, like not sharing it, like if I'm stressed, I'm like, I guess, somewhat like building up a little bit of anger, but, uh, it's quite, it's quite hard to describe, it's a, it's like frustration and anger like within you. [P10]

Like as soon as like I do something wrong, I mean, I'm like upset, or stressed [...] [P10]

P10: And then, obviously, like it's gone wrong, it's gone wrong, and that internal it's going to lead me to feeling these emotions that like I don't want in my head.

I: What kind of emotions would that be?

P10: I guess, like feeling like upset with myself, I let myself down, frustrated with myself that I couldn't get it right, a little bit like sad. Just like, feeling just like, uh, in general, like, down, just like, and that internal, like, makes me stressed. It's like I don't want to feel that way, I want to feel positive, and I know, I want to know what I'm doing. [P10]

I thrive on like being busy, like, that's like what I enjoy and that doesn't really, like, stress me out. [P10]

Uhm... I think it can go back to again, just like, if something takes too long, like on the contrary to be, something being time-restricted, annoying, having to wait for something else. [P10]

And if I can't be productive in a day, then that stresses me out, because I feel, I guess, there's that frustration I guess that I haven't, I guess, done enough. [P10]

If you're stressed, and you're worried about certain situations, or certain assignments, you're gonna do it basically. [P10]

And if little things go wrong then they'll not have a meltdown, but they will even get agitated, get upset, get sad over certain thing. [P10]

And like, I was, like, so upset if something went wrong. [P10]

Uh, I guess, like I let them, like I let myself down, and like frustrated with myself. I wouldn't say I felt like upset, I just felt kind of like, uh, frustrated, I was like god, why did I do that? [P10]

At things like that I just, I generally like frustration, and just a little... not anger at them, because I'm angry at myself. [P10]

It's more kind of like frustration [...] But for me, like a stressful, like, within myself isn't painful, it's just frustrating when it's there, and I would like get rid of it, like, as soon as possible. [P10]

If like, if does it actually, like, is it going to affect my life? If like 'no', then why am I, why I am worried about it, why am I getting stressed about it? [P10]

It's, I guess, it frustrates me a little bit, but then I realise, like, within myself, like there's nothing I can do about it, so why am I like having these thoughts, or even, why am I even worrying to, like, use my brain to think about it. [P10]

I suppose I'm thinking, to me stress is a wee bit longer-term than just being nervous [...] [P11]

Yeah, whatever you call it, I'm not very good at calling the right thing by the right name... so whether it's anxiousness, or stress, or... to me it's all the same [...] [P11]

So, yeah, I'm not even stressful at that, yeah... you come up to roundabout, uh, idiot doesn't indicate, you have to wait a few more seconds, sometimes, I used to worry, you know, a lot more than now [...] [P11]

Uh, stress is like a rollercoaster. Sometimes stress is good, and you're enjoying yourself, and sometimes it's very scary. Sometimes it's bore, and a pain in the arse. Uhm, rollercoaster is like that, ups and downs, and... I suppose, uhm... I suppose that's what, something that, you know, you can have a good stress, as stress, is it stress, or is it excitement or is it tension, is it... you know, what is stress, you can call lots of things by different names. [P11]

Totally out of control, and exasperated I mean, I used to just be, uhm, bad-tempered and shout. Now, I'm just exasperated [laugh]. [P11]

Oh, that's right. Uh... oh, it's so unsettling. [P11]

Oh, it's just horrible being stressed! I hate it. [...] You know, I've... so, it's horrible. [P11]

How do I know [I am not stressed]? Very few times in my life you can sit back and say 'if I die now, I would be happy'. [P11]

And I know, I don't care. I have food in a fridge, I don't care. I'm happy. [...] Well, it's being OK with the world, and if you're OK with the world, do my bits, be happy, really. [P11]

I, I was really afraid of going up in a plane, and that was stressful to me, you know, all... people like going through, uhm, you know, the process of going into a plane but as I was going, I was getting more, and more worried, and it was sort of building up to very stressful event. [P12]

But sometimes I'm afraid of something, and that's very, that's where my stress will come from, maybe. [P12]

And I said 'pardon?', I said, 'I feel really stressed out', and she said 'but you're stressing out about getting on to the plane might be in your head because you're worried about what will happen to the plane when you're on it'. [P12]

I spent a lot of time trying to analyse what would be frightening and stressful about going on a plane, and uhm, there were lots of factors, it wouldn't, it was, you know, people around you, you know. You imagine there's gonna be panic if anything happens, you know. [P12]

Yeah. In crowds, and, uhm, that can be fun, being in a crowd can be fun, but they can also, if they're just a crowd of strangers, really... then, there I'll be, gonna be a bit worried of those. [P12]

So, you think you're de-stressing them, but actually you're making them annoyed and stressed out, as well. [P12]

So, I can analyse my own stress. If I don't help people, if I don't feel positive, if I don't contribute, I might feel stressed out, I don't know. [P12]

I: Was your, your illness, I mean, was it stressful when you got the diagnosis, or... uhm, living with that disease?

P12: Uhm, it can be. It can be frustrating. [P12]

[...] ignorance stresses me out, you see, they're so stupid, you know. Do, do you want me to sit down, and talk to you about it? And then I get annoyed, and they feel guilty, it's not their business, so... [P12]

And she said 'oh, I'm really angry today', 'why you don't go out and pull out a few weeds out of garden?'. So it's like, if you're stressed out, you might get angry, so go and pick, go and pull weeds out, or something. [P12]

Well, when I'm stressed out to the point of craziness, I'm, I'm kind of religious, so I pray. [P12]

Well, as I say, it's in your head. Your head's not full anymore, it's a bit, it's a bit, it's gone down. [P12]

Because it's new. And I'm worried that, that sort of... I can walk with that stick but I didn't, I just brought it, just in case there was something that I couldn't handle. But you were right, there's a

lift, and all of that. You, you put my mind at ease, but until you're actually doing it, it's a bit stressful whether sort of, uhm... apprehension before comprehension. You are apprehensive about something but once you're doing in, you can, you can, you can take it on board and you can think, and I can go and have my cup of tea, my lunch now when I did it. I put that challenge ahead of me, might be a bit worried and stressed out but actually I did it, so I can do that. [P12]

Well... well, I'm older now, and I'm a bit more worldly wise but when you're young, you're worrying about things. Mostly the arguments I had with the opposite sex were to do with money, let's face it. So, stressed about money out, how much things, cost, and all of that business. [P12]

Well, it's anxiety, and, uhm, see I've got, uhm... I've got this view which is probably making me tunnel here, but, uhm... if you can't see way forward, a solution to something, you have to have accept it, or else it's gonna be stressful for you for the rest of the time. [P12]

Could be a mental illness to do with anxiety. [P12]

I think of work mainly, if you're stressed at work, things are not going your way, and everything just, get into you the little things that are building up, uhm, and just you're in a bad mood in general. [P13]

So it's, I guess, that's... feeling, uhm, and I've used the word 'feeling' but I might change that in a minute. Something, something you feel when maybe you feel like everything's not going right, you're not happy [...] [P13]

Uhm... it could be... uhm... could be that you're not happy about, uhm, lots of different things. [P13]

Uhm... because I was worrying I wasn't going to make the deadline, and maybe even if I did that work would, wouldn't be the best... quality. Uhm, and that, if I messed it up, what I have been doing for the last three years, why did I leave it so late, I'd just been annoyed with myself that I let myself get into that situation, really. [P13]

[...] everything just doesn't, it's not going your way, it's not, uhm, making you happy. [P13]

[...] and then someone at work has annoyed you, or something like that, and then everything happening, the feeling that everything is happening all at once. [P13]

Uhm, frustrated, uhm... I wouldn't say angry, some people might say angry, but I wouldn't say... Just frustrated more than anything, just not happy, not, maybe not wanting to, to see people, or do social things. [P13]

So, just like... almost angry, but just annoyed with everything that's not going right. Annoyed that things are not going right. Just a bit confused as to why. And there's, there's sometimes a feeling like, oh why it always happens to me? [P13]

Uhm, moody, I'd say moody that's a general, yeah, so not happy, uhm... yeah, not really sociable. [P13]

So you're quite shaky... yeah, that's... it might just be a task, because this is a stressful situation, perhaps, to do that. [P13]

Because you're nervous, you might mess it up. [P13]

Because... because you're worried about what might go wrong. [P13]

Uhm... it's a quite, uhm, quite chirpy, smiley, uhm... always, like, brings the mood up of people around them, perhaps. [P13]

Uhm... and then I didn't have a spare tyre, so I didn't have a spare tyre, I pulled up, I had a inflation thing, but I'd used that a couple of month ago and I not replaced it. So I was annoyed at myself for not buying a new one, yeah. [P13]

Because, it was stressful, because of course it had to happen when, at the worst possible time, uhm, and it was stressful because I was angry at myself for not replacing that thing, because that would be a five-minute fix, and I could have gone, and make the meeting. Uhm, and I was worried about what, what would happen if I missed the meeting. [P13]

Uhm... I felt frustrated, felt quite, uhm, worried and annoyed, uhm, and just, just what it's go like 'arrrgh!' kind of thing. [P13]

I: How does it feel?

P13: Uhm... worrying, yes, yeah. [P13]

So I don't imagine that stressed person could be happy and smiling I imagine them to be like blunt, like I said, blunt and, like, grumpy, like, yeah, you know, and that like, being in that kind of mood has an effect on other, on the people around you [...] [P13]

Uhm... just like if you're in a bad mood and you say something to someone [...] you're not in a best mood, you're not gonna get, uhm, not do the best a good job, you're gonna make your employers... [P13]

I would think so. I would say, yeah, it can't be healthy to always be like that [stressed]. Sure it's healthier to be as positive and happy as you can. [P13]

So I did it once, when I, I didn't speak to ten thousand people but like, it's the first time I've done something like that, uhm, and it was quite stressful and I was very nervous [...] [P13]

Yeah, because of, because we're stuck, like I say, because we're stuck in the middle, we're being fired at from all angles, and... so yeah, volatile emotions sometimes, like quite extreme emotions, tiredness. [P14]

Oh, I find, I find, uhm, like for instance I was saying about [daughter] earlier, I find that more stressful than anything, because I worry, uhm, it's more what I don't know than it's worry, stress, I suppose it could be a symptom of stress, uh, or is the symptom, worry, I suppose. But I worry about her quite a lot and that stresses me out, like when I think of when someone being horrible

to her at school, or any things like that, that makes me stressed, and I get worried about that. So worry, because obviously she's got to be at school for such a long time. [P14]

Yeah, work stresses me out sometimes, like the other day an academic made me cry, because it's so, they're just so spiteful... [P14]

I was really shocked, you now, I mean shocked, that's why I think I cried, just...[P14]

We do, I, we, we became quite rational, almost like, normal my reaction to everything it's I'm explosive, but that's almost like a plateau [...] We, we've... but I was also calm at the same time, it was a really weird... zone [...] [P14]

Uh... medium stressful. I'm not probably like, I'm sure there, like my friend's got disabled son, so that's an added burden of paperwork and worry. [P14]

We didn't have like fancy time, or anything, we went camping, driving around, we had coffee and the croissants, so it's nice, with ice-cream [laugh], just [inaudible 13:34] [P14]

Uhm, no financial, we had no financial responsibilities whatsoever, because we left everything in the UK, and that was it, we were no... no worried to pay a mortgage, or... And also no... no one knew us [laugh]. You could do what you wanted. I'm not saying we did that, but like nobody knew you, or no one, I don't know, it was nice! [P14]

I: Can you, can you imagine such a life, the whole life like that [stress-free]?

P14: It would be lovely. [P14]

So like, I just sat down with her, well let's stop worrying about that now, I'm sure that there's a way [laugh] [P14]

[not being stressed] I just feel... don't know, it's just nice, that you feel happy all the time [...] [P14]

And I don't, for me it was..., yeah, and I also had to introduce like super... like prof-people, and I was getting a little bit nervous, because I hate delivering training. I get nervous. [P14]

I can then suddenly will feel myself kind of uptight about that. [P15]

[...] it wouldn't bother some people, I fully get that, but for me that's the thing that does wind me up, I want it to be, you know... [P15]

Uhm... everybody is fit and healthy, we both have jobs that we're happy in, we live in a nice place. Uhm, I look at other people, and I think I've got nothing to complain about really [laugh] [P15]

So it's niggles but it would irritate me more [...] [P15]

So... not having to worry about any finances, and be able to go, yeah we would just go to Disney, we'll be able, you know, not have to think about making those things that you want to give your children, not have to think about and just go – you know? [P15]

Uhm... talking to each other, whether you want to talk to someone, if you stressed, if you're wound up [...] [P15]

I think about my friends, I've got friends that have been in stressful situations recently, and if they rang me, their stress, it kind of, I, I would get about this wound up and agitated because I'm concerned about their well-being. [P15]

[...] she likes to be perfect in everything, and be in... so I came home, I said I'm really proud of you, you've just got to work on commas, and she got really crossed and she's like 'I can do commas, I can, I know what to do, how can you say this to me?' [P15]

Not really, mmm, not really, I just know I'm a little bit [inaudible 36:55] frustrated and would like to go the next step [...] [P15]

Yeah, I think when my marriage went wrong, uhm, and I felt so sad that suddenly it was, because I didn't get married thinking it was gonna go wrong, I got married thinking this is for ever. [P15]

So, yeah, stress in that way was negative for me. Because I was just sad. [P15]

You know, and I did kind of feel I was in a, in a really sad place. [P15]

Anxiety, uhm... worry. If I'm, if you, if I think of stress I think of... kind think of strain in terms of words, you know, uhm... pressure. [P16]

No, I, I associate stress with anxiety, pressure, strain, yeah. [P16]

So that's what stress means to me. It can make you anxious, it can mean you're being pulled in different directions [...] [P16]

So, for example, uhm... so I think the PhD is challenging, I spend a long time within my PhD finding my focus, and then I became quite stressed about it because I was thinking how am I ever going to get this, you know, it became a worry for me. [P16]

I associate it with mainly negativity, yes. I think if, if I'm stressed... I'm, I'm worrying about something, yeah. [P16]

So I think, well... yeah, I mean, I was quite, again I wouldn't say stress, I would say anxious about the my mum situations [...] uhm, it was, it was a kind of a worry for me to think about how, until we, we've sorted her out, if you know what I mean. [P16]

You know, it's like oh, whatever I can just, you know, do when I need to, or pull it out the bag, you know, whereas other people tend to think about things, worry about things, and get anxious about whatever it is that they're doing. I'm, I, of late I think I'm more of a worrier, uhm, but I am quite a confident person, so I'm confident in my abilities but I do sometimes worry about how I'm gonna get there , so... [P16]

Uhm... I wouldn't, uh, I tried, I had these conversations with myself where I say I'm not going to, I can't, I can't, I can't stress myself out about that, I can't worry about that because I can't do anything about it, you know... It is, it is what it is kind of thing. [P16]

You sometimes get anxious when you're going on a flight. As I got older I've, I've not been so excited about getting on a plane, I've been thinking about all the plane crashes that have happened! [P16]

Uhm, but I'm, I'm in a, I'm in a comfortable situation, I don't have any financial worries, I haven't had any financial worries for a long time, I've been very lucky. But, and I think that can be really stressful, uhm... for people, uhm...[P16]

It's, I'm coming to an end of my funding for my three years of my PhD, so one of the things that has been worrying to me, has been what income I'm going to get. [P16]

I think having financial worries would be stressful. [P16]

so I, I would think if I had children, I would be quite worried about, you know they would gonna, they would gonna progress, and have families [...] [P16]

I would think, yeah, if you've got financial worries, if you've got a lot of things to do, a lot of other people in your life to look after I think that could be quite stressful. [P16]

[...] it wasn't really, really stressful, because I knew there would be an end, and I knew that what I was doing was the right thing, or what I wanted to do. But it wasn't a particularly pleasant experience. [P16]

I don't, you know, I don't think it would be a good life to be because... it makes you re-evaluate your, your... if you're stressed, and you're worrying about something, you then might think of all the bad things, and then you might think about all the good things. [P16]

No financial worries, feel like I'm making contribution in some shape or form to whatever that I think is reasonable, in that I'm doing something positive. [P16]

I think, uhm, it manifests itself in lack of sleep for me if I'm stressed, I'm worrying about something. [P16]

Yeah, if somebody was, if, if somebody suddenly became very irritable, or... you know, kind of anxious, uhm... withdrawn, that can be another sign that somebody's stressed. [P16]

Not stressed, being not stressed. Oh, yeah, happy, jolly, singing, dancing around when I'm in the kitchen, that kind of thing, yeah, yeah. When I'm, me, when I'm... yeah, when I'm not stressed, I don't mean that I'm super-happy either but, uhm... When I'm not stressed I'm just normal at the time when I'm doing one thing or another. Feeling relaxed... yeah, sleeping well, that kind of thing, yeah. [P16]

It's probably this week about this businesses that I can't just get hold of, and then... well, a part of my pilot, I'm thinking... getting quite anxious about that, uhm... [P16]

I'm wondering what it is, what I, what, so... how did I feel... I, I felt anxious because of the impact on the rest of my, my plans. Uhm... and what will happen if they don't get back to me, if they do get back to me? Can I close it off, can I do this? So it's that kind of, uhm... so how did I feel? Pissed off [laugh], uhm... [P16]

[...] I will be very happy when it's resolved and I've either decided to move on to something different, a different organisation, or they've responded to me, yeah. [P16]

And, uhm, so, and, and I was pretty anxious about that because it was such a lot of money in terms of, it was the price of a house. [P16]

When it was, well, maybe stress is the wrong word, frustrate is probably a better word for that. Get frustrated because you'd know that you could do, do quite good. [P16]

You have to make sure you're in the right place, uhm, to see what goes on, so I was pretty anxious about that, and, uhm... they can be quite key games, as well, if there's two top of the table clashes. And things like that... that's, that can be really quite, uhm, nerve-racking, really. [P16]

Well, I, I, so it was, it was stressful going into it because I was worried about it, because I wanted to do a good job, and so I was talking to myself through the game, sort of saying, you giving myself those helpful hints, and thinking... [P16]

It's so hard to describe it! How could I describe it to you if you didn't know, if you felt like you'd never received stress? How would you describe worry and anxiety? Stress? Gosh, that's so difficult. [P16]

[...] I remember getting so stressed once, one time that I actually got quite upset, I had to walk away. [...] but this one thing I do remember because I remember feeling so wound up by it. [P16]

Some people get stressed and they turn to alcohol. I've never done that, never been one of those, well, I, at times, I've been upset or something and I've, you know, turned to a wine bottle, but on the whole don't think like that. [P16]

But you can understand with heart because if you get anxious you breathe, adrenaline is, you know, boom, boom, boom. [P16]

Yeah, because if you're, if you, if somebody is stressed around you that can, that can pass on, you can start to feel their anxiety or whatever it is. [P16]

So if you are stressed you might not do such a good job because you're not thinking clearly, you're emotional, you know, you're worried, you're... uhm, and likewise your job can put you under a great deal of pressure, uhm... and that can make you stressed. [P16]

She, she, she doesn't like the fact that there's a lot of wasted time and effort in local government, and bureaucracy, she thinks they're very inefficient and that upsets her, sort of worries about it. [P16]

[...] if you're under stress then I would think that would be more worrying [...] [P16]

Well, I think it's because if you, if you're stressed about something, you're worrying about it, and, uhm... and until you know what you can do about it, until you've come to a conclusion, that affects you in all sorts of ways. [P16]

Uhm... but yeah, I think, you... it's not good to feel like you always... worried, under pressure, anxious. [P16]

[...] I still get games where I get upset, and... but they don't affect me for as long now, kind of a bit shorter. [P16]

Yeah... [sighs] well, that's mixed, there's all sorts of emotions mixed up there, aren't there? [P16]

But yes, it's so easy to feel it, but it's so hard to actually describe it without using other words, uhm, you know, like pressure, anxiety. [P16]

They've got... not necessarily wealth, but you know, comfortable and, and happy, and then, all of the sudden, you know, they're just no longer with us, and you think 'oh my goodness, what's happened there?' [P16]

Yeah, because you just, it's, it's so hard, isn't it? It's so hard to describe it because it's emotional, and people do, do things... you know, emotional things can be lovely, and also can be absolutely catastrophic. [...] No, it's not an emotion, but it feels like it's very connected to emotions. [P16]

Uhm, the first thing I'm thinking are those balls, those stress balls that you squeeze, and I suppose, so, uh, stress is kind of, often perceived to be a negative emotion that you feel you've got too much on your plate, too much to do, uhm, and, uhm, you just kind of get frustrated, or very worried about trying to get everything done in, uhm, the time that you have available. [P17]

Uhm, stress is like, uhm, well for me it's kind of something that happens inside, and it's, uhm, makes me feel anxious, so it's a sort of like a knot in my stomach maybe, so, uhm, just feeling very worried about, uhm, trying to get everything done, I suppose. [P17]

[...] that's the same knotted feeling that makes me feel worried, and, uhm, upset, I guess, uhm, so yeah, stress kind of incorporates a lot of different emotions. [P17]

Uhm, well, as I say, kind of anxiety, uhm, being worried, uhm, feeling upset, I suppose, I've, I've, I think because I perceive stress to be negative. [P17]

I associate being stressed with somehow kind of me having failed at something [...] And so that makes me upset, and I'm upset with myself. [P17]

Yeah... they sort of be tearing their hair up, physically like this [showing tearing hair up], they might be quite sweaty, uhm, kind of, uhm... look tired, uhm, they, they'd look anxious, I guess. [P17]

Just, I suppose, mentally feeling, or thinking I, oh, I can't get everything done, uhm, so there's an element of kind of despair there [laugh] [P17]

So obviously, uhm, people with mental health condition, or even just fairly low levels of anxiety. There was a famous, quite famous, uhm, female cricketer recently Sarah Taylor who has come out and said that she suffered from really, really bad anxiety, such that she was actually, on some days she was unable to leave the house. [P17]

But, yeah, he is very, very laid back, uhm, and always has been, uhm, whereas my older sister is, kind of gets quite stressed about things and quite anxious about things. [P17]

How is it like not being stressed? Uhm... I think to me... I know I have talked about stress being positive but I associate not being stressed with being quite happy. Just sort of wake up in the morning, the sun streaming through the curtains, and feeling 'oh, today is gonna be a nice day'. [...] I think 'oh, this will be a nice, kind of fairly relaxing day'. [...] And so therefore, yeah, I just, I kind of feel happy and positive about life, about things. [P17]

Uhm, so... yeah, I, there, there's a kind of, there was a kind of social expectation and I suppose I' uhm, was stressed because I kind of worried that, of the way that I'd be viewed if I was late. [P17]

Uhm... because negative levels of stress, uhm, generally, I think, make people unhappy. [...] So the people who do experience high levels of stress on the day-to-day basis they can't be, I imagine, from my own experience, they can't be very happy. [P17]

So, I often say to my students, there's kind of an optimum level of revision, and if you are revising too hard then it's not gonna be, you're not absorbing information properly, and, uhm, you know, you're not going to be, uhm, it's not gonna be good study. Uh, there's bad study as well, which is when you just panicked and you're taking it from [inaudible 43:09] [P17]

Uhm... yeah, well, I did, I briefly mentioned job interviews before, and I think, well, I had had job interviews that I'd messed up because I'd been kind of anxious, stressed about the situation. [P17]

Uhm, I'm just trying to think what I do, I suppose I'm trying... sort of regulate my breathing a bit, uhm, and just trying... kind of there's a bit of my brain that's really panicked, and I'm trying to, uh, get the more rational bit of my brain to kind of, uhm, you know, hit the non-rational bit on the head with the hammer. [...] Uhm, and so trying let the kind of calm and rational bit, uhm, dictate what I'm doing rather than the anxious, crazy bit, yeah [laugh] [P17]

And me being someone, a young academic, and them being someone in their mid-fifties, uhm, who doesn't have a family, is not married, uhm, who's had issues in the past with other staff members, uh, it was just difficult, it was time I really remember which is ridiculous but worrying about my job [...] [P18]

[...] many people suffer from anxiety, mental issues, not because of any real reason but because of things like social media, or, uhm... perceived issues of work maintenance, whatever it is. [P18]

But then you'd also... the fear of the unknown, isn't it? [P18]

[...] when something happens like that, you suddenly think, you don't, you're not expecting, you don't think about it, uhm, and even afterwards [...]it's like well... I can't cycle in, I can't drive in so I was panicking for a bit, getting slightly stressed [...] [P18]

Uhm... I think sometimes it's just, it's that fear of the unknown, it's just... once you realise... [P18]

I've heard of the people in the past who get like hot and sweaty, like the anxious kind of... I don't, I don't really get any of that. [P18]

Yeah, but that for me is what stress is like, an inability to focus, and then panic, and think of the worst case scenario, and it's always a worst case scenario. [P18]

And I'm underweight compared to what I used to be but that's more because to cope with my stresses, anxieties, I, and to give myself structure in a day, I do my cycling, I do my running [...] [P18]

Uhm... but for me, I think, like the big one is I can tell someone's stressed if, the old, the old word, if they look flustered. [P18]

[...] and that's something I've learned over the like, perhaps, past year or so, is I know my own anxieties. [P18]

Yes, I'll stand firm, I won't just agree to what she said because I'm panicking and that's easy way out. [P18]

[...] it wasn't a very good dissertation student and he made a complaint against me, I was crap in myself. And I had to go back through all his emails, like basically prepare evidence, he made a formal complaint. This was a year, two years ago, and I was really worried [...] [P18]

Actually that's kind of something that I would absolutely be, absolutely petrified of. Then you had the situation – it's not the end of the world. [P18]

I: OK, so that was about being stressed, but how is it like to be not stressed? To be relaxed, how is it like?

P18: Oh, brilliant. Brilliant but my mind does have a tendency to wander, not wander...[P18]

[...] yeah, relaxation's great and it just knowing what makes you happy [...] [P18]

You must not punish yourself, and no I've learnt that if I'm doing the hard graft I shouldn't feel guilty to enjoy that downtime, that relaxation time. [P18]

Or I'll do it for you tomorrow – shit, tomorrow I did give myself a deadline, I can't do it tomorrow, I have to do it tonight now, and I and my wife, and... I'll be in a shit mood as well because I'm working in the evening. [P18]

[...] the people who were selling us the house were getting anxious and you get all these messages of the sellers are getting anxious [...] I said I have the money in my account now, I will transfer it if you want because I don't want it to kind of fall for after all these months and all this time. Uhm... and I was panicking like hell [...] [P18]

Uhm, complete breakdown, and as I, as I say, and you've probably guessed by now... I'm quite... I'm not reliant, it'll make it sound like I am... I've got anxiety issues [...] [P18]

Uhm... and then yeah, I can't, I can't say I've come across any other people who've been complete, really struggled with issues. I think it's mainly not controlling your anxieties. [P18]

[...] but I think people who do have... issues with anxiety which I've had a little bit in the past, uhm, and bad chronic stress is... just inability to cope with it [...] [P18]

And sometimes I'm doing 15 emails, not 15, sometimes I'm writing email after email, getting distracted, getting anxious, where when I'm over at [workplace] I can see that person, and it's bang! Done. [P18]

And it's in the back of mind, but I think I'll put off until tomorrow, but really I'm worrying about it, and then... [P19]

Yeah. It's not, I mean, I don't have to do that much of it now, but still, say I'm, I do a little bit of teaching just, just with library things, you know, but, uhm, an example would be, you know, I went, the first class I had to do, I wasn't terribly worried about it and I got it all prepared [...] [P19]

and I was, I apologised, but then I only had half an hour to do an hour's worth of stuff, and I went into that mode where I got quite anxious about it. [P19]

So it's stressful, you know, it's a state of panic, I suppose. I presume panic is a sort of stress, isn't it... [P19]

I'd say, uhm... well, every life has its stresses, but I'd say, I think being a parent is very stressful because there is the, the endless worry about your children, you never stop worrying about them [P19]

Yeah. I think yes, if you're, and if you're, well, take an example of a disabled person travelling to work, they might find it a great deal of stress - will I get on the bus, will, will the bus, uhm, will, will somebody give me their seat, will I, uhm, you know, all the things that nobody else worries about, they could become very stressful, so I think living with, uhm, some sort of disability must be very stressful thing, and, uhm... [P19]

I'm kind of anxious sort of person, I worry about some things, and, uhm, that makes my life more stressful than it needs to be. [P19]

Yeah. For me, anyway. I like multitasking, I like, I like having five things to do at once, so I quite like a bit of chaos, and feeling I'm running around doing that, I enjoy that. That makes me happy, if you like, doesn't make me stressed, where some people it would make them stressed [...] [P19]

So yeah, I think so, a little bit, you know, you can't always tell, some people just look anxious, but you know, it's a... [P19]

You know, they say, first children are more, are more sort of anxious than children later on, because the parents put so much time and effort into the first child than they put in the third or fourth. [...] I'm the second child, and I think, uhm, I don't know if I'm, I don't know if I'm less anxious than my sister, but maybe, I think that a third or fourth maybe you'd notice there's a difference. [P19]

I: And when you are not stressed, how, how does it feel like?

P19: Uhm, don't know, yes, pleasant, calm, and things move along at nice pace in time, and, uhm, there's room for everything to happen, you know, life's quite broad, you can experience lots of different things and enjoy them, you know. [P19]

Yes. I think, being too stressed is unpleasant, yeah, evidently, yeah. [P19]

But then, we were gonna arrange the date on Tuesday, and then I got a bit anxious thinking there's been a long time since I'd been in a relationship with someone [...] So there's a bit of stress going to this group on Tuesday night, and I was a bit worried about it, and it made me slightly anxious. [P19]

Uhm, and, uhm, yeah, was I going to get embarrassed, or something, you know, all sort of thing that was going on in the background. So that makes a bit, sort of, uh... so it wasn't a terrible stress, it wasn't like I was a bigger meltdown [...] [P19]

So a bit, you couldn't just relax and enjoy other things happening, you were thinking, gosh, at some point I'm gonna have to say something, and then what do I say, is it going to go wrong what's going on? [P19]

I think if it'd been terrible, if I'd got really upset about it, or something really bad had happened that may have caused me some stress, then I would have thought, you know it's time to abstract yourself from this, and calm down somehow. [P19]

Yeah, I think it's, uh, anxiety is a major thing for other people, I suppose it's linked to stress, isn't it, I mean, I think other people, yes, allow their, uh, allow their minds to become, uhm, yeah, like I said again it's the narrowing down, isn't it. [P19]

Instead, you're, you're either panicking about something in the future, or you're reacting to something that's happened in the past. [P19]

I mean, that affects especially your closest relationships, maybe [inaudible 31:32] the person you're with is really battling with anxiety, or reacting to something that somebody said, or is in a state of fear because of something [...] [P19]

But, uhm, I know at times there'd been, uhm... turn to my head to do something, and I got incredibly stressed, and worried about it, and anxious [...] [P19]

And then when you finally have to deal with it, you think, you're just in the state of slight panic, and then, then you either you manage it, or, you know, or you don't [laugh]. [P19]

Uhm, some people, uhm, some people don't, they just channel it into other things, the stress comes out in, you know, they do things furiously, they shop furiously, they drive furiously, they're furious in the lift with people, they're furious with their children, and the stress comes out slowly, and in a really bad way. [P19]

I don't know, it always has, when I was a child, if I was upset I'd go for a walk. So I was grown in the countryside, so it, I did a lot of walking, but, uhm, yeas, that would be the thing that I find,

uhm, being outdoors has always helped me. I was happier if I was outdoors, and, uhm, yes, moving is good. [P19]

[...] I would leave my essays until the very last, possible term, and then I would panic, and I wouldn't, you know, there'd be too much to do. [P19]

So something, like, like the other night I think I was a bit stressed about, it was silly because it was a small thing, but it just grew up in my head so that, you know, I was worried about it [...] [P19]

Uhm... probably, for me, a mild panic, a mild panic attack. [P20]

And I sort of, I've gone home worrying about it, and you, you can't switch off completely in a matter [...] [P20]

I think, I don't think there's a stress, uhm, I'm sure someone somewhere maybe has a stress-free life, maybe in the middle of nowhere, on an island where there's no one else there, and quite happy in solitude, maybe that's... [P20]

I: So what, what would be... for you, what stress-free life would look like?

P20: I just think when you didn't need to worry about anything, uhm... [P20]

I don't know, just being, uhm, I think it would be really lovely in the matter, you know, I wouldn't like to win the lottery or anything, but it would be lovely never to have to worry about money. [P20]

Uhm... yeah, so I think sort of being comfortable, being able to do what you want to do when you want to do it, uhm... [P20]

P20: [Laugh] Uhm, I'd [say] for me, I get like a little, little, uh, space, it's like having a little red ball inside you [point to her stomach] that sort of niggles away at you, and you thinking...

I: Why is it red?

P20: I don't know. Just because that's an, that's an angry colour [laugh] [P20]

Probably for me, you know, it just makes, it makes... depends on the situation, like, you know, work-related things, that seems the only thing that makes me stressed and angry, whereas... like a student situation is uhm... stressed and emotional. More... you are sort of emotional with the... I don't get the angry part, I get, maybe the empathy, you empathize... [P20]

Uhm... they may, when they're stressed, they may, they may be not looking as good as I know normally they do. Uhm... you know, emotional, you know, tears... [P20]

For me, uhm, stress where, like I'm gonna go and cry in the corner, for example, I, I don't get that sort of stress. I'd probably made more of, like we talked about the anger stress. It's like the frustration stress. Uhm... it's probably more, I'm more, uhm, frustration stress than, uhm, sit down and cry, and get stressed that way. [P20]

Uhm... uh, stress for me is just [frustration] is just probably how I frustrate, how I express my, I guess, stress... because I'm expressing my frustration. [...] Uhm, frustrations are the things that are not done correctly. [P20]

Uhm, because it takes quite a lot of me to, you know, I like the happy life with everything nice, and whatever, so it's just, uh, about communicating that's, for me, with the, the frustration, say, would work. [...] I guess that's why I get my little red, red ball all over [laugh], red ball of anger [...] [P20]

[...] I think if they'd turned round and said you can't drive that would, I worry about that because I've got a young daughter, getting her round from A to B would be a lot more hard work [...] [P20]

Uhm, no. No [laugh], no I just felt really sorry for myself [laugh] [P20]

Uhm... to, maybe to a point. I don't have an overly stressful life, I've... uhm, but if you are stressed, I'd say it's not particularly nice to, uhm, to be feeling stress. It's not something I, you would wish on anyone, I don't think to... [P20]

[...] I suppose with the exams there's a bit of adrenaline that maybe kicks in with stress for that. You know, you're nervous because the exams are coming. [P20]

Uhm... but... but yeah, it's uhm, it's sort of, something, I don't think stress is particularly nice, and, you know, something to be proud to have sort of thing, it's uhm... [P20]

Yeah, I'm sure, because if you, if you're worrying about something, whatever it is, uhm, and it, it depends how big the stress is. [P20]

I suppose for some people stress, like, for, for exams, or if you're nervous about something, uhm , it can give that, like I said, the adrenaline, uhm, kicks, so, uhm, maybe to a little point. [P20]

I think it's just a feeling of 'I'm not happy'. Uhm... so, yeah I don't, I don't... yeah, I don't see stress as a positive thing in, in my life. [P20]

Uhm... no, I, I don't think so... So, it's, it's just something unpleasant. Yeah, yeah, it's, it's, as I said, I'm not a, I'm generally not a stressful person, it's, it's just like... a little niggles, and that for me is my, that's [participant's name] stress, so to speak [laugh] [P20]

I'd, I'd... as long as it's not to the... and it's, it doesn't, is not really ever to the extreme, but if I was that angry I'd probably just walk away [...] [P20]

Uhm, so, yeah, and, and tiring after the day before, and, you know, sometimes kind of stressful with worrying about her. [P21]

We are in the university, we're sending this out to potential students, it's just ridiculous, and that's, you know, but that's kind of minor irritation [...] [P21]

[...] know, when you're trying to something up and running and the tech won't work in the beginning of the lecture, or something, it's, it's kind of a bit awkward [...] [P21]

I felt really lonely, there was, yeah, it was the, because, yeah, I, I guess lonely, because I wasn't going to dump too much around him if I could help it, anyway, so, yeah, and, and, yeah, and kind of ongoing worry for him, because he's very frail [...] [P21]

Yeah, yeah, so he was, you know, so there was a lot of worry about how we were going to get in home [...] [P21]

[...] if I know there's stuff going on I'll keep half an eye on it, just occasionally, because, you know, maybe there's somebody worrying about something. [P21]

I: And can you imagine life without stress at all?

P21: Would be nice! Although, I don't know... because while presenting – I used to... I still do, I still feel sort of nervous before I start, you know, that bit of anticipation, I'm much happier once it's got started, and I realised a while ago that that just kind of meant I cared. So I would hate to go on and present without any nerves at all. [P21]

There's a... so, yeah, completely without angry, yeah, I can't just imagine us all without it a bit [laugh] [P21]

So, it's almost like, uh... almost like wanting to regress to being sort of a toddler, or something. You know, you just want to just be looked after and not having to worry about any of that stuff, you know [...] [P21]

[...] it's not really whether they come for a coffee, but sometimes in combination with other things that's just kind of, there's too much going on, and, and it's not really just about time, it's about if they're not taking that time for themselves, and they're, and they're preoccupied. [P21]

And... yeah, so element of being this... you know, it does depend very much on knowing them, so there's one, they'll be less cheerful, for example, and... less... well, it does depend on person, a few cases, just less forthcoming with things, less likely to initiate anything. [P21]

it's not, not just being this cheerful, but just more, kind of a sadder, resting face, you know, or not even sadder, no, more... more neutral, almost more expressionless than sad, actually, just, uh... [P21]

Certainly in the peaks of it, oh gosh, yeah, hyperventilating like a, like a mad thing. Obviously crying sometimes. [P21]

So, you know, I'm worried, I'm stressing out about sort of whether or not my blood pressure is going to be too high, my blood pressure goes through the roof [laugh] [...] I just wondered was I going to be, you know, worried about myself measuring but it turns out I'm OK with that [laugh] [P21]

Or can I switch off? Am I preoccupied? Or concerned or thinking about next thing? [P21]

[...] or are there sort of load of other things, load of worries, sort of all clamouring for attention in there? [P21]

Like if when something happens, is it a [inaudible 1:02:28], or is it really, or do I get upset [...] [P21]

[...] you know, every day involves some minor setbacks, or obstacles, or annoyances, right? Sort of, yeah, are they, are they, do they feel like minor annoyances, or do they feel like something big [...] [P21]

There's, you know, where's a kind of rhythm, and nature, and fresh air, and... There's, there's enjoyment, there's something that being able to enjoy stuff [...] [P21]

oh, gosh, yes, the... the unknowns, the worrying about the unknown things that could go wrong rather than dealing the future one, yeah, sort of... Lots of anticipating of things going wrong. [P21]

[...] so people are going to be a bit worried about it, and it's just not, yeah, that's not, you can't, you can't [inaudible 1:15:25] the more you do that, at some point it's going to explode [...] [P21]

[...] sleep too because you, oh gosh, yeah, the times when you're preoccupied, you know, waking up in the night, and just getting a bad night sleep which is... again not, not too healthy. [P21]

[...] but it's going to be a real fight, you have to, you have to have that battle, so there, they're stressful, but I think I'm more selective and less... yeah, sort of become more, more inclined to [tut? 58:53] rather than get really wound up. [P21]

Hmm, so I guess some of them do what I do, just kind of withdraw... or get, it depends where you are, in what situation... getting emotional, getting upset. I think some of them get angry, you know, [inaudible 1:25:08], you know it's... they... I think it's just sort of rather than, in some cases rather than crying it's where the emotion goes. They, they get emotional in some way. [P21]

I suspect anger is actually a bit of a coping with things, just kind of letting it out, but it doesn't, I know crying doesn't actually help [laugh]. You know, it comes out, I'm not sure if it feels much better for it, really. [P21]

But I can kind of see the appeal of it, sometimes it's that wanting it to, wanting things to be simplified and go quiet, you know, the world seem as, the world seemed to be a happier place [...] [P21]

It was really, it was really upsetting to have to go OK, I'm not gonna finish it, I'm not gonna finish it in time to graduate this year. That was a thing to accept. [P21]

And also this year, actually, after my mum died, because we've been going up every Saturday, we were finding Saturday mornings really weird and uncomfortable. [P21]

Uhm... probably anxiety, uhm... I'm not a great fan of stress. Uhm, yeah, probably stress and anxiety, just probably go together. [P22]

Essentially stress is something where you find yourself in a situation that you don't feel comfortable with [...] [P22]

Uhm... Stress is a bit like the worst hangover in the world [laugh]. When you wake up and you're like that 'Oh my god, I've got no idea what happened'. It's like that [laugh] [P22]

They become, again, they become stressful, I would say, you begin to feel like you've got no control over the situation, or you feel very, very uncomfortable with it. [P22]

[...] so whether it might be someone's not happy about what they're being instructed to do or they, they feel like they're being spoken down to, or, uhm, I could still relate stress to that. [P22]

What it mean, uhm, I'd say increased heart rate, general feeling of anxiety, uhm, maybe hot flushes, just generally feeling absolutely horrible. [P22]

Also I watched people, like, played with their hair, they have some kind of, uhm, they're chewing on their cheek, or playing with their nails, or... you can always tell, there's always little kind of tell. [P22]

I think some people, uhm, stress can be associated with anxiety, with depression, so anyone who has, uhm, suffers from depression, uhm, is more likely to be affected by stress.

Uhm... I'm, because I'm easily angered, I would say [son] will know when I'm stressed because I'll come over and I'm arrrrggghh that he hasn't done the dishwasher... I'd probably, I'm probably high promotional to stuff that would normally irritate me but not make me yell. [P22]

I: How is it like not being stressed?

P22: It's very nice.

I: How does it feel?

P22: Uhm... I generally feel, I think if I'm stressed, I think I have sort of, this sort of, uhm, feeling of impending doom, you know, ever so slightly. Uhm, whereas when there is no stress I look forward to the future. [P22]

Uhm, just generally anxious. Just generally, uh, tired, and, uhm, irritable. [P22]

Uhm... I don't know, apart from my, uhm, I would say stress is probably like dealing with, you know, a form of, you know, mental illness on a daily basis. I think it's very debilitating, or certainly can be. Uhm... I would say it's like feeling unhappy, and unwell, all at the same time. [P22]

Yeah, but only because it's so horrible you'd do anything to get away from it. [P22]

I was faced with having to take meetings, uhm, that had like a 100+ people and I was chairing them, so I'd be, uhm, absolutely terrified, so, uhm, there'll be crying in the toilet, trying not to be sick in the way to the meeting, uhm, and then finding ways of, uhm, conquer that fear...[P22]

[...] so the nervousness... Well, actually, for me, nervousness slash stress for me would be about not saying the right thing [...] [P22]

Uhm, just feeling anxious, really. Uhm... yeah. [P22]

[...] so then I would find that I would make more mistakes because I would be so anxious about not making mistake [...] [P22]

Uhm... anxiety [laugh], uhm...and frustration. Usually my stress comes from frustration of not being able to finish or fix a problem, so...[P23]

Because stress for me is always anxiety, and that for me would be, having someone stand behind me will make me anxious, so... [laugh] [P23]

[...] it might be that you, you've, you've never got quite enough money to meet your, or even if you've got just enough to reach rent, you're worrying, write up until the last moment, so there's never enough time, you're always worried that you've never gonna catch the bus to work, or... that would be a stressful life, overall, I think. [P23]

And, and for another of my close friends... my old friend is running his own business, so he find that stressful because it's the constant worry of ' I've always got to find something, a new customer, so that I always have enough money to be able to pay rent'. [P23]

I'm still, I'm stressed at moderate level when there's lots of things going on, you know, I still feel anxious and 'am I be able to complete everything on time?' [P23]

Uhm... So... being stressed is like being worried, and not knowing what's worrying you. Not knowing the individual thing that is worrying you. So it's like feeling ill but not knowing why you feel ill. That's what being stressed is like. [P23]

Uhm, so... someone who is not stressed will be someone who, who knows what's going, who is, who knows what's going on and is comfortable with themselves at that particular point, and everything that's going on around them. They know that there's nothing to worry about because they know that whatever is coming or has come, they can deal with. [P23]

I: OK, and how do you know that you are not stressed?

P23: Uhm... because I'm happy [laugh] [P23]

Uhm... So Monday morning when I woke up, I had a shower, and I started thinking about everything I had left and worrying about which bits hadn't been done, or what may have happened from that. [...] So I started feel stressed. Not like sick in stomach or anything but I was worrying, and... for me that was stressful. [P23]

Yeah, there was nothing to suggest... there could be nothing in my inbox, but I was still already worrying that there would be something in there, uhm... which is based of the past, and I know that there is always going to be something that happens [...] [P23]

Oh, in fact I knew there was three bits of reporting I'll be doing this month and they were quite large. But... yeah, that's where I started worrying [laugh] [P23]

Yeah, because I don't think it's healthy to worry all the time. [P23]

When I was at the rental company I worried a lot. All the time because every day, the same problem I was worried about every day, entire day, and then, in the evening I worried about the next day. So... over the two years that I worked there, I went from being happy most of the time, I was, you know, quite, relatively fresh [inaudible 33:29], I was happy most of the time. [P23]

So... if they then don't have the ability to go with this person who is just trying to fix this problem, and it's not directed at me, because of the frustration and being stressed then that's fine [...] [P23]

The thing that would frustrate me... our, our shop was opposite the petrol station. They would even try to drive it over here which means that the wrong fuel is getting through the engine. That is a stupid thing to do. [P23]

Yeah, so, uhm... that was then something that I had to keep my eye on myself because if I, if I've done something like that, I would then be annoyed at them, and also the situation, uhm, an I'd have to make sure I didn't say anything inappropriate. [P23]

It's happened in the past, I yelled at my family because they've done something that has annoyed me. I'd always end trying make up and apologise. I never, if I'm angry with people I usually by the end of that day try to at least make sure that my last words aren't negative to them. So, I'd be angry with someone in the morning, and then in the afternoon I'd come and go 'I'm sorry I've reacted that way. It frustrates me for these reasons but I know that it wasn't necessarily on purpose' because I had time to think about it by that time. I had time to break it down into the individual elements, which bits and things I'm actually annoyed about, how much [inaudible 40:41] [P23]

Uhm, I would think so, yeah. So I can imagine when people say I've got too much on, you know, so stressed out, so much going on. They're obviously stressed at that point which is not a great position to be in [...] [P23]

Which meant then I would spend less time with my friends, and I'd spend less time with my family, so therefore I was essentially withdrawing from the things that made me happy because of the thing that was causing me to be unhappy. So even if it was fifty-fifty happiness and unhappiness, I was taking away the things that would help trying balance that out again, and I was becoming stressed which wasn't positive, I don't think. Not, not emotionally, I think. [P23]

[stress-free life] Uhm... pretty relaxing [laugh] [P24]

I: What is it like to, to feel stress?

P24: It's not very nice [laugh]. I think if you're feeling too, yeah, it depends what it is. [P24]

And, and people that I know, uhm, they may be quite happy, laughing, and something like that, and... so, you recognise with some people that they, when they're really stressed, they might have a different way of thinking, really. [P24]

So I think some people had very traumatic situations, and I think there's other people that, that get into, who maybe get into habits of getting stressed, and so see everything is a bit stressful. Uhm... and maybe panic a lot. [P24]

And also just thoughts about, well, if I don't get here on time, you know, thinking about, this building is quite, you know, then I would have to find you, and, uh, yeah I would feel embarrassed. [P24]

But I think also, you know, if you, if you're stressed, uhm, you know, you're much more likely to, to get anxiety. [P24]

Yeah. I mean, I think, so maybe another example... maybe a few years ago I've started going to a club where you practice public speaking, and when I first started, that was a little uncomfortable, and stressful, uhm... [...] [P24]

Boredom is very stressful for me. I get quite like... I, I get upset, I get, I get sort of, it will come out in an angry sort of way [...] [P25]

That, that is stressful, quite, and it's upsetting as well [...] [P25]

You know, it's, that was just, you know, because I wasn't stupid, I just needed a bit more help, have a disability but if people import... I get angrier because that's stressful to me, because that makes me angry because if people just took that little time to, to work out why I was struggling, uhm... [P25]

And if people are stopping me, and are putting barriers in my way through no fault of my own then that's when I feel angry, and upset [...] I'm struggling, and then I don't get help so then I get quite angry with that. [P25]

I'm quite, I prefer to be by nature, or, uhm, water, and I'm happy with, with those sorts of elements, so if I ever felt stressed, as I say something upset me and I couldn't handle it I will go and sit by water. [...] so if I ever feel like upset, or while I feel stress, then I'll go and find some water, and I will sit by the water. [P25]

Yeah. I, I think it makes, my mum says you, you'd look around [inaudible 13:43] today, she says everybody's so happy. You, you know, it makes such a difference because everybody looks in a good mood, you know. [P25]

[...] my mum had a breakdown when I was younger, and it was because she sits and watches the news and she will, she gets sort of worked up about what's going on and she thinks it's gonna happen to us, and, you know, things like that. [P25]

If it's full moon then my anger's more likely to come out than if it's not. [P25]

I: So if you were to compare stress to something, like if you were to finish a sentence 'stress is like something', what it would be like?

P25: Fear.

I: Fear?

P25: Mhm. I... if I feel stressed then sometimes I can feel frightened. Uhm... I think it's I'm out of control. [...] but then it's like I fear because it almost becomes like I can't manage things. [P25]

So that was my fear that was something bad was going to happen... that I couldn't control. And I think when I feel out of control that's, that's a fear to me that I can't, can't control everything, you know, and I can't control everything in life but certain things, you know, most people... but so, yeah, I do feel, when I feel stress I don't feel so much anger, I feel fear that I'm out of, sort of out of control. [P25]

I hate them [rollercoasters], they frighten the life out of me. I mean, I would, I could cry. Uh, that's I have this really bad fear of like heights and stuff, used to feel right when I was younger. It's got worse as I got older, and one of these, my boyfriend that used to, he made me go to Alton Towers with him, and he made me go his rides and I was petrified. I was just... so that was like really stressful for me because I've a fear of, of just the heights [...] [P25]

Uhm, the fear of danger, and being trapped. [P25]

That, that, I was petrified, and... I couldn't run off because I was, I was that frightened. And that stressed me out because I didn't enjoy, I couldn't enjoy it, I didn't want to, to go. I just wanted to run away [laugh] [P25]

[...] that's what stresses me, something that is out of my control, and it, and it's making me either ill, tired, or irritable. [P25]

But that's certainly when it's not going where you wanted to go, you know, you're just, it's frustrating [laugh] [P25]

[...] my mum had a full [inaudible 29:09] with her and if she got upset, then I got upset, my sister got upset, you know [...] [P25]

And that's annoying for me a little bit like, you know, how can you run a disability service, how can you be a manager with this service? And I get angry because she, her staff got disabilities and sometimes it causes them to be poorly. [P25]

So, so yes, now I'm really happy, I've moved in with my boyfriend, I live by the sea... [laugh] [P25]

You, you know, so now I think we are both adult, so I said you, you stay in, do what you need to do, behave when the football starts, and I'll go off to the beach, and I'll come back when I'm ready. And if, then we're both happy, aren't we, you know? [P25]

[...] so I'm, yeah, I'm happy at the moment, because it's sort of like, when it's like he was a stressful, jealous one, oh, well, I had plenty of, you know, what I've thought would stress me out in my life [...] [P25]

[...] well I'm afraid he drinks quite a bit and that just sometimes stress me, he, he drinks, you know, so I will just go to bed and I'll leave him to it, but I have sense, you know, about it, but it worries me a bit. [P25]

I don't think that [stress-free life] would happen, I don't think you can have a... not unless you didn't go out of the house, deal, deal with people because people they don't drive properly and that annoys me [...] [P25]

You know, these, these horrible people, these accidents that happen, I mean, you can go out, and I could be quite happy going out to the beach and then I can see someone get hurt. [P25]

[...] we, we didn't have to worry about what was going on in the world, or, or anything like that because we were just children, we were children, we didn't have to have that stress [...] [P25]

[...] some people are quite happy living on a farm, and [inaudible 46:25] but then you got farms, farmers are struggling to, to survive [...] [P25]

Oh... I get very upset, I'm very emotional, uhm... [P25]

That's, you know... But I do get quite angry if people ignore me [laugh]. That stresses me out. [P25]

So I tend to sort of... my mum's always said if my sister was angry or upset, she'd just go off and sit in her room, and be quiet whereas I'll scream and shout, get it all out of my system, but then I'll sit and have a cup of tea. [P25]

And he gave me a bit talking to, this is, you know, are you really happy in this relation because if it causes you this much stress [...] [P25]

Generally, it's... or I get very teary. And that's, if something makes me cry, and it's not a film, or book [laugh] you know, so it's not happy tears, uhm [...] [P25]

Uhm... sometimes you can just get, you say 'oh, I'm stressed' but... you're just angry. Or frustrated, or things aren't going your way wherever you want them to. [P25]

You, you know, some people are like scared of like, like interviews, make them nervous [...] [P25]

It was, it was such a nice feeling, you know, I didn't care about anyone on the beach, you know, on the beach I dare say. [P25]

You know, I think it was around a thousand of nasty sunbathers, and then a family came with, like, noisy kids, and that annoyed me a bit [laugh] [P25]

But yeah, I didn't have a care in the world on, on Thursday, I was just happy. Sun makes me happy, the water makes me happy [...] [P25]

Well, uhm, I'm not sort of person, I don't depend on, I'm quite happy on my own, uhm, for certain time [...] Because, I don't need to worry about anyone else of you, you know [...] I just can go off and do what I want to do, and, and be happy, and carefree. So... stick me by beach any day and I'll be happy [laugh] [P25]

I was trying to finish off my old job but I was like... I was scared of leaving my parents, you, you know, I was thinking 'am I doing the right thing?' And that did cause me a lot of stress, actually, because I was petrified [...] [P25]

[...] my parents made it so easy for me, but I was scared to death, I didn't know how to tell them [...] [P25]

No, no, it wasn't that bad. I was just... it caused me a worry, I think, more than, perhaps, anything. [P25]

I'll still trying to work out but I'm happy, and the sunshine, and some... I'm not gonna let it, like part of me, and I think that, you know, I can, you can overcome it if, if you need to. [P25]

And then, they're like, she, she denies being abused. Well, I know I wasn't abused and I got quite upset and angry with them about that because I know, I... you know, I remember, I remember a lot, and I can, I can tell you things when I was 5 years old, you know, in my life that went on. [P25]

And that's quite a hard thing to, to actually do everything, can't cope, you know, and it did upset, I got really, really low. So, I mean, I didn't know if it was stress, or depression, or... [P25]

I mean, I was walking from work when I first started it, and I saw three children. I started getting anxious, you know, children nowadays are not as nice as, you, you know, towards adults that we were. [P25]

t's just, you know, I've been working myself up expecting something and the it was a totally different situation, and almost put your faith back in people, you know. [P25]

But then, one day I'd had three drivers like caused me stress. Well, they really wound me up, you know, they put my [inaudible 01:26:51] really quite angry and upset. [...] But people kept, you know, doing stupid things in the cars, and park, car parks that annoyed me [...] [P25]

[...] I just get myself all worked up, and... I try and deal with it myself instead of, perhaps, sometimes getting help that I need. [P25]

And then I went home and I was upset, I was just distraught because I was so, you know, I was worried enough about leaving my parents, it was a massive weight to, to leave my parents, you know, to make that decision to move and meet the best. And she said that, and I was so distraught when I've got home [...] [P25]

My dad thinks you're evil, I said, you've upset me, you've upset my parents, you've upset my boyfriend, you've upset my sister, you know... [P25]

And, and some people just don't, don't have that 'think-step' before they, before they just blurt things out. And that can totally tip someone over, if one's very worried. [P25]

[...] if you have, if you both, you've got issues, like I was, obviously, like worrying about, you, you know, my mum and dad. [P25]

So if you don't treat me right then that's gonna, you, you know, that's gonna cause me stress, and, and it's gonna, and it's gonna impact because I would be really annoyed [laugh], I'm really gonna be like angry with him, you know. [P25]

So I think you can, if you're stressed, and you've got loads of things, you know, worrying about [...] [P25]

And I think although sometimes you might get a bit worried about it, and you feel a bit stressed, then if you don't do it, but then once you've done it you feel so good, that, you know, it's a good sort. [P25]

Uhm... well it's the whole guilt thing, isn't it? Leaving behind your unwell mum to come on a course, you know, I didn't have any official experience in this sort of sector, if you like, before the course... [P26]

Which is just sort of, like, I suppose, it's kind of insecurity but whenever I was in public spaces I would just be really petrified, like I'd become quite petrified. [P26]

Uhm, but then, there were these incidences once or twice where I just sort of ballooned, you know, I'd have this real sense, of, uhm, of anxiety, I suppose, multiplied [...] [P26]

So I can kind of control myself but, uhm, there was a barber when I was in London where I had to leave, I had to get [laugh] I had to leave, and that was my panic attack. I can laugh about it now but, you know, I thought I was gonna die, uhm... [P26]

I feel like I kind of, you know, I've lost a stone in weight just the... sweating, and the worrying, and the stressing in interviews, so... I hate interviews. [P26]

[...] an office job that I absolutely hated, it was so stressful, uhm, and, you know, I didn't wish that upon anyone who didn't want to be in that environment. [P26]

I: And can you imagine life without stress at all?

P26: Uhm... I mean that would be ideal. [P26]

[...] I'd recommend counselling to anyone if, if they actually, genuinely, do have anxiety. [P26]

I mean just, just it's not really an issue anymore, and then I've got different things to, to worry about, I suppose [laugh]. Get entry to the course, and getting my final piece and everything. It's a different sort of worry but a good kind of worry and it's all of the, I haven't got time to worry about anything else, really [laugh] [P26]

Uhm, you've got all these worries going around in your head, I mean... [P26]

When I see it's like a fleeting kind of, uhm, annoyance, uhm, and their responses like quite are vocal, you know, uhm... maybe being slightly over the top about something. [P26]

[...] I can tell when she's like a little panicky, or, you know, it's not a great day for her. I can sort of pick up on that. [P26]

Uhm... well... I mean, it just got really, really uncomfortable, and, you know, I had to... I had to do my best to sort of, you know, really focus on my answers [...] [P26]

Because when you have one, and you know how bad it can get, you know in anxiety situation like that, it can quite easily spin out of control, and you don't wanna be the person who's like 'I'm

sorry', you know, in tears, leave because I'm having a moment, uhm, you can't do that [laugh] [P26]

[...] what I was trying to do was deal with it in a way that sort of like be really nonchalant, like 'yeah, it's just an interview, it's fine, what, what is there to worry about, it's just an interview – don't worry about it, don't think about it too much' [P26]

I mean it must influence the decisions you make, and the pass that you take in life, if, if you're house-bound by, by anxiety, then of course, you know, you know, in a way it's influencing everything you're doing, really. [P26]

[...] I don't know if that's necessarily related to stress, I suppose it's more realising I just enjoy it more when it's, there's less people around. That's fine, it's not necessarily conducive to being, you know, riddled with anxiety or something. [P26]

Well... not really. I mean, it does at the beginning, obviously, because, there are new persons, I'm going through all of those emotions, you know, when I go on dates and stuff, and then... [P26]

[...] when we do hang out together we can all, you know, when we're looking each other in the eyes, we know that pain, you know, so, uhm... [P26]

It, it might be a stretch, but it, you know, I do think that's sort of like, if, if you are such a high-anxiety-driven person outside of those sort of like scenarios, when you have that, as I say, like a legitimate stressful situation [...] [P26]

### **Physical discomfort**

[...] and it's just uncomfortable thing and maybe there are butterflies in your stomach or uhm just a headache, a tension headache, this kinds of things so these are normally the triggers that, uhm... sometimes, you know, making our heart beats slightly more [...] [P1]

I don't like the tension headache that might come, or you know the churning of the stomach and that kind of stuff. [P1]

When I think of stress, I think of completely panic, and I think of shouting, so... like I get, I think like I'm having a really tight chest [...] [P3]

[...] and my chest would just, it would just feel like I can't breathe a full breath, and it's just so tensed, and I just can't, can't breathe [P3]

But the stress it's just, it's the constant tightening, like you just, you just wanna be able to just take a deep breath and you can't. [P3]

My chest all the time was like pounding, just always, always so tight [...] [P3]

[...] I've just panic, I just, I just need my time for myself, and I just need you to just not take my time. It's what makes me shout, and it's, makes me get tight chest [...] [P3]

I think the more stress you get, the more anger you feel because you experience similar things in your body, so like the tightness of the chest, or like the headaches. [P3]

And it's just when I'm stressed, it's, it's always comes back to the tight chest feeling. [P3]

I find if I do start getting stressed then I can feel the whole body, my internal is getting mixed up in a way. You feel quite tense inside [...] [P5]

Uhm... for me, I think, it's like, uhm, an internal knot inside. So that you feel quite tense. [P5]

Uhm, you know, you, your body is... uhm, you know, maybe get really knots in your stomach, or you perhaps get, you know, like indigestion a lot, or... and you feel your heart racing sometimes [...] [P5]

I think it's like a knot, sometimes it's the, uh, maybe the heart racing sometimes [...] [P5]

Uhm, yeah, when, when I, when he's gone to school, that's fine, it's quite a relax all day, uhm, yeah. [P5]

I can feel almost physically sick, to be honest. Uhm, I know that I get, you know, my palms get sweaty, my, my heart will race [...] [P5]

I think that's what happens, I think, your whole body gets tense, uh, and heart racing [...] [P5]

I'm sure it doesn't help your body, because, because you get into this all of a sudden, uhm, everything's like sweaty palms, racing heart, you know, [...] and everything feels really tense. [P5]

Those, you know, whenever, like, when I was sort of working with stress, it was about shaking, physically shaking, uhm, uhm... probably, yes, cold sweats [...] [P6]

And whilst you're waiting for that to happen, you... you get tense, and nervous, and you worry. [P7]

Hmm... yeah, and breathing, I guess you'll be breathing... [...] I'm fine sitting here, but should you take me to the front of that class of thirty, I'm not used to doing that, my breathing would become quicker [...] But, initially, yeah, the breathing, I think, uhm, the, the nerves, that might be the effect, yeah [P7]

[...] and then, yeah, just the combination of being too hot, being sweaty [...] [P8]

The shower, I think, because you can get quite tense when you're stressed out [...] [P8]

Uhm... I think it'll just be little things like biting your nails, and like, uh... [inaudible 39:01] you know, being sweaty, or... something around the lines about, uhm... [P9]

I know, like my heart would just start beating a little bit faster. And then I'll have this little, like, swirl in my stomach [...] [P10]

Oh yeah, you get cold, it's a bit like somebody, or you open a letter, or, you know, you just, you don't want to know, it's the only way. I get cold, literally. [...] you get cold, totally cold, everything is cold, it's like, it's like Hollywood, you know, ice goes all the way through. [...] But that's, that all, that cold feeling is horrible. [P11]

OK. Well, I think it might, some people might, uhm, sweat, or will have like shaky hands, or something like that. [...] Maybe some people might get like feeling in their stomach, like butterflies in their stomach maybe. [P13]

And you feel tense like a ball. [P14]

Uhm, tension, a feeling of time limits, maybe, and, uhm, too many things to do at once. [P15]

I suppose cartoons spring to mind that you maybe would see in newspapers, with sort of typical stress character with the post eighteen full, have full head and like that stereotypical image of stress and tension, of that 'arrgh', clenched fist, sort of wiry hair, big eyes, bloodshot, but [laugh] [P15]

I do, I know I feel it in myself, like I know if I get, uhm, stressed I will get tension headaches, and like my muscles in my shoulders, everything gets so tight, and I can feel that physically in myself. [P15]

I think physically you feel it. Like I know, in times like, I felt it in my shoulders, in my neck, in my neck, that sort of physical response to it. [P15]

I would describe it as constricting within yourself, so inside, uhm, you can feel... I suppose tension to some extent, except... [P16]

Yeah... tension, probably. Sometimes I find myself with, I find my shoulders, and I suddenly put my shoulders down [...] it feels, certainly feels like you're not relaxed, that's for sure [laugh] that you, that you're tense [...] [P16]

Tightness, yes, I would think, yeah, feel, feel tight, uhm... [P16]

But you can understand with heart because if you get anxious you breathe, adrenaline is, you know, boom, boom, boom. [P16]

Uhm, stress is like, uhm, well for me it's kind of something that happens inside, and it's, uhm, makes me feel anxious, so it's a sort of like a knot in my stomach maybe [...] [P17]

Uhm, so if you imagine that stress is kind of, uhm, makes you very tense, physically [...] [P17]

Yeah... they sort of be tearing their hair up, physically like this [showing tearing hair up], they might be quite sweaty, uhm, kind of, uhm... look tired, uhm, they, they'd look anxious, I guess. [P17]

Uhm, so I talked about that kind of knotting feeling in my stomach, or just feeling, you know, your heart beating a bit faster maybe [...] [P17]

I think it makes me tired. And... yeah, kind of heart beating faster, just not feeling relaxed. [P17]

Yes, I did. Yes, a knot in my stomach, uhm, kind of heart beating a bit quickly, uhm, and the tiredness, yes, I did have those, yeah. [P17]

I've heard of the people in the past who get like hot and sweaty [...] [P18]

I know how to control my breathing through yoga, my heart rate is very low, uhm... I've never noticed myself getting... yeah, maybe a bit in my chest, but that's, I've overcome that now. [P18]

Sometimes... they are not hyperventilating, but they're breathing more. [P18]

Physically, getting, uhm, you know, unable to relax or unwind, that sort of things come to mind. [P19]

Yeah, sort of, if I knew them. It's hard to tell, but sometimes people just look pale [...] [P19]

Uhm, maybe them being a bit sweaty, being a bit, uhm, you know, uhm, like they're not really concentrating, looking around a lot, looking, uhm, being fidgety, being, uhm, physically uptight, their shoulders are uptight, they're, uh, you know, they're, uh, looking, uhm, frowning a lot, sighing a lot maybe. [P19]

I can actually feel, I have a thing in my heart, it's perfectly healthy, normal thing, but I, sometimes it feels like it misses a beat. And that, it does that if I'm under a lot of pressure, my heart would go a bit funny. [P19]

But I felt, uhm, I felt a dryness in the mouth, and, uhm, and a bit of sort of awkward, [...] I was a bit, a bit wooden, because, you know, it's all, uhm... So yes, little things like that, those physical symptoms as well. [P19]

Uhm, stress for me is when I get hot up inside, and you... not that you can't, not to the point that you can't breathe but it's, your breathing, perhaps, becomes a bit irregular. [P20]

[...] I get like a little, little, uh, space, it's like having a little red ball inside you [pointing to her stomach] that sort of niggles away at you, [...] and it sits there and, and sort of prods at you [...] [P20]

I think I'm aware when I'm getting, I know because I, mine's more like the, the red ball, I guess. [P20]

[...] and also, the problem is when you have that red ball inside... you may not think as clearly as... you get your time to walk [...] [P20]

Actually, that was, after my mum got ill in November, I was really... I guess, quite tense [...] [P21]

And so, I've come to actually go, you know, is feel a bit of butterflies and go great [...] [P21]

Certainly in the peaks of it, oh gosh, yeah, hyperventilating like a, like a mad thing. [...] but heart, heart rate goes, when, when it's one of those peaks, sort of, it's, it's exploded things, I don't notice it for the rest of the time [P21]

What it mean, uhm, I'd say increased heart rate, general feeling of anxiety, uhm, maybe hot flushes, just generally feeling absolutely horrible. [P22]

I'd be able to tell if they're stressed by their face expression [...] whether they're sweaty, whether they're shaky [...] [P22]

Yeah, I'd probably notice that I'm, uhm... I feel like my heart, uhm racing quite fast, and my brain is sort of all over the place. Uhm, and sometimes I grit my teeth. [P22]

Then, like, I'd go 'oh my god', you know, my face would start to sweat, my heart would go... [P22]

And I suppose, you know, I recognise physical symptoms of stress, uhm... So if I feel extremely stressed I might feel hotter, maybe a bit sweaty, something like that. Uhm, all, you know, all the sort of physiological changes that might happen if I'm feeling particularly stressed, you know, maybe, uhm, the, the feeling in my stomach that's a bit empty, maybe, uhm... you know, just, yeah, yeah, maybe just feeling tense in my body, and things like that, really [P24]

[stress-free life] Uhm... pretty relaxing [laugh] [P24]

Well, I think it depends on the person, if I know them... so, yeah, it depends. They may go red, for example, you might see them sweaty, or something like that. I might be able to tell from the words that they're saying, or they may even be shaking, or something like that. [...] Uhm... I might shake their hand, and you can feel if their hand is clammy when you shake their hand, or if they're feeling, if it's feeling a bit cold, or maybe, uh, a very sort of weak handshake, or very strong handshake, something like that. [P24]

I was just... so that was like really stressful for me because I've a fear of, of just the heights, it makes my stomach flip, uhm, even fly-overs in a road, you know, uhm , bends in the roads, I, I can feel my tummy start going all funny if I think I'm gonna... I don't know [laugh] [P25]

You feel... I don't know, your shoulders, my shoulders tense. [P25]

[...] I'd feel knotted. Do, do you know, I'd feel knotted, and like... tense, then become like tense. [...] And that's what like all my neck feels knotted [...] [P25]

Interviews, I mean, I know they're stressful for everyone, of course, but, uh... I feel like I kind of, you know, I've lost a stone in weight just the... sweating, and the worrying, and the stressing in interviews, so... [P26]

[...] the physical manifestation, you know, if I'm perfectly honest with you, for me sort of sweating all of the time was so embarrassing as a kid, as a teen, you know, trying to go, to be social in these situations. You know, there was points that I had to bring like a spare T-shirts with me in my bag, uhm, you know, just became this thing, this physical kind of reflection of whatever it was that was going on. [P26]

Yeah... well, I mean, your heart beat rises, you, you know, you're anything like me, you'd become clammy and sweaty, you hope no one shakes your hand. [P26]

## Appendix 8. Study 1a. Lay interviews. Quotes representing *Negative effects* subtheme (Theme: Negativity)

### **Health**

#### **Mental health**

[...] when you're stressed, you do tend to worry more about things that may not happen. And it's those hypothetical worries that you try to not worry about until they happen. But yeah, that, that kind of stuff if you... You know, in the best of places, the world can look much more worrying place. [P1]

Yeah, it definitely influenced mine, my health. I mean, I still take tablets for anxiety, so... [...] [P1]

They, they might be. I think you can get underlying issues from having stress, you can get things like stomach ulcers, or, you know, heart issues, or mental... more mental, mental issues. [P1]

I think, if you, if you get to the point that stress levels become too much, it becomes more mental health issue. [P1]

I'm happy most of the time, but I was going through a point where stress, anxiety, worry were too much for me, and maybe was making me slightly depressed. [P1]

[...] but I think that, the stress then in me goes into sort of anxiety, and, and almost like a depression, really, because I just, you have to try and get out of that vicious circle of worrying about it [...] [P5]

I think it, you know, I think it certainly can bring on anxiety, and maybe depression, I don't know, maybe that's why, you know, I wasn't well last year, I don't know. [P5]

And I think it does affect, stress does affect your mental health, doesn't it? You know, that doesn't help with that. Because it's just a, uhm, sometimes it's just a vicious circle, you worries and you get stressed about some, you know, you get stressed about something because you're worrying about it. [P5]

Your worrying takes over, so you blow something out that is, perhaps, a small worry into something big. And I think that affects, that can affect you mentally. [P5]

Uhm, you know, I think it sometimes can lead to, perhaps a slight, you know anxiety, or a mental health [...] [P5]

[...] because you've got to get things organised, like for a funeral, or the things like that, you tend to be on that high plateau so, perhaps, you're not really registering what's happening, so that keeps it in, in a grief situation, keeps that grief out of the way for a time, until afterwards [...] uhm, so you go through it, and then afterwards, obviously, you just hit the bottom [laugh] [P5]

You know, don't break down, or anything, do that later, which you do [laugh] [P5]

And I think that's when sometimes people then, maybe, then get the anxiety and the depression because this stress, something major has happened, that's been really, really stressful. [P5]

And I think, sometimes, if it becomes too much, I think, you do need to ask, perhaps, for help. Sometimes, you know, these phone, I did phone counselling, mainly because of the anxiety and depression I had last year, but that helps because you're getting somebody [...] [P5]

Uhm, I, I had to take time off in 2008-9 caused by a situation of stress, a work-related stress, call at the occupational, uhm, doctor. [P6]

Uhm, as I said I had three months off, for somebody who was fairly toughen-up. [P6]

Oh yeah, I'm sure it affects your health, uhm, either emotionally, or physically. [P6]

I can get flashbacks to when I wasn't well. Uhm, what we were talking about now, we're talking 9-10 years ago. I can hear a voice, an accent that will make me think about that person that was bullying me, uhm, that makes me... not closed down, but become more wary, where that voice is coming from, is it that same person, who's just come round the corner? That I can't see.

Uhm... yes, so that, that can have, uh, painful implications for me. [P6]

Well, uhm, I don't know. Suicide has been never anything that crossed my mind. But I can understand how people can become suicidal. Uhm... they feel they failed in some way, failed themselves, failed their family, failed others, uhm, and therefore they've seen no option but take, what I think is, uhm, very difficult step to end their life. [...] But they accept how they've let other people down, and they could find no other solution [than suicide] to it. [P6]

[...] obviously stress is a very close thing to depression, one will cause the other, vice versa, so I think, again, you can pick that up. They might be talking down, they might sound negative [...] [P7]

I would delve over it, I'd be a bit depressed about it. [P7]

Uhm, well if you've got sort of a team that are being consistently overworked, and put under lots of stress, and there's no outlook for it, and it's not doing anything constructive, and it's just ongoing, then I think that can lead to mental health problems, or feeling, yeah, not worthwhile, or sort of people not, not being OK [...] so I think, yeah, there's no positive outlet that is produced by the stress, then it's just a downward spiral, really [P8]

Uhm... I, I know that when people get stressed, they're, that when like kind of eating disorders and stuff like that kind of comes out. [P9]

I mean, the only kind of reference that I have, kind of films about people who have kind of fought out against stress, they, they kind of aged faster because they are stressed [P9]

Like, I guess, like I don't know how it would, I know it would like affect maybe your mental health, maybe the way that you function, but I wouldn't, I wouldn't know how it would. [P10]

Uh... oh, you can go, you self-harm, really. [P11]

I mean, I get a few, occasionally I may get bouts of depression, but I don't know if that's stress, or depression, or just chilling out. Uhm... I've never really thought of it as chilling out, I always saw it be a sort of depression, sort of. But it could have been stress, I don't know. [P11]

Uh... that could be... uh, well, it can turn you physically, or verbally, like physically violent to other people, other things, or yourself. [...] So it can be, I mean, then you can hurt yourself, you've got yourself harmed, or whatever. I've never seen the point of that, really. [P11]

Uhm... it affects your self-esteem, you know. [P12]

Uhm... and sometimes stress can be a part of something bigger, as I say, can be of, some severe thing behind it. [...] Could be a mental illness to do with anxiety. [...] And if you can't handle stress, you get ill. Either physically, or mentally ill. [P12]

Because... it is, I guess, it is part, as, as an, like an emotion it's a part of your mental health [...] if you're stressed then you're not gonna want, yeah, your mental health is gonna be impacted because you don't want to do, uhm, do things to make you, make yourself happy. [P13]

Uhm, we see quite a lot in our, we've got high staff turnover in our [inaudible 04:35], and people have had a... about four people have mental breakdowns, an it's quite a physical manifestation over a period of time. [P14]

I think there's this connection definitely between stress and sort of depression, and situational depression. Uhm, like I know that my situation, the doctor said to me that I was sort of diagnosed with situational depression. [P15]

And... I did find that really hard, and I self-harmed for a little bit, like a really, really short time, and that was, was never to do anything serious to myself, it was a cry for attention. [P15]

Well, I think if you get... physical symptoms. You know, so you can, I don't really think I had one, I can think of nobody that did, but not panic attacks and things like that, but, you know, people would do. [P16]

I think it can be, manifest itself in all sorts of ways. [...] mental health probably. I don't feel that, uhm... I have mental health issues at all, but I could imagine why some people do. [P16]

Uhm... but yeah, I think, you... it's not good to feel like you always... worried, under pressure, anxious. I don't think that's a good thing. [P16]

P16: I'd like to think so, but I think some people inevitably don't, don't do that and can end up in very tragic circumstances for whatever reason, because these other things, that, that stress... you know, stress can lead to other things that then can't be coped with.

I: What kind of things?

P16: Well, I suppose... I mean the, if, if somebody, I mean the worst case scenario is somebody is so stressed and they can't cope, so what do they do, they end their lives. [P16]

And mental health, I suppose, is, yeah, I'm thinking all physical things, but I suppose mentally, uhm... as I said, uhm, if you, if you get stressed a lot then it can be bad for your mental health, I suppose, yeah. [P17]

I: You've also mentioned that people get like mental issues from stress. So how can stress kind of translate into mental issues?

P18: Yeah. Uhm... an inability of coping, strategies, I guess. Uhm, complete breakdown [...] [P18]

[...] but I think people who do have... issues with anxiety which I've had a little bit in the past, uhm, and bad chronic stress is... just inability to cope with it. I mean, people with chronic stress from what I gather... let it, let it invade everything [...] [P18]

I think it's uhm... well, it could rise your blood pressure, and can make your heart work over hard, it can make your, uhm, your, uhm, obviously, your mental health. Your physical health, yes, it can make, uhm, it can make, uh, make you less inclined maybe to do other things which you like doing, physical, pleasurable things. [P19]

Yeah, I think it's, uh, anxiety is a major thing for other people, I suppose it's linked to stress, isn't it, I mean, I think other people, yes, allow their, uh, allow their minds to become, uhm, yeah, like I said again it's the narrowing down, isn't it. So I'd say your mental state, you mental health, it's narrowing your mental health down to, to one thing rather than, uhm... [P19]

Uhm, just, just, uhm, you know, it's the point that it can sort of turn, stress can turn into depression, I guess, uhm. Then, obviously, there's thing you start taking tablets [...] you know, stress can build, uhm, you know, suicide, things like that, so, you know. [P20]

Uhm, you know, we've got cases, uhm, here at work, where, uhm... they're really stressed with stuff, and they self-harm. Uhm, and that's how they deal with it [...] [P20]

[...] the times when you're preoccupied, you know, waking up in the night, and just getting a bad night sleep which is... again not, not too healthy. But also, you know, getting potential mental side effects from that as well. [P21]

Or... or wanting, you know, it's, it starts to overlap with depression a bit, with you not wanting to go out and do things [...] [P21]

[...] but also mental health, it's really... if, certainly, struggling with that and holding it in, and dealing with it it's just... [P21]

[...] waking up in the night, and just getting a bad night sleep which is... again not, not too healthy. But also, you know, getting potential mental side effects from that as well. [P21]

But also mental illness, I would have thought. If you, you know, if you'd endure... if you endure like a prolonged period of stress, I think you can get to a point, uhm, [inaudible 31:22], you know, when you get to a point where you could end up being depressed on the back of it [...] [P22]

I: OK, do you think that stress may influence, uhm, health?

P23: Yeah, because I don't think it's healthy to worry all the time. [P23]

They will make them more stressed and therefore more unwell. [P23]

Also, I'm aware of things like, uhm, I forgot how we call it, post-traumatic stress disorder. So I think some people had very traumatic situations [...] [P24]

Uhm... I think... like just in general, if you get very stressed, you can be thinking more negatively, uhm, and then you probably make, like, worst choices [...] [P24]

[...] if you're stressed, uhm, you know, you're much more likely to, to get anxiety. And, and obviously that's gonna impact on your mental health, so... yeah. So, so it all impacts on you outlook, on things whether you're feeling positively about things, that sort of thing. [P24]

So I found that hindered a lot of things. It affected my mental health in the short term, uh, quite badly, uhm, at that time, and, uhm... yeah, so, that, that hindered a lot. [P24]

You, you know, she has got like PSTD [PTSD] from that [witness of shooting] [P25]

[...] stress, and it's like, starts causing to affect your life where you can't eat, you can't sleep, you've got pain in your neck, you know, you bend over, double, and that, and that's to me like, and I feel like I'm going crazy because I'm thinking, well, is it me that's... you know. [P25]

So it does affect my emotion, uhm, but yeah, kind of affect my sleep, and it's constant to me. [P25]

Yeah, I, uhm, was in a little bad way, actually, and, uhm... I just thought I can't cope anymore, and I thought I needed some help. So I went to my doctor, I was suicidal, actually, at this time. [...] Uhm... I just couldn't handle my life, and I was suicidal, I was suicidal, and, uhm... I just thought never things have been alright, I couldn't, you know [...] [P25]

And, the only thing, I wouldn't have killed myself because my family and I are really close, and it would just devastate my parents and my sister too much, you know. So... but I couldn't get that thought out of my head. You, you know, it's like... take sleeping tablets, overdoses, and you know, things like that. [P25]

No, I think, it's interesting, you know, when you actually think about it, when you start talking about it because it's not a topic that, that many people will sort of... To me [inaudible 01:43:24] sort of scared because they associate it with a bad mental health [...] [P25]

[...] other things or issues going on and on, and that can cause you, and that can become quite hard, for it can, you know, beat you out and your mental health as well. [P25]

But, yeah, stress for me is something that can kind of quite easily escalate into something, and manifest. [...] I think stress can quite easily turn into something more and bigger, and become, you know, very quickly out of control. [P25]

### **Stress-health direct pathway**

[...] and it's just uncomfortable thing and maybe there are butterflies in your stomach or uhm just a headache, a tension headache, this kinds of things so these are normally the triggers that, uhm... [...] [P1]

I don't like the tension headache that might come [...]. [P1]

They, they might be. I think you can get underlying issues from having stress, you can get things like stomach ulcers, or, you know, heart issues [...] [P1]

I've got headaches in my temples [...] [P3]

I think the more stress you get, the more anger you feel because you experience similar things in your body, so like the tightness of the chest, or like the headaches. [P3]

My teeth were actually chipping. I had to go to a dentist's because I was grinding my teeth at night from stress. [P3]

Uhm, you know, you, your body is... uhm, you know, maybe get really knots in your stomach, or you perhaps get, you know, like indigestion a lot [...] [P5]

Because then that makes you feel sick, or whatever, because you, you're not thinking through it properly. [P5]

Yeah, I think, it can. I think it can. I would certainly think it would, it does, because I think, just by experiencing it sometimes when you know how your body reacts to be in a stressful situation. [...] But, uhm, yeah I think you can, I think it doesn't help you, I'm sure it doesn't help your body [...] there must be something that, it's upsetting your equilibrium, or whatever, that word, or how would we say, but yeah, it upsets how you, your body is, isn't it? [P5]

I shouldn't, I would imagine if you were under stress for a long time, or always under stress, I would imagine, yeah, certainly, your body might probably, would feel absolutely worn out. [P5]

Oh yeah, I'm sure it affects your health, uhm, either emotionally, or physically. [P6]

Uhm... what does it mean... I'm trying to think of several words, you're gonna be alert... could have headaches, muscle aches – that can be good and bad stress, of all of these things. If you overdo some other things you can get a headache, uhm, which could be a chemical reaction, like not enough water, or... uhm, making bad decisions. That will be related to the stress, so... I don't know,... that's all I can actually think of at the moment. [P7]

Yeah, I might get a migraine. [P7]

Stress, bad stress... well, both of them, I suppose. They can make you ill. Good stress and the fact that you've overdone it. You've been enjoying it and you took it at stage too much, so... you perhaps bored a muscle, you've caused a bad migraine, uhm... And then bad stress, yeah, you, it has an effect on the body. Affecting the brain, affecting your health... [P7]

[...] people can be stressed without realising they're stressed. And actually that can make them take it out on other people, or they can get unwell. [P8]

[...] and physically, if you are under physical stress that's, I think, so I think the more stressed you are, the worse it is for your health generally [...] So if you're putting physical stress on your body, so if you'd like carry big, heavy things around that's... [P8]

And I think people who live their whole life of stress tend to not last so long as people that, I mean, if you see people in Mediterranean and their like a stress-free life, they've always lived like to a hundred, and just drink olive all day. [P8]

It's usually because I'm pretty sat still, and over computer or something. So I, I get a lot of with lights, so if the lights are too bright, or if it has strip lights, then it can give me a bit of a headache, uhm, I can just be staring at the screen, or whatever, and then if you sat in the same position you can find yourself getting a bit tense. Uhm, and then I'll usually get a bit of a headache, or at the back of my neck, or be a bit tense [...] [P8]

I mean, the only kind of reference that I have, kind of films about people who have kind of fought out against stress, they, they kind of aged faster because they are stressed. [P9]

Hmm... not directly, I mean, I don't get cramps, or headaches, or... I maybe, I used to get tension headaches but it was only because I've left everything to the last minute so it's my fault but I've never really had that. [P11]

I always saw that I got diabetes through stress not through... because I've always eaten too much marzipan bars from Lidl's, and I think it was proved the either way because I've read someone, heard someone that you can get diabetes through stress, and I was going through quite a bit of stress at that time. Well, I call it stressful, at work. Uhm... don't know how I got it, don't know if I have actually got it. Doctors argue as much as anything else. [P11]

So, uhm, not really direct, I don't think, anything, I don't think that kind of way [inaudible 1:00:58] or a rash, or whatever. You know, like, some [inaudible 1:01:03] I do, I suppose that may be using, you know, under stress, really. [P11]

And if you can't handle stress, you get ill. Either physically, or mentally ill. [P12]

If you leave it, though, uhm, and you keep it all inside yourself, then it must affect your health because... you know. [P12]

I: What about physical health? Is there any relationship between stress and physical health?

P13: Uhm... I'm not sure, really. [P13]

But she say now, she is back, she came back, uhm, she also got an underactive thyroid, or overactive, so that can also cause problems, like, with depression and things like that. I mean, historically she did have family issues, but some of them, you know, just have enough of stress, too much. [P14]

[...] and I went through a bout, from January, whilst all this, I had to do that conference thing, as well as my [inaudible 39:48] job, I had tonsillitis about five times. And I don't have it [laugh] I'm, although the weather has changed, admittedly, well not that much, but, yeah, I think I would, I also don't get to sleep, because the little one doesn't sleep all way through and like, or the big one turns up this week. So that probably influences your stress tolerance, perhaps, that and your immune system. [P14]

I don't know how it's called, but sometimes I got lots of dry patches, and I thought that has something to do with stress. They've got now again, but again it could be, well, I don't know [laugh]. It's hard to... [P14]

Well, I suppose, it does, my role in a sense of when I kept getting tonsillitis, in the end I had to be signed off for over a week and a half. It's quite a long period of time out of the office. [P14]

I do, I know I feel it in myself, like I know if I get, uhm, stressed I will get tension headaches [...] [P15]

Then I ended up getting signed off work about a year later with these headaches, stress headaches it turned out to be, and I ended up having scans, because they didn't know if I had brain tumour, or something. [P15]

So I have, I can only just keep drawing back to that time in my life when I kind of had this stress, so I felt like this [left] side of my head would spasm, and down my neck, down my shoulders I would suddenly, it was like being sick, in the side of the road for no reason, I've been walking down the road and just, I would just need to be sick. And, uhm, just, it was just like my body gave up [...] Once everything calmed down, and then like I kind of got a period of stability, I felt like my body gave up. And it was almost like it'd flicked out of that fight mode, that fight mode, sorry. And, it was like you don't need to fight anymore, I need a break, and I just felt like almost that my body just went caput. I couldn't cope anymore. [P15] huge stress aftermath

Mhm. Yeah, after that time I would say I was actually stressed, so during that time I had the tension in my head and things, but I would say the main, it, for me, it was like a fallout of it. After things had calmed down [...] And then like I say it's the fallout of it. [P15]

And I think stress in a negative way, like my father, he'd probably say it wasn't from stress, but sort of high blood pressure and things from a demanding career [...] Uhm... blood pressure is the one that kind of springs to mind to me, uhm... [P15]

High blood pressure uhm, I think that can, that, that can, I do believe that can be caused by, no, not caused by stress, it can be emphasized with stress. [P16]

I suffer from an allergy, and, uhm, I'm allergic to cow's milk and it gives me eczema. It flares up at this time of year because of the changing temperature I've noticed of late, but, uhm, I can, that, that flares up quite a bit, but if it flared up in the winter I would be more thinking what's going on, whereas in the summer it's not quite so bad because, like I said, because of the temperature. [P16]

I can sometimes, sorry, you can sometimes see when people are quite anxious as well, you know, it's difficult to distinguish between stress and anxiety because they get, sometimes you can get a red rash flashing, you know, that kind of thing. [P16]

I think it can be, manifest itself in all sorts of ways. Strokes, heart attacks, rashes, flare-ups of skin conditions, lots of things, [P16]

But you can understand with heart because if you get anxious you breathe, adrenaline is, you know, boom, boom, boom. You can understand it with that, and, uhm, hearts and strokes, like heart attacks and strokes are kind of combined in some sense of seriousness. And, uhm, high blood pressure is probably, isn't it? Uhm, I take blood pressure medications, so I think that might have some... can cause stroke, so it's to do with blood pressure, but I don't know because I'm not, I haven't got any doctor, doctor training, or anything like that. [P16]

But, uhm, and my, mine's, I've been on the same level, so my blood pressure is being managed at the same level that it has, that it has for the last, I don't know, 8 or 9 years, I think, so... I feel like... my life isn't making... isn't that stressful to make my blood pressure worse, if you know what I mean. [P16]

You don't know, do you? You, you, I'm always surprised when I, uhm, when I think about people dying prematurely, and they seem to have it all, you know? They've got... not necessarily wealth, but you know, comfortable and, and happy, and then, all of the sudden, you know, they're just no longer with us, and you think 'oh my goodness, what's happened there?' But I do believe it's, it's a big thing. I think, uhm, almost the, the extent that... a temporary medical condition maybe, being stressed. [P16]

Very tired. Especially by 8 o'clock. Uhm, my eyes were kind of sore and just sort of, uhm, I had a bit of headache. Uhm, I think that might be because I was staring at the computer screen so long. [P17]

[...] she was talking about all those different things that you can do to stop your body, uhm, being stressed, I suppose, like having the chair in the right position, and, uhm... you know, she was saying you're doing a lot of looking at your laptop instead of your desktop [computer] and that's bad for your neck because you're looking down instead of up. And that is true I do get neck pain, and, uhm, you know, that's... so it is, it's kind of, yeah, I think it has some impact [...] [P17]

Oh, definitely. Yeah. And I think, generally, uhm, probably in a kind of negative way, uhm, because I think that it can sort of age people [...] Or, uhm, just generally kind of wear and tear on your body is worse. [P17]

Well, I suppose, uhm, heart attack. That's often linked to stress, isn't it? I don't actually know if that's true, that's my perception, that might be wrong [laugh] [P17]

If, well, if there's... in incredibly stressful environment that I was working too long hours, I was losing focus, I was losing my physical health, that is what I would deem maladaptive stress. [P18]

But physiologically not really, no, I just find... yeah. I understand, yeah, I know the repercussions of it, high blood pressure, this and that, but my blood pressure is, maybe because myself, well, now I'm selfish, my blood pressure is low. [P18]

Cardiovascular disease, uhm... in the past I've... I get better it now, but my breathing gets more rapid. Uhm... uh... our sexual health, it depresses your libido [...] [P18]

I think it's uhm... well, it could rise your blood pressure, and can make your heart work over hard [...] [P19]

Yeah, of course, well, it can affect your heart, can't it? And, and things like that, if, uhm... yeah, so I think it has, I think it probably has big effect on, on your body [...] It affects blood pressure, I'd imagine, and, uhm, you know, and that, that affects other, obviously if you have high blood pressure that affects other organs in your body. [P20]

Uhm, I, I suspect blood pressure must do, they've had to put a note on my records on doctors now, that I've got dreadful white-coat hypertension. So, you know, I'm worried, I'm stressing out about sort of whether or not my blood pressure is going be too high, my blood pressure goes through the roof [laugh] [P21]

Uhm... so... I believe there's a... there's a physical issue with... is it cortisol? The rise of cortisol level which is not healthy [...] [P21]

Physically, I, I suspect, it's not good for blood pressure. Uhm... not sure, it is no good to digestion either, actually, the whole sort of, yeah... Digestion isn't really a priority, is it, when you're in fight-or-flight, so... [P21]

I think probably, you've got high blood pressure, it's not, uhm, the best for you. [P22]

Uhm, they may take more, they may be off work more, they might be, you know, sick more. Uhm... that would be how I would identify it. If I, if I had one of my friends, and they're always tired, and they're always seem to be unwell, uhm, and they are short-tempered, I'd ask 'what's wrong?', I'd say [P23]

I'm being reduced slowly down, it's like a waste, wasting away disease. If you're stressed for long enough it's gonna kill you, so... at least that's what I believe. I can imagine people dying from stress. [P23]

I think it impacts on your immune system. I think you're much more likely to get things like coughs, colds, and things like that. [...] Uhm, how does it work? I don't know, I guess it's... uhm, it probably impacts, I don't know, it probably impacts on a number of white blood cells that you can produce? I don't know, something like that, I guess [P24]

And also you're gonna have higher levels of things like cortisol, and adrenaline, and so... you'll probably gonna less sleep, or have more disturbed sleep, I suppose. Uhm, and I think, I don't know the full interactions, but I guess in those, those stress hormones will, you know, if you have them a lot, you'll have some physiological effects. I mean, certainly things like adrenaline, for example, so in the short term it's gonna raise your, your heart beats and your blood pressure, and things like that, so... yeah. It's gonna have that sort of effects, yeah. [P24]

Do you know, I can't... if I can't deal with it, and I can't cope with it, then I feel totally out of control, and that's what stresses me, something that is out of my control, and it, and it's making me either ill, tired, or irritable. [P25]

But then there's things I'd go through and they cause me a lot of stress, and they make me ill. And I've had those situations where I have been ill because I was just totally drained and, and stressed out. [P25]

So, when I was going through like the, uhm, domestic violence, I completely, my shoulders just completely shut, seized up. I was bent over. [P25]

[...] because my neck just seized up as soon as like I get stressed. [P25]

But, but that my neck just tends to seize up. And that's when I know that I'm, I'm stressed because then it becomes an issue with my health, how I feel. I'll get wound down, uhm, I'm just not well. [...] and my health is deteriorating then I know that I, I'm stressed [P25]

It's really, really bad sort of situation, and I know it's really, really bad if it starts like affecting my, my neck, and things like that. [P25]

[...] if stress, and it's like, starts causing to affect your life where you can't eat, you can't sleep, you've got pain in your neck, you know, you bend over, double [...] [P25]

Like I said some people go to, go to Alton Towers and have the time of their life, whereas that would just, all the way there, the night before I'd feel sick [...] [P25]

But, but now I think , when I was like, you know, I was completely bent over, and I couldn't... couldn't do that. [P25]

But like... if I don't feel... you know, when I was being bullied, and when I was at work and had many issues, then like, it just put like I can't eat, I can't sleep, I, you know, in the like, I think... I'd just, you know, so that's when it starts personal, and this is like the pain's there, is just like a seize-up sort of like [...] [P25]

Itself... I mean it must do, I mean it must do because, you know, walking around with this sort of the bane that stress was causing me for years... I mean, in those what it did to me health wise, I mean, there's no repercussions, I suppose, physically, now, but I don't know what if my blood pressure was higher, uhm... you know, or those sorts of things. It must have an effect, yeah. [P26]

### Sleep disturbances/Fatigue

[...] so these are normally the triggers that, uhm... sometimes, you know, making our heart beats slightly more, or you know, not sleeping [...] [P1]

I think, I think your body will tell you that it's too much, I think you've got things that are too concerning for you, you won't sleep [...] [P1]

I think it's not nice to be lying in bed, worrying about something that is going to happen the following day. It would be nice just to have a deep sleep and a nice dream, rather than just lying in bed waiting for something to happen that is obviously going to keep you awake, is the more you think about it, the more you worry about it. [P1]

[when not stressed] Yeah, and I think you're more willing to do stuff, you've got more energy to do things [...] [P1]

Uhm... yeah, they usually have these periods they'll be up all night, drinking coffee, and I'll come in next day, sleep, they had no sleep, so they'll be even more grumpy, uhm, yeah. [P2]

Uhm, it's quite exhausting sometimes, it can take the energy from you, uhm... [P2]

When I think of stress, I think of completely panic [...] not having enough sleep, a lot, yeah, a lot of shouting. [P3]

[...] slam my door and just sit down, like, 'oh god, I'm so tired' and I would sit there staring into space for like a minute [...] [P3]

You can't sleep because you, do you know what? My teeth were actually chipping. [P3]

I don't know why, and uhm... and perhaps when I, it affects my sleep. Obviously, I don't sleep that well, and I grind my teeth. [P3]

But when it comes to being in a stressful situation where is that bad stress, and non-manageable, I'd say it's a, it's like a ticking time-bomb in your head, like you just don't know when you gonna kind of break down. [P4]

So I found then you're constantly not sleeping properly, say you're, you're waiting for something to happen, almost. That's how I feel, I think, this, the lack of sleep doesn't help, because I think it's like a vicious circle. If you don't get your sleep, I think you then, everything then becomes too much, because you are so tired. For me, when you get extra, over-tired, everything seems horrendous, so everything seems ten times as worse as it perhaps even is. But because you're not sleeping properly, everything just gets too much. [P5]

I don't, I don't, I wouldn't, I don't sleep very well if I, you know, like I feel under pressure, or slightly stressed [...] [P5]

Uhm, he, he, I think he sleeps when he is under stress, so he sleeps a lot. Uhm, and I'm the opposite because I'd be awake [laugh] [P5]

Uhm, I think my, you've, you can feel quite, uhm, deflated, almost. You know, sort of, you feel drained when you had a, sort of a stressful situation, I think. When you, if you get yourself so

stressed about something, I think all your, you know, you don't, your body, obviously your adrenaline's going. And I think afterwards you feel quite drained, so you feel quite tired, and, and you're quite lethargic. [P5]

I think for me it's quite exhausting sometimes. [P5]

I think if you have it too much, like if you're in a job where you're totally stressed, where you're totally exhausted by it all the time. I, I don't think that that can be a good thing for you, or your body. [P5]

Uhm, yes, during the night when the votes were being counted I was constantly getting up, looking at my phone to see which way it was likely to go. I think, wow, why am I doing that? Why am I interrupting my sleep pattern to worry about something that will probably never happen anyway, whatever the vote comes in the end [P6]

But not having enough sleep, and not the comfort of you at home, because obviously you can sleep better when you're at home, where it's a lot more comfortable. [P8]

I'm being so tired that it's actually physically affecting how I'm doing stuff. [P8]

Uhm, I'd say they're not at their best, uhm, generally, uhm. So it might be tired-looking, uhm [...] [P8]

Uhm, if I feel really tired, and not, not like I can focused, and I feel a bit, I feel like crap, really [laugh]. If I feel a bit rubbish, uhm, and yeah, I think, if you can't keep your eyes open, I mean, and often it kind of ties in with time, it's for me, so if I'm really tired, I'm overtired and I can't actually focus probably [P8]

Or if I can see there's not enough work I've achieved then, then I'm, I guess, physically, it's just being tired, or being irritable, or... [P8]

Obviously there are still days where I'm like I'm so tired, so stressed out [...] [P8]

Uhm... somebody who takes, like, uh, take more time to do the things they're achieving, uhm, less likely to be tired... sort of. [P8]

But it's the stress of me, myself doing everything, so it's quite tiring [...] [P8]

[...] and also if you're not getting enough sleep because of stress that obviously has a huge impact on how you live [...] [P8]

Uhm, well if you've got sort of a team that are being consistently overworked, and put under lots of stress, and there's no outlook for it, and it's not doing anything constructive, and it's just ongoing, then I think that can lead to mental health problems, or feeling, yeah, not worthwhile, or sort of people not, not being OK, sleep problems, that sort of stuff [...] [P8]

Your, like your body not really working properly because you're too tired to do it [to eat]. [P8]

But you are having to do it anyway, then it just makes you feel really terrible, uhm, and you're tired and stressed out [...] [P8]

They'd probably have bags under eyes, because they've got no, had no sleep. [P10]

Uhm... I guess it's just going back to, like, if you've got so many responsibilities, it'd like, you'd be probably waking at six am, and you're not going to bed till like two or three am, you are not getting this amount of sleep. That's affecting your day, like, you look tired [...] [P10]

No. If I'm very stressed, I'd... the only thing that I find if I'm stressed like when my mum died, I'll, I'll clean [laugh]. And I'll stay out late, I won't go to bed. [P11]

You don't sleep, you don't sleep properly, you're up in the middle of the night doing something, working it out, you know, I've been up at 4 o'clock in the morning thinking of I've got to get that done, and things like that. [P12]

[when not stressed] Yeah. I mean, you're sleeping. Uhm, not all the time, just a normal time. [P12]

Because I don't sleep when I get obsessed with something. You know, you get obsessed with things when you're stressed out, so... [P12]

[...] so yeah, volatile emotions sometimes, like quite extreme emotions, tiredness. [P14]

Or... I'm really tired, or I get really clumsy, but that could be sleep deprivation, because, obviously, I've got young children – that doesn't help. You're just... uhm, I don't know, like tired, you're just like physically-like exhausted [...] [P14]

[...] while when you're at work it's like peaks and throughs , like, I don't know, I'm not, for instance, at the weekend, I'm not that tired, while during the week I, like, fine, I'd go to bed like half eight [laugh] because I'm so tired. But at the weekend I can stay up until one or two, so, obviously, I think stress makes me tired. When I've had a really stressful day I'm like, like [inaudible 34:10] maybe get home I'm not sleeping, and then another day comes [laugh]... will go then [laugh] [P14]

I... Because I'm, you get, when you get stressed and you're frazzled , there's probably more like 'should-do' for like myself, or for like the family. Even like, something like small is, like the stress makes you so tired [...] [P14]

Like I say, I've, I always feel tired [...] [P14]

In my current situation how it is to be stressed? Uhm, probably, there's probably quite a strong link with being overtired [...] [P15]

Not overly. I think I can sort of take a deep breath, like little day-to-day things, overtired, but that's minor stress comparing to like a huge overwhelming stress. [P15]

I think it was impacting on his health, on his everyday sort of behaviour and things at home, because he was exhausted, and... yes, so I would say definitely it does. [P15]

[...] my current headteacher is going through marriage breakdown right now, and I can see that her stress and her lack of sleep and things is impacting on whole staff team, and her sort of approach towards every, every aspect of the school life, really. [P15]

It becomes too much... again, I would, I would, I would think if I was too stressed about something, that would manifest itself in me not being able to sleep very well, and therefore I would think I would need to do something about it. [P16]

[...] and, uhm... when I don't sleep. Yeah, that's the symptom. When I wake up thinking about things. [P16]

I think, uhm, it manifests itself in lack of sleep for me if I'm stressed, I'm worrying about something. [P16]

I: Uhm... so that was about being stressed, what about being relaxed? How does it feel?

P16: Sleeping [laugh] [P16]

Feeling relaxed... yeah, sleeping well, that kind of thing, yeah. [P16]

If you feel too much stress, uhm, then that can kind of lead to, uhm... well, ultimately, I suppose, because of the physical effects that stress has on your body, that would just lead to you kind of breaking down from exhaustion. [P17]

[...] if you've got kids stressed by exams, want people to be just at right level of stress to be motivated but not to go overboard, to make people feel, uhm, you know, just exhausted and burnt out when they can't do anything. [P17]

Or they would just, you know, work so hard that they would be exhausted. [P17]

Yeah... they sort of be tearing their hair up, physically like this [showing tearing hair up], they might be quite sweaty, uhm, kind of, uhm... look tired, uhm, they, they'd look anxious, I guess. [P17]

I think it makes me tired. [P17]

Very tired. Especially by 8 o'clock. Uhm, my eyes were kind of sore and just sort of, uhm, I had a bit of headache. Uhm, I think that might be because I was staring at the computer screen so long. [P17]

Yes, I did. Yes, a knot in my stomach, uhm, kind of heart beating a bit quickly, uhm, and the tiredness, yes, I did have those, yeah. [P17]

Uhm... and it probably makes me more tired, uhm, so probably has an impact in respect of that. [P17]

So that must have like across workplace as well, and, you know, I, I'd imagine that between 6 and 8 pm last night, uhm, my work was affected by me being tired which was brought about by the level of stress. [P17]

[...] you know, sleepless night the night before because I'm stressed about that situation doesn't help with coherence [...] [P17]

Whereas some people I know, so, they maybe haven't had that, uhm, do you know, insomnia, whatever they end up, end up things being worse, because physically they can't switch off what's happening. [P19]

[...] and then spending all day visiting my mum which was quite tiring in itself [...] Uhm, so, yeah, and, and tired after the day before, and, you know, sometimes kind of stressful with worrying about her. [P21]

It's just... yeah, and then you, so if you're not careful while you do, if you're really not careful you nearly lose [inaudible 41:48] with that, you can eventually, you tire and you... that's very much that fails, actually. [P21]

Digestion isn't really a priority, is it, when you're in fight-or-flight, so... uhm, and sleep too because you, oh gosh, yeah, the times when you're preoccupied, you know, waking up in the night, and just getting a bad night sleep which is... again not, not too healthy. [P21]

Because if you're not, if you're not getting that, if you're not getting enough of the right quality of sleep that's... and just processing stuff, what's happened then that's quite detrimental, it's just not... I don't know, there's something about, sleep is a mystery, isn't it, really? [P21]

Uhm, just generally anxious. Just generally, uh, tired, and, uhm, irritable. [P22]

[...] I knew that wasn't right because you've got to eat, because you're not well. Uhm, I couldn't sleep. [P23]

Because I didn't have time, because I was always working, and always thinking so I was mentally drained by the time I would finish my day. So all I wanted to do was just sit on a couch and do nothing because I couldn't face having to do something else that would require me to think because I'd spent my entire day thinking. [P23]

Yeah... I used to get stressed out by death. That used to stress me out a lot, and I used to, it used to keep me up at night, it'd always been the thing that popped into head in the last minute just before I'm going to sleep, and going 'oh, what happens after you die?' [...] It's one of those things that would keep me up, so I had to change my belief systems [...] [P23]

Uhm, particularly when I worked for that rental company, every time I woke up in the morning, I'd sleep terribly, and then in the morning I would wake up and I would just not feel well [...] Uhm, so, you know, for me it was, you know, like a stomach anxiety and not being able to sleep well [...] [P23]

They may... if it's prolonged then I would say they're probably tired. [...] If I, if I had one of my friends, and they're always tired, and they're always seem to be unwell, uhm, and they are short-tempered, I'd ask 'what's wrong?', I'd say. [P23]

And also you're gonna have higher levels of things like cortisol, and adrenaline, and so... you'll probably gonna less sleep, or have more disturbed sleep, I suppose. [P24]

Hindered things like sleeping, and being able to concentrate, and, uhm, yeah. So, that was extremely stressful. [P24]

[...] it was work and then I had to look after my parents and I was tired and I was driving, and I couldn't, and at that I felt overloaded, and that stressed me out sometimes [...] Uhm, I don't know it was responsibility, or I was just tired, and I think sometimes, you know, uhm, I was on antidepressants, so I'd been on antidepressants for quite a few years, [...], P25]

[...] that's what stresses me, something that is out of my control, and it, and it's making me either ill, tired, or irritable. [P25]

Oh... I get very upset, I'm very emotional, uhm... and I normally sleep a lot, makes me sleep, it makes me really tired. [P25]

Yeah, I... I can't sleep, you know, it stops you sleep, because you start going over and over things in your mind, and you start... [P25]

[...] if stress, and it's like, starts causing to affect your life where you can't eat, you can't sleep [...] [P25]

So it does affect my emotion, uhm, but yeah, kind of affect my sleep, and it's constant to me. [P25]

I get emotional, I won't sleep, I won't be able to eat [...] [P25]

Yes... but it just wasn't sort of. I haven't got energy, I was exhausted. I just felt exhausted, you know. [P25]

But like... if I don't feel... you know, when I was being bullied, and when I was at work and had many issues, then like, it just put like I can't eat, I can't sleep, I, you know, in the like, I think... [P25]

Yeah, I think it affects your concentration at work [...] you do stupid things, you might be rude to someone, you snap at people. Uhm, you know, you're short-tempered because you've not slept properly [...] [P25]

### **Stress-health indirect pathway**

[...] you might be sort of having perhaps a drink, or eat you know a wrong kind of food if you're maybe stressful. Different people deal with things in a different way, may get a giant chocolate bar or... a bottle of wine or couple of large beers, so there's, there's ways that would, would sign, would tell you that you may be stressed. [P1]

[...] so some people can be chocoholics, some people can be alcoholics, or some people will just eat something that they really want to eat just to try and cheer them up. It might be a curry or a pizza, or something that may be perhaps not as healthy as it should be. [P1]

I'd lost lot of weight before I finished work because I was being healthy, I was dieting, and I think since I've stopped working, whilst I've got a different kind of stress, I'm, I am eating more biscuits and chocolate and I've put a little bit more weight on. [P1]

I certainly think that people who are constantly under stress probably don't take care of themselves as much as someone who isn't stressed, and can focus on other things. Uhm... I suppose it can, it can affect health [P2]

I think a lot of people when they're stressed, turn to food a lot, so-called stress eating which is a common term nowadays. Uhm, and obviously that will have a detrimental effect on their health when they're eating a bit too, uh... Uhm, yeah. So that's one thing, uh... that's probably main, main... or... yeah. [P2]

Uhm... they start working harder, the work they're doing, I suppose, uhm... in a less controlled way... yeah, and then like do things like kind, I said, just overeating, you know [...] [P2]

[...] if they were in normal state of mind, uhm, they would say 'no, I'm not going to eat the whole bar of chocolate', but if they're stressed then they would just go and eat it. [P2]

I think it affects how healthy you are. [...] Well, it stops me eating normally. And it either makes me exercise more or less. [...] So, if I'm feeling really stressed about my body, then it makes me exercise more. And when I'm stressed about like uni work, I'd probably exercise less. [P3]

Uhm... yeah, my eating kinds of goes out the window, huh. I usually don't eat like all day, and then I just want to eat so much in the evening, so many things, like, so much. [P3]

Uhm... Oh, they'd usually just say 'I'm stressed' [laugh]. Uhm... but yeah, they may, they may not eat as well. [P4]

Some people don't eat at all. Some people eat a lot less, I eat more, and rubbish [laugh].

Uhm... yeah, I feel, I feel less, yeah, I'm less inclined to want to make myself a nice meal. [P4]

They're not eating lunch, you know, they're staying at their desk all the time, uhm, maybe they're just sort of on the go all the time [P5] self-care?

As an ex-smoker, you used to have a cigarette because you were stressed [P6] Cheering up or Arousal regulation?

I used to play a lot of sport [...] But they all dropped off because I didn't have the time, uhm, to actually pursue those sort of things, because time was such a scarce resource[...] [P6]

I'm also thinking of some of those, uhm, can't, maybe... they're not keeping their hair tidy, or their clothes tidy, could be a sign, could be, I'm not generalising... well I'm generalising, sort of... that could be sign, uhm... doing strange things... [P7]

It can stop you, perhaps, going for your regular walk, it could, uhm... your hypothalamus, or make you eat more sugar [laugh] and you feel that's gonna do you good when it's... the brain won't kick in the same, well, actually, that's not good. [P7]

Long-term stress could make you turn to the wrong diet, so overdoing sugar, overdoing alcohol, things like that. Consequence – diabetes type II, for example, uhm, uhm, not getting out, not exercising... [P7]

Because you're trying to escape, and... if, if I offered you a slice of bread, or a bar of chocolate, 99% of people would take a bar of chocolate. Because... it's not because it maybe tastes better, sugar itself is a drug that your body remembers. We don't treat it as a drug, but it is a drug, uhm... so you're... and drinks – water, Coca-Cola, almost a 100% of children will take the Coca-Cola, and it used to, uhm, I mean the chemical reaction is this to, if you [get] a spike in your glucose level which is a happiness thing, although it's short-term. Uhm... a kid isn't gonna say I'll have the water because it's good for me, and in the long-term I'll feel good. [P7]

Yeah, yeah. Yes, if there's too much, for example, like a pop star, you'll be on a high after a concert, and because it's gone too high... the down is tremendous, they turn to drugs, or drink. Yeah, because you don't feel this euphoria, so you just look for it. And you just try to get it in any, another way, maybe not very healthy. [P7]

It can. Yeah, it can have an effect on health. [...] Uhm... because if people are stressed out they, they eat more than they would normally, or they may eat less than they would normally, or... you know, the times of eating, or things that are not as good for you. [P8]

And also you won't have enough time to go for a walk, or go to the gym, or do whatever it is that makes you feel healthy. [P8]

Because people, if they're stressed, they're like 'I don't have time to eat' so that then after a few hours you're gonna feel terrible. [...] Because I think when you're stressed you can be unreasonable. So if there, somebody that is prone to being unreasonable with themselves, they will say like 'ah, I don't have time to do any of these things' [P8]

Uhm... I, I know that when people get stressed, they're, that when like kind of eating disorders and stuff like that kind of comes out. Uhm, I know that once some people really are stressed, they eat more, or like they just forgot to eat, and, uh, kind of damage their health that way, but, uhm... [P9]

Uhm, definitely, I think. Because I feel some like stress can lead to, uh, obviously negative implications on, like, I guess, what you eat, what you drink, what you feel like. If you're making, I guess, bad decisions as such that can lead to like adverse consequences. [P10]

Uhm, I guess, like, if you've got some responsibilities, and you're stressed, and you're in a rush, maybe you pick the most convenient, like, thing available, maybe you'll just like treat yourself to something to make you feel better. Or maybe you'll have a few beers, or a few wines because, like, you maybe need that to feel like less stressed, or you need that to, like, cope. Or maybe you'll have the cigarette, or something. And that will like influence, like, your health over the long term. [P10]

You can, you can go to the other extreme, you know, if you're literally like not stressed at all, you don't care, like what you do, what you'll eat, what you behave like. [P10]

[...] you don't eat because you're so stressed, and you've got so much work to do, and so many responsibilities, or you just, or it'll maybe, or you'll maybe choose not, like, a great thing. [...] The only way I can think of it directly, like, or indirectly like, correlating it through like your behaviour, like what you eat, or maybe if you, what you drink, or if you smoke, etc. [P10]

Oh yeah, because I know what stress is and there's different levels of stress. I don't wanna be so stressed that I'd, well, I've never been stressed enough I don't eat but, you know, uhm, I don't want to be so stressed that it turns me into drink, drugs or god knows what. [P11]

Physically, you don't care, you know... Although, I'm not that stressed, because I suppose if I was that stressed I wouldn't care if, I suppose if it goes as far as, I don't know, kind of clothes [...] [P11]

Well, I mean you can sit and wallow, like they say wallow in your self-pity or wallow in a soak, if you want to, if you've got time [laugh]. [P11]

You're eating good food at, uhm, the right times. You know, I've just had all this chocolate, because it was cheap. I think to myself, it wasn't really because it was cheap, it was because I was stressed out at coming here, really. [P12]

[...] he smokes a lot, and he says 'I smoke because I'm so stressed out by everything' [P12]

Also when I've got so much at work I sometimes forget to drink water, or get to the toilet, because you're just so busy, and that... water obviously is, uh, you know, so important for your immune system to function well, things like that, and toilet, obviously [laugh] [P14]

Uhm, comfy eating probably, uhm, weight gain, uhm... or not eating. [P15]

Feeling like I'm not in control, got too much on, not eating properly, not having enough time to do what I need to do – that would be stress for me. [P16]

I do tend to lose weight if I'm stressed. So I don't think I'm very stressed very often [laugh] [P16]

Some people get stressed and they turn to alcohol. [P16]

[...] it can, uhm, you know, lead to... well, lead to poorer health, really. I'm just, I'm just trying to think of an example. I suppose, if you're working very hard then maybe, and you're, and you're very stressed, and you try to get everything done, maybe you're not making great choices about diet and things like that. [P17]

I've actually come across two women, two academics recently who talked about taking their laptop to bedroom with them and like 'oh, I've got too much work to do, I've got to take my laptop to bed, I haven't got time for running, or anything like that' [...] [P18]

I mean, people with chronic stress from what I gather... let it, let it invade everything, it stops them doing physical activity, uhm... [P18]

[...] he's still massively overweight, and it's just, that's it, he eats to indulge because that's how he releases his stress. [P18]

Uhm... it caused me to drink too much sometimes in the past, not massively, but it caused me to overdrink, perhaps. [P19]

Uhm, but I think certainly if people are stressed, you can put weight on, uhm, you can... again I'm not an expert on this sort of stuff, and I, not an issue for me, but, uhm... I know there's a lot of, you know, you can have a lot of side effects from stress. [P20]

Then, obviously, there's thing you start taking tablets, and, uhm, you put on or lose weight, or... [...] [P20]

Yeah, I think so. I think if, I mean, uhm... if you, uhm, I would like I said my role was very stressful and I did that for a couple of years. Now I would say by the end it started to make me a bit ill. Uhm, because I found when I, I am, stressed I don't eat enough, I don't necessarily look after myself, uhm, you know, so go home, not eat enough, maybe didn't drink a coffee in the morning, and then you've got no appetite, so I would say it makes me look after myself less than if I'm not stressed. [P22]

For me... uhm, it's... I feel it in my stomach, if I'm really stressed I feel it in my stomach, so I sometimes feel ill. [...] I would just not feel well, and I would be hungry, but, you know, I wouldn't want to eat, uhm... and then I would, eventually get to work, and then the manic-ness of that, of, you know, being pulled in million directions would make me forget that. [...] Uhm, so, you know, for me it was, you know, like a stomach anxiety. [P23]

[...] and I would just not feel well, and I would be hungry, but, you know, I wouldn't want to eat, uhm... [P23]

[...] I was normal weigh, I could be active in a normal way. When I was there, for long period of stress, particularly when I got to the assistant manager role, I was losing weigh rapidly, I didn't want to eat, so I knew that wasn't right because you've got to eat, because you're not well. [...] My family members were coming up to me 'are you OK? you don't look well'. [P23]

And then, I couldn't eat, because I felt sick. That was why, so a combination of those, constantly working hard, not eating enough made me to lose weight, and then I had no energy, so it was just a vicious circle of things that would, you know, keep going round. [P23]

Uhm... I've heard people eat. People stress-eat. I don't. [P23]

Uhm... I think... like just in general, if you get very stressed, you can be thinking more negatively, uhm, and then you probably make, like, worst choices if I'm very stressed in a particular period of time, I'm probably slightly less inclined to go and do exercise, and things like that, which obviously has an impact on your health, so... yeah. [P24]

[...] and it's like, starts causing to affect your life where you can't eat, you can't sleep [...] [P25]

I get emotional, I won't sleep, I won't be able to eat [...] [P25]

You know, and then you've got the children dealing with abuse, and, you know, how can you come through things like that? It has, you know, then they have dependencies on, on things because it's like they're clutching onto something that's safe. [P25]

But like... if I don't feel... you know, when I was being bullied, and when I was at work and had many issues, then like, it just put like I can't eat, I can't sleep, I, you know, in the like, I think... [P25]

### **Social interactions**

I think you might notice then they may be more abrupt, or more sharp with you, they might be slightly more aggressive when they're talking to you uhm, they might almost try to ignore you, because they're worrying about something [...] [P1]

They might start to get more aggressive or shout a little bit more, so I think you can still genuinely guess even if they were a stranger, from the way that they're talking to you, their body language, maybe will tell you that they're stressed. [...] They might sort of be waving their hands around you, so showing that they're slightly aggressive, they're not happy [...] [P1]

I think you can tend to shout at people you don't mean to shout at, primarily your family [...] [P1]

[...] when you get the stress levels, you can become a little bit more withdrawn and less willing to socialise with people. [P1]

There's lots of ways you that you can, you can be less affectionate, you can just become more internal and more removed from people you, you like, you don't want to talk to them. You can be, or you're more aggressive with them, with the way you speak to them, uhm... yeah, I mean, there's lots of... by, by having stress it can affect relationships, especially if you don't talk to the people, you, you need to talk to. [P1]

[...] the stress might be because you had disagreement with them about maybe something [...] uhm, so sometimes it can, it can be that person, or something that that person's done that can be the trigger to the lack of affection, the, you know, something's gone on in the house that means you're seeing them with bit more resentment [...] [P1]

Typically if I knew one of my friends is stressed I would leave him to it, because they seem to be irritable a lot of time, uhm, I know they need to get something done, they're gonna to do it, and they don't like to be interrupted while at trying to do so. [P2]

Uhm... yeah, they usually have these periods they'll be up all night, drinking coffee, and I'll come in next day, sleep, they had no sleep, so they'll be even more grumpy, uhm, yeah. [P2]

I get quite internalised, and I'll just focus on me, uhm, if I walk into my kitchen, and my flatmates are there, most of the time I'm, I'll chat with them, but if I'm stressing out with assignment in my room and I need to get me a coffee, I just walk in, make my coffee and go out. Uhm, I tend to shut other people out and focus on the task at hand, I think. [P2]

[non-stressed people] Uhm, usually very friendly as well. They seem, no one seems to dislike them. Uhm... yeah, they get on with everyone, generally. [P2]

That's a good question. I think, I'm focused too much on the task at hand rather than having a meaningful conversation with them. There's probably no reason, why I couldn't speak to them in that situation, but this feel kind of, uhm, just when in bad mood, or when I'm stressed, and I don't feel like talking to them at that time. [P2]

I imagine that it would I can't think of any example of the top of my head, but I would definitely say that it would affect relationships, uh, if someone's under stress it may, uhm, don't commit so as they could, then, you know, could be tension there. A family, if... uhm, hypothetical family if father is always at work, and when he gets home he gets stressed about his work. It does affect relationship with his children, or his wife, or whatever. [P2]

I imagine that they would probably shut themselves away a bit. Uhm... or at least should be less social. What I'm saying, the people in my 6th form, the people who were less stressed seemed to be happier, with more friends, [...] [P2]

I was stressed out, uhm, I'd snapped at one of them and said 'no, I'm not going', I'd got angry, probably caused some tension there, uhm, something like that, yeah, affecting relationships with other people. [P2]

When I think of stress, I think of completely panic, and I think of shouting, so... [...] a lot, yeah, a lot of shouting. [P3]

And if someone comes and he says anything to you, even if you're not doing anything productive, it's like 'this is my time! you need just get out, you need just get out of my box now!' and if you don't I'm just gonna bite your head off, like you need, you need to stay away from me. [P3]

Uhm, but yeah, so I know that I shout a lot, and then I get really inconsiderate, and selfish, and... [P3]

[...] but the feeling, I've just panic, I just, I just need my time for myself, and I just need you to just not take my time. It's what makes me shout [...] [P3]

[...] they start snapping and sort of saying little comments at you, so where, where I used to work, the manager used to get quite stressed, and when she got stressed, she would sometimes cry out of anger just because she was so stressed, uhm, and she's start blame-shifting, so like putting the blame on people for stuff [...] [P3]

Uhm... and it just felt like... if anyone said anything to me, anything, just... 'would you like a drink' I would be like 'No! Just get away!' And I would be like, oh my gosh, the amount I swore, like I don't like swearing, I don't really agree with it, but like literally every other word was just like 'no', like... yeah, like really, really bad. All the time. Because I didn't have the brain space to think of any normal words, it's just worse, it's just bad, it's just to get someone away from me. I was leaving notes on my door, passive-aggressive notes on my door like 'don't talk to me',

stuck it on my door, then like 'do you want food?' – 'No! I don't want any food! Just get away from me!' [laugh] Like, it was awful of my, my family was falling apart around me because of me, I was literally the walking version of a headache [laugh] for everyone else [P3]

And just having almost as if it were a road rage to everybody. Always. [P3]

I think, I would probably tell myself, I'd probably, I would probably try, but fail to put some time in to stop myself getting so angry, and, and stress it out at people. I don't like the version I come to other people. It's OK when I'm stressed on my own, and if I feel like that way. Although it's not pleasant if I, if it's just me it's fine, it's just me. No one else, I'm not affecting anyone else. But as soon as I snap at someone, I think 'not, that's not acceptable'. Why, what gives you the right to that? And it really frustrates me that I get that way, and so I think I probably would, I'd, I'd do something, anything to just... just stop the snapping on the people. Because other people aren't trying, they're not trying to take away my time, they're just trying talk to me, they're just trying to offer me a cup of tea, whatever they're doing, like, they're just trying being a nice person, being my friend. And I'm not doing the same back, but pushing them away, and I think that hurts my relationships with people when I'm not stressed. Because they are less willing to go 'Oh, do you wanna do this?' 'Do you wanna come and...?' 'Do you want some food?' Because they're scared that I'm gonna shout at them [P3]

Because, I think, firstly, because I shut off. Obviously, I, I damage a lot of my relationships at that time, my being snappy, so it's me having some kind of human interaction, huh. [P3]

I don't, I, when I'm really stressed I'd definitely cancel all social plans I had. That time I'm saying about, my, uhm, when I had that two books assignment, lots of stuff, I had like someone's 21st birthday party to go to, an engagement party, and I cancelled everything. Like I had clothes, I'd gonna book clothes for the occasion, and I just cancelled, I couldn't, I just had to sit in the library doing my work. [P3]

Uhm, or perhaps... I think there's so many ways. They can, they can seem distant, uhm, because they think about other things, uhm... they could choose to isolate themselves. [P4]

I think, if you undergo, uhm, a high amount of stress, uhm, like the negative stress, then I can see how it can negatively impact any relationships with people around you, like the way you respond to things... [P4]

[...] maybe choose to isolate yourself which ultimately affect the other person. [P4]

[...]I can get, uhm, anxious with people, get short, short with people, so like short, not short, short-tempered but little things really annoy me [...] [P5]

Uhm, I guess, every, you know, people feel it how you are, don't they? So it affects how you, how people feel with you, about you, how you, how you're behaving. If you're in a, so stressful situation you can be quite focused on just that, and maybe sharp with other people, you know, not doing things about the people, you just get focused on that one thing that you feel it's stressful. [P5]

Uhm, I think it can affect you, your relationships with other people sometimes if you're under stress, because you're perhaps... if you feel under stress yourself, sometimes perhaps you don't tolerate people, you find them irritating, uhm... or you might feel that you don't want to go out in the situations because, for whatever reason, you don't want to be with those people, yeah. [P5]

And I think if you are under stress, if either one of you in the relationship are under stress, I think you do tend to take it out on, on each other. You know, you can be... you don't want to do stuff with each other because you're not feeling right, you're worked up about the... you might be worked up about it, but the other person might feel that's not a stressful situation, and they can't understand why you're getting so stressed and worked up about it. Uhm, so I think that can, you know, affect your relationship in that respect. Because one of you is saying 'oh, this is awful and I've got...', you know, 'this is so stressful, and I've got to cope with this', and the other person is thinking 'what just it means? that doesn't seem very stressful to me, why are you getting...?' you know, so you tend to be a bit crossed with each other. [P5]

Somebody showing stress could be shouting, agitated, uhm, expressive, throwing their arms about [...] [P6]

Uhm, stress to me as well can be shown in anger. I can say things that probably I shouldn't say, I can swear, uh, uhm, and I can think thoughts about what I'd like to do with the individual who's causing me stress if I was just allowed with a rear room for ten minutes. But that's, that's just a natural reaction, I would think. [P6]

So, uhm... when I've time frame that is acceptable to me to find the solution, uhm, I'm gonna find it, and therefore, uhm, apart from display of anger management, shouting, swearing [laugh] [P6]

Uhm... I might become a bit sharp with my... speech to people, altering their questions, or replying to something. [P7]

You'll be more abrupt with each other, I can speak from the marriage point of view, you'd be more abrupt, [...] I guess if you're dating someone it could affect the relationship to the point where you're... not bothering to date them anymore, uhm, you're not bothered, until they, they'll apologise, or if you think they should apologise. And it could affect relationship in that way, that you're boasting in the same way, and by not talking, you land at parting when in fact it might have been more beneficial in the long term to talk about it, and it could have been in a great relationship, ended in a marriage possibly. [P7]

And probably a bit more irritable than somebody who is not stressed. [P8]

[...] people can be stressed without realising they're stressed. And actually that can make them take it out on other people [...] [P8]

Or if I can see myself being snappy with other people that's probably when I'm stressed. Or if I can see there's not enough work I've achieved then, then I'm, I guess, physically, it's just being tired, or being irritable, or... [P8]

Yeah, I think it puts pressure on things, I think if somebody is feeling stress from work, or from something they are likely to take out any sort of negative feelings they have from stress on other people. So I know, if you, almost if you have a boss that is really awful and that makes you really stressed out, you can't answer back to them, so you're likely to sort of vent that stress elsewhere, and that can often be the people, vent the stress towards people that I love because I feel more comfortable with them, so I think a lot of relationships have that dynamic that people can't say what they really feel in the stressful environment, but then [pat the desk] sort of leave that stress out elsewhere. [P8]

Uhm... she becomes very irritable [...] [P9]

Uhm, they, they're very, they're much more irate, they're very, uhm, almost aggressive, uhm, and it's almost panicky. Uhm, obviously, it's not very pleasant to be around somebody who is stressed, because there, they haven't, uhm, they can be not very nice. [P9]

Yeah. Definitely. I think, if you don't have a good group around you, then, I think, stress can really drive you away from people. Almost seclude yourself. [...] Because if you're stressed, you... you almost separate yourself because you need to focus on what you've got to do, and you... It's almost like you, you'd do something to someone, say you get an argument and then, because you're so stressed you're not thinking about trying to rebuild that [inaudible 33:25] and just separate yourself. [P9]

Uhm, I would say, if a person is stressed would be quite agitated, would be quite snappy, a bit kind of be walking everywhere very, very fast. [P10]

That's affecting your day, like, you look tired, you're not performing at your best at work, you're not giving everyone like you're 100%, you're being snappy. [P10]

I'm not even like speaking in, like when I do speak, then I'm like kind of like quiet. And then, I'm not my normal self, and, uhm, like I'll just keep kind of sentences like short. And that's really how I know myself I am stressed. [P10]

[...] and I think it influences people's behaviour in a way, that they act to other people, in a way that they like act to themselves, how they feel in a general sense, just like in that they, whether it makes them positive, negative, whether it makes them like snappy [...] [P10]

[...] if I do something a little bit wrong, and I'd feel like a person that I'm with is stressed then they'd react, maybe, in a negative way to that certain situation, and maybe like it makes them snappy, and they say something that they wouldn't normally say... uhm, only because, obviously they're stressed, to their friend or something, just because maybe they've said something in a jokey way, and they interpreted it the wrong way, and their behaviour is changed based on the fact that they're stressed. And I think it does affect, like, social situations quite a

bit. Because I guess, it's like, obviously it's like relaxing, if you're relaxed you'll talk about anything with your friends, I guess. But when, when you're stressed, maybe you'll hide it inside, and you'll be quiet, and you won't say much because you are... or something said, is said out of context, and you take it the wrong way, interpret the wrong way, then you're reacting in a negative way to that stimulus, to what has

You've like, uh, uhm... I think either they'd be like extremely, like, quiet, and they'd just be in this, like, I guess, not mood, just like this behaviour, or just like a little bit like down on themselves, and just like keeping themselves to their selves. [P10]

Totally out of control, and exasperated I mean, I used to just be, uhm, bad-tempered and shout. Now, I'm just exasperated [laugh]. [P11]

Or they are shouting, and just being louder, or just at the verge of act because they're taller, bigger, louder. I know, you know, when you're in that situation the quieter you are, the better it is. It's very difficult to train yourself doing that but, you know, you can do. But some people just shout louder If they're not physically violent, they're verb... verbally, verbally... they shout [laugh] [P11]

Oh, it affects my temperament. I could be bloody-minded, and if I don't think about it I could... [...] If you're in a car, on your own, and people being bloody stupid idiots, you can shout, I mean I shout, swear, and whatever. Hopefully, the window's not open [laugh] [P11]

[...] another thing I'm trying to get over is if I've got a problem myself, don't put it on the other people. It's a bit like I learned donkey's years ago: if you have an argument with one person, don't take it out on other people. [P11]

Uh... that could be... uh, well, it can turn you physically, or verbally, like physically violent to other people, other things, or yourself. I mean, I used to have a terrible tantrums when I had got a bad temper. Now, was it due to stress? Maybe. [P11]

Because you argue with people, don't you? [P12]

Just frustrated more than anything, just not happy, not, maybe not wanting to, to see people, or do social things. Uhm, just staying [inaudible 19:50] maybe just watch rubbish TV... to deal with that, that... If I was in, so it's one I've got from home, if it was something at work, or something, if I was at work, I'd just be, uhm, I'd be not be rude to people, but quite blunt [...] [P13]

So, perhaps, they're normally a smiling person, always talking, and maybe now they're a bit reserved, or frowning. Uhm, they've been a bit blunt. [P13]

Blunt, uhm... not really pleasant do be around, I would say. Uhm, moody, I'd say moody that's a general, yeah, so not happy, uhm... yeah, not really sociable. [P13]

I think being, like, with your friends helps, although sometimes you might not want to be sociable [...] [P13]

Yeah, so, it has an effect on the people around you. So I don't imagine that stressed person could be happy and smiling, I imagine them to be like blunt, like I said, blunt and, like, grumpy, like, yeah, you know, and that like, being in that kind of mood has an effect on other, on the people around you, so maybe like your family, you, if you have, a partner, or the children, your children, or your housemates, work colleagues. [...] Uhm... just like if you're in a bad mood and you say something to someone and that... just you're blunt and it puts them in a bad mood, uhm, yeah. [P13]

I guess, yeah, absolutely, yeah, the relationships that you might, like I've said if you, if you, if you have clients, relationship with people you work with, your family [...] [P13]

They've started to... you don't, saw at the moment, but they'd become quick, quick, physically frantic, and... snappy, maybe when they weren't like that. [P14]

Or your... I don't know, it's not too, I mean, it's not too bad for us, but it can do. Or you're probably quite short with people, like all, all I take, I would take it out at [husband], like, in fact shout, like 'ugh!', like that, you know... low tolerance for the nonsense [laugh] [P14]

Uhm, I would say that I am short-tempered, maybe snappy. [P15]

Uhm... talking to each other, whether you want to talk to someone, if you stressed, if you're wound up you could potentially isolate someone, uhm, people that you're close to. [P15]

[...] and you're then putting your stresses on someone else, you know, uhm... I think, uhm, I think about my friends, I've got friends that have been in stressful situations recently, and if they rang me, their stress, it kind of, I, I would get about this wound up and agitated because I'm concerned about their well-being. So it kind of, for the people that you care about, you almost absorb some of that stress yourself, because you want them to be OK. [P15]

Uhm... so... I, I would, I would say that when, if you, if you, if things are becoming too stressful then it would be manifested in, in it, in, in physical symptoms like moods, the way you are with people, uhm, your, and like I said, your health. [P16]

Uhm... withdrawn, that can be another sign that somebody's stressed. Uhm... let me just think, yes, so I would be, so I would, some people can be a bit snappy at times, you know, sort of... yeah, definite change in, in mood, I would say. [P16]

Uhm, so... well, I guess, if you're very stressed and kind of anxious all the time then you might go home and take that out at your partner, at your children, uhm, and, uhm, if you are very stressed then it must be very difficult to spend quality relaxing time with people. Uhm, and if you're working very hard which is something I associate with high level of stress then you don't have that time to relax, and that time to devote to relationships, it's really important. [P17]

Over time they show impatience. [P18]

[...] I've seen people reacting in different ways, but one of them, yeah, suddenly become short of patience, others are quite erratic in behaviour or movement, and yeah, you know they're stressed. [P18]

They think that if they work in the evenings, over the weekends, don't have social lives... so what? [P18]

So in those situations I couldn't engage with that person appropriately, uhm... because my mind is elsewhere, I'm looking over the shoulder, thinking 'oh shit, what about those blood samples, what about those blood samples, what about those blood samples?' Uhm... and it's distracting. [P18]

But because of all sort of stresses, and for me... that was influencing how I was at work, it was influencing how I was with my wife, because suddenly I'm not focused completely on the job [...] [P18]

You know, somebody, yeah, in a queue somebody jump, somebody jumps in front of you, not a big thing, but if it's, if it's the last thing that's happened then it's a very stressful experience, it could be massive, you could lose your temper, and you know. [P19]

[...] they're lost and not looking at what they're doing, they're lost in themselves, they're, you know... they're not really listening, not really engaging in what's happening. [P19]

It can make you less attentive, and less, uhm, less able to, uhm, be in the present moment, like I said, so, I mean, that affects especially your closest relationships, maybe [inaudible 31:32] the person you're with is really battling with anxiety, or reacting to something that somebody said, or is in a state of fear because of something, then they're not really going to be able to relate to you normally, and they might, they might not be pleasant to be with, or they might overreact to something you say, or they might not be really able to, they might not be listening to you, so it will effect on you, on your relationships, yeah. [P19]

Uhm... yeah, I think so, you know, whether, you know, whatever your stress, when you might get home to your other half and, and rant about it to, to them, or... you know, you talk about, or you might to another extreme, when you just close yourself off, uhm, so it can affect your home life, uhm, friends and family, uhm... Stress, you know, some people, I would imagine, tuck themselves away and don't want to socialise with anybody. [P20]

Uhm, just generally anxious. Just generally, uh, tired, and, uhm, irritable. [P22]

Yeah, I would say so. Uhm, in the, in the way that like I said if I'm stressed and I get home and he is sat on his bottom, and the place is annihilated, uhm... you know, someone's wound me up here you know, or, you know, uhm, then I'm much more likely to go home, and go 'for god's sake! could you...!' you know, could you do anything...whereas if I've, you know, had an awesome day, you know, I'd walk in and go 'really?', and then I'd be like 'love, just pick up after yourself' instead of coming in and go 'whoaaa!' [roaring] and I'm throwing everything round [laugh]. [P22]

You know, so it's almost like that's a way to, uhm, suddenly you know, someone you're close with, and probably the same in, in a relationship, you know, that's the person you do go [roaring] in front of because you can't do it with anybody else. You can't do it in a workplace, so you do tend to do it at home, and then you sort of feel better afterwards. [P22]

That's interesting, isn't it, because in some cases it's going to be someone so fairly relaxed, and easy-going, and be quite personable [...] [P21]

but, you know, the, the less forceful personality would be kind of, yeah, relaxed, engaged, sort of probably more willing to chat. [P21]

Mhm, yes. I think it's, uhm, long term it's horrible for health, also, potentially the relationships, it's not... uhm, not least because if you've got that closing in, and simplifying the things then you're not gonna go out, socialise with people so regularly. Or if you are, you might be quite prickly, you might be quite literal like me, not realise that you're stressed because it's, you know, uhm... [P21]

Uhm... short-tempered. Uhm, they'd be... they'd be close to a breaking point whether a small one, or a big one but they'd be, you know, they'd be close to, you know, small disruptions all lead to a disrupted life, that would cause them to snap at you. [P23]

If I, if I had one of my friends, and they're always tired, and they're always seem to be unwell, uhm, and they are short-tempered, I'd ask 'what's wrong?', I'd say. [P23]

Yeah. So if... two people see the same problem, and don't know how to fix it, they'll be stressed together. There's some sort of joining in that, you know, you're in the same boat, and equally two people see the same problem and they both don't know how to fix it, but they think about trying to fix it in a different way, then that of course will cause stress and friction between them. So... if they then don't have the ability to go with this person who is just trying to fix this problem, and it's not directed at me, because of the frustration and being stressed then that's fine, but if they couldn't see that then, there would then be friction between them, and then that would cause problems in their relationship, whether they're friend, you know, married, whatever. [P23]

Yeah, so, uhm... that was then something that I had to keep my eye on myself because if I, if I've done something like that, I would then be annoyed at them, and also the situation, uhm, an I'd have to make sure I didn't say anything inappropriate. [P23]

It's easier when it's someone you know because you can snap back at them, not necessarily the right thing to do because then that causes more problems [...] Someone does something that stresses me out I try not take it as a personal offence to me, I just think 'well, they've just made a mistake, how can we fix it?' rather than going 'oh, you idiot, why did you do that! that was the dummiest thing you could ever do!' and make them feel small because that doesn't achieve anything. They're not gonna learn from that, I'm not gonna feel any better at the end of it because they're going like me less anyway, so them I'm gonna lose friends, and, you know,

there's no point to do that. It's happened in the past, I yelled at my family because they've done something that has annoyed me. [P23]

Which meant then I would spend less time with my friends, and I'd spend less time with my family, so therefore I was essentially withdrawing from the things that made me happy because of the thing that was causing me to be unhappy. [P23]

What people do, yeah. OK. Uhm... They'll be, they'll be quick to voice a problem, and, you know, if you have someone says 'oh, I've got this, could you please do this bit of work' – 'oh, no! I can't do it! because of dadada', they could be very quick to, to snap at that. And not necessarily at you but just quick to, to announce it. [P23]

[...] and that can be, you know, stress can be isolating. [...] Because... if you're really stressed out, or if you, if you've got a lot of problems then you might feel like, when you look out, and you see your other colleagues working, you may go 'oh, why they're able to do what they're doing so easily?' They might be stressed as well, but you don't know that. From where you're sitting, you're the most stressed out person in that particular point of time [...] you sort of 'I'm so stressed out. Why? Is it fair? It's not fair'. And that is in itself isolating. Uhm... because then you feel like it's, you, you know, you feel like it's your problem, it's not everyone else's problem. [P23]

[...] you might get, uhm, people who are suddenly violent for some reason, or something like that. And they don't really know why themselves because it's been emotional rather than sort of a thought process. [P24]

I think it does, uhm, because, obviously if you're feeling stress, you know, you may communicate less. You, you may even start yelling at your child [laugh] occasionally, it can happen [laugh] Uhm, and, uhm, yeah, I think it affects communication, uhm... and I think, yeah, yeah. So I think that's the main thing it would affect – communication, really. [P24]

Boredom is very stressful for me. I get quite like... I, I get upset, I get, I get sort of, it will come out in an angry sort of way [...] [P25]

[...] that's what stresses me, something that is out of my control, and it, and it's making me either ill, tired, or irritable. [P25]

Oh, but I think there's a lot other problems with relationships. Uhm, if... you know, if they are stressed, they're just, they can take, can easily take it out on another person. If you had a bad day, something has happened to you at work, or you're not feeling very well, or you've got like, like, you've got money problems, and then they don't want to tell their partner because, you know, that can cause issues. Money can cause a lot of problems, you, you know, and I think, yeah, it does definitely affect relationships, not just boyfriend-girlfriend, but like... whole family, you know. [P25]

[...] you do stupid things, you might be rude to someone, you snap at people. Uhm, you know, you're short-tempered because you've not slept properly, uhm, so you're rude, and, uhm, and every little thing is sort of like... [P25]

There's a very relaxed atmosphere, it's a very easy job, people that I work with are great. [P26]

Well [laugh] I don't know how honest I should be but the manager there is a nightmare. [...] definitely she has lovely attributes, and you can have a laugh with her and she's absolutely fine and then [snapping fingers] she'd gonna change from being, you know, into that, you know, overly, uhm... what is the word I'm looking for, just overly disciplined manager, do you know what I mean, that sort of aspect of her comes out, and it's, it's quite scary, isn't it? [P26]

Uhm... maybe it does. I mean, I suppose there's finding the time outside of my course to actually have contact with other people, really, if I'm honest. [...] yeah, it doesn't really stop me from having kind of contact with people... in any other way than just the logistics of it, it's not, yeah. [P26]

I think I'm probably, if I'm honest, occasionally quite passive-aggressive with it, so instead of being like irritated like, really like, wow, what's on, you know, what's chip on your shoulder? It was probably better in the long run. I'm kind of more... it's just, I can notice in my tone I was a bit 'what, what was that about?' you know. [P26]

### **Performance - productivity**

I'd waste so much time by just sitting there stewing in my stress [...] [P3]

Uhm... let's say, for example, on the bad stress, uhm, it could stop you going into work because you're not feeling too well. [P7]

I'm being so tired that it's actually physically affecting how I'm doing stuff. [P8]

Or if I can see there's not enough work I've achieved then, then I'm, I guess, physically, it's just being tired, or being irritable, or... [P8]

Because, I think, if you are really, really stressed you are not working at the same level of effectiveness, as you are sort of a bit stressed. [P8]

Like, I think, the way that I'm working, you need to be able to handle the stress that you have, because otherwise, like I'm fine, I just, oh, I can't, I can't work like that anymore then the whole thing crumbles [...] [P8]

I: Uhm, uh, and what about work? Is, well, does stress influence work, or studies, or whatever you do?

P8: Yeah, I think it does, but only in a negative way if you're feeling too much stress, so... [...] but it doesn't have a negative impact on it, unless it's unobtainable, there's not enough time, and then, then you can have a negative stress. Like a negative effect one. [P8]

Uhm, I think if you're only thinking about what you need to achieve and nothing else, then I think you can kind of get sucked into just trying to, you know, getting something done as quickly as possible without thinking of the quality of it, or, you know, whatever. [P8]

Not really. Uhm, because I, I've never really felt pressure, uhm, which is why I think I kind of don't, my, my form doesn't really fluctuate, it's kind of the same every week because I don't feel pressure as such. I just, I think I'm quite fortunate. I don't feel it, so, uhm. [P9]

Like, they wouldn't be in the best state of mind, they'd be little bit like clumsy [...] [P10]

That's affecting your day, like, you look tired, you're not performing at your best at work, you're not giving everyone like you're 100%, you're being snappy. [P10]

It's so just time-consuming and... because you can't get anywhere, because you're so stressed that get to a solution [...] I mean, some things take quite a long time to work out but, you know [...] if I'm too stressed, I'd never work it out. [P11]

Stress, does it affects work... I suppose, in theory, it has to because if you feel stress... depends on what you're term. [P11]

I mean, I've had that with other people, you know, accusing them of not doing their job properly, and then finding out they're having drastic trauma. And my argument is always, well, if I knew about it, I could give them a lee while I racked it. You know, I've given them lee while I've said that if you can't do the job, let me know. So they should have let me know. But if they don't let me know, and they still haven't done the job [...] [P11]

And it's not perhaps a, uh, just, you, you don't get on with each other, but it's also affecting your ability to work, and achieve things as a team. [P13]

Or if you've got like, say, you work for a company that has clients or something, and you're not in a best mood, you're not gonna get, uhm, not do the best a good job, you're gonna make your employers... [P13]

Uhm... what, what do I think stress is? I, well, I know, when I'm stressed I become more clumsy. [P14]

Uhm, we see quite a lot in our, we've got high staff turnover in our [inaudible 04:35], and people have had a... [P14]

Or... I'm really tired, or I get really clumsy, but that could be sleep deprivation, because, obviously, I've got young children – that doesn't help. [P14]

Like, it got quite... uhm, one maybe was off for six months, uhm... yeah. [P14]

[...] I was just like [chanting] frantic, like I did add literally five minutes of everything, and done nothing. [P14]

Well, I suppose, it does, my role in a sense of when I kept getting tonsillitis, in the end I had to be signed off for over a week and a half. It's quite a long period of time out of the office. [P14]

[without stress] So I probably could be even more productive than I am. But I probably could be better [laugh] And I could probably think better ideas, or solutions to some procedural problems. [P14]

[...] my current headteacher is going through marriage breakdown right now, and I can see that her stress and her lack of sleep and things is impacting on whole staff team, and her sort of approach towards every, every aspect of the school life, really. [...] You know, so, because I can see the fallout of the, on work life that way. [P15]

stressed from. If you're stressed from personal thing, and you're at work, will it affect work?  
Might do, very short

Work, how stress can influence your work, yeah. I think, uhm... in that situation I would think that you could, if you, if they... if you're feeling under a lot of stress at work it wouldn't be a good thing for you. And it wouldn't be productive, it wouldn't be right about how you go about things, how you do your job, uhm... [P16]

Uhm, because if you're working very long hours and you're very tired then, you know, the work you do isn't gonna be as good quality. [P17]

So that must have like across workplace as well, and, you know, I, I'd imagine that between 6 and 8 pm last night, uhm, my work was affected by me being tired which was brought about by the level of stress, uhm, and therefore it probably wasn't as great, uhm, I probably wasn't as productive. Uhm, so yeah, it must have an impact on things like productivity. [P17]

Uhm... yeah, well, I did, I briefly mentioned job interviews before, and I think, well, I had had job interviews that I'd messed up because I'd been kind of anxious, stressed about the situation. [...] you know, sleepless night the night before because I'm stressed about that situation doesn't help with coherence so, yeah, I'd probably been bested at a couple of job interviews because I'd pushed over into negative levels of stress rather than just having kind of a positive level of stress, yeah. [P17]

[...] they work, they have very few holidays to take off, and he said sometimes you're just not productive, you're like, you're going and you get, I've heard it from my colleagues here, [you] work long days but not get a really, not get a lot done. Uhm... and then it's easy to take sick days [...] [P18]

And then if you've been forced to make rush, rush decisions because you haven't managed your time properly, you then make crap decisions and then that, for me personally, any way that, it's a way of me. [P18]

And the minute they start making passes and misdirect it, or taking too long on the ball, because they were thinking about too much, you've won, because you've essentially ruined that game. [P18]

I: So, how did it feel? I mean how did you know that you were stressed?

P18: Because I wasn't focusing. It took me longer than I thought it would. [P18]

Yeah. Absolutely, yes. It could be, uhm, you may not do it as well, or you might, you might do it very well sometimes. Stress can help you rise to the... so it can go either way, I suppose, can't it. [P19]

One thing, one thing that I definitely do is I flick between things, if I'm not coping with stuff and if, if it's probably all the more important to focus on that thing, get that thing done, get it out of the way, but I'm really rubbish at that. I'll do a bit of stuff, be, I'll like be half-through an e-mail, notice another one's coming and go off and deal with that. [...] And just not really make any progress, actually make less progress because I'm, I'm torn and can't, and [inaudible 50:01] I can't decide on thing, really, it's about having to choose a thing, focus on it and forget about the other, just seems to be impossible sometimes [...] [P21]

[...] the other thing that I get, actually in stress, I get quite clumsy, just I'm less coordinated [...] [P21]

So yeah, so there's a bit of that, your, your abilities just go out through window, to do it, yeah. It's that, all that, that... cognitive reduction goes bonkers on completely obvious and simple stuff while you still thumping away at it. [P21]

So, yeah, it's, yeah, lots of ways, so long, longer term, sort of, in the moment, just sort of what you can do, yeah, just being, just being plain clumsy, frankly it's... [laugh] but it's [inaudible 1:15:45] it's kind of not good. [P21]

Uhm... I don't know, I think sometimes actually dealing with things... I don't know, I think it gets, it can be a bit counterproductive... for the inability to perform thing but it's... [P21]

Yeah [laugh] certainly getting so bad that I was a week off work, for several weeks was kind of not ideal. [P21]

I mean, you know, I worked for companies that were supercritical, so then my stress levels would be around getting something wrong, so then I would find that I would make more mistakes because I would be so anxious about not making mistake [...] [P22]

Oh, OK. As to how I... and I said yeah, uhm, that I would say yeah, I might think that I'm operating at full capacity but I think, looking back, I realise that, actually, I'm not. I don't think that it necessarily makes you work to the best of your ability. [P22]

Uhm, they may take more, they may be off work more, they might be, you know, sick more. [P23]

They will make them more stressed and therefore more unwell. Uhm... which, if that happens to a whole team at work, or then cause problems because no one can, the team is not growing, is not being as productive as it could be. [P23]

I know that when I'm stressed I can't function as well as I should. [P23]

If you're, if you're not stressed, you're not performing, if, if, but I think you need some stress in order to, to perform, really, uhm... But I think if you're too stressed, yeah, then definitely, I could, I'm visualising that graph, and, yeah, definitely then, uhm... [P24]

Boredom is very stressful for me. I get quite like... I, I get upset, I get, I get sort of, it will come out in an angry sort of way if I'm, if I'm not, or I just don't bother, you know, then I'm not very good at, [...] [P25]

Uhm... It used to, I mean, it impacted on my jobs in the past, uhm... but doesn't impact on my studies, really. Just because it's not, it's not really present in the same way anymore. [P26]

### **Performance - motivation**

Uhm... well... yeah, I mean it would be just in the day-to-day-ness of my job, I suppose, you know the overall, managers would have picked up on me kind of not dealing with situations 100% in a, you know, relaxed manner. You know, these types of things, you know. It wouldn't be... it wasn't just one, one event. I would say that just because the stress that I was going through would, would have reflected in my day-to-day job in small, little ways. [P26]

[when not stressed] Yeah, and I think you're more willing to do stuff, you've got more energy to do things [...] [P1]

Uhm... usually, I start to... if it's the bad stress, usually I start to feel quite, quite sad, and, uhm, lack of motivation for stuff, and, uhm... I might no longer want to deal with the thing that's causing me the stress. [P4]

And I feel like as soon as it gets that bad stress, I'm not longer positive, I'm not longer motivated. [P4]

Uhm... maybe go to the gym, but it sounds, you know, if I'm not happy I can't get myself to the gym. [...] but if I'm not happy I can't get to the gym. It's so hard. [P4]

Uhm... Negatively, I have a habit of just... uhm, if I'm extremely stressed, like not wanting to deal with it as soon as I feel it. [P4]

And I think afterwards you feel quite drained, so you feel quite tired, and, and you're quite lethargic. [P5]

I'm sure stress could make you feel lethargic, for instance. Uhm, you don't physically want to actually do anything, you know, could I sit down all day and just read a book? No, but I could be tempted to do that because there's thing going on in my psyche which make me think I want to escape from that decision today. [P6]

Uhm, did it affect me physically? Yes, I became lethargic. [P6]

Like it's, it's almost like there's no point in trying and completing it in the first place. Like, if, if, if I can't complete it and it will count for nothing then I've done all this work for nothing. [P9]

Then it just like, I guess, manifest in, to you, either like just doing nothing, basically. And just like putting it to the side, just...or just being constantly going throughout the day, just like thinking about it. [P10]

Uhm... well, I'm just, I guess, I would, I would say, I guess, most of the time when something stresses me out, I, my response would be I can't be bothered with that anymore. And that's, when I get to that phase, when I'm like 'ugh, I'm done with it' that's when I know, I'm stressed, because otherwise I wouldn't do that. [P13]

If you, if, no, I don't know how to phrase it, like, if you're not in a good, if you, if you're stressed then you're not gonna want, yeah, your mental health is gonna be impacted because you don't want to do, uhm, do things to make you, make yourself happy. [P13]

[...] even things like if you, like, if you've got something to do, but when you get home from work, you just can't be bothered because you've got a stressful day and instead of, I don't know, cleaning bathroom like you told yourself you're going to do when you got from work in the morning, you're sitting in front of the TV instead. Something like that. It stops you from wanting to, yeah... perhaps do things. [...] Yeah, I would say yeah. Yeah, lack of motivation to do anything, or to do certain things. Yeah, maybe you don't want to, if it's, like, if it's something at work, you don't want to get up to work. [P13]

OK. So, uhm... yeah, I guess it would either, sometimes it can make you, uhm, not want to put 100% in, so I guess, if you, yeah, maybe the motivation thing again. Uhm, it can make you not want to be there, so... you'll just do the bare minimum, perhaps you're not giving, giving, uh... [P13]

Even like, something like small is, like the stress makes you so tired you couldn't read a book, like a normal book but for pleasure. It was like pfffff [laugh] I can't be bothered, like... Or [husband] never wants to read anything again, like he does so much reading at work. Uhm, or like, I know, you get stressed at work sometimes, you can't bother to even find a, your car insurance, so you pay a fortune, because you just think, I just can't do like any more administration. [P14]

And... yeah, so element of being this... you know, it does depend very much on knowing them, so there's one, they'll be less cheerful, for example, and... less... well, it does depend on person, a few cases, just less forthcoming with things, less likely to initiate anything. [P21]

[...] it starts to overlap with depression a bit, with you not wanting to go out and do things [...] [P21]

Uhm... also, yeah, I do notice that I'm not wanting to do things, I don't, I don't think I would have done that in the past, that's the thing, so being to it a few times, and I'm, I'm really better now at noticing than I was. Because I'll notice a certain amount of withdrawnness, and kind of, yeah, I'm not trying to change it, just being at... and, yeah, lack of, lack of enthusiasm. [P21]

Yeah, OK. So sometimes it's just, you know, sometimes I just, it's that closing down again and not wanting to deal with it. [P21]

Oh, well, outside of work... when I was going through the, uh, I worked for the rental company, that was prolonged stress which had an effect on me outside of work because I would never really want to do anything. [P23]

### **Performance - concentration**

[when not stressed] Uhm, I think, I generally can concentrate better, I can sit and watch a film [...] [P1]

Uhm... typically about I know it's a cliché, but a million thoughts running through your head [...] [P2]

I think, when you're stressed you don't think about things logically, uhm, I think you do things irrationally [...] [P2]

Uhm, the quality of the work, or studies? Yeah, I think, if the person is stressed, and they're preoccupied, and they're not gonna put as much as they could into there, work, or the studies, or work... uhm... Yeah, I think, it's if, if their mind is elsewhere, and they're not focusing so much as they could on other things, so relationships, or what they've got to do, right? [P2]

So, it's like my, my thoughts become foggy [...] [P3]

Uhm... maybe just not able, I think some, you know, perhaps not able to sit still, not able to concentrate on things, uhm, maybe, nowadays it's perhaps checking all their IT, you know, doing that sort of thing. [P5]

It's just some days, you've just feel, you feel irrational about sometimes [...] [P5]

Yeah, most probably your concentration, I think. Because I think if you're under, if you're under stress, I think, your concentration would probably go slightly, because you're, if you're worrying too much about something [...] [P5]

So I think, well I think if you were perhaps constantly under stress at work, then I think your, I think, your concentration goes [...] So I think you, your mind is going too quick, that you're more likely then, to make mistakes. [P5]

Uhm, I guess when your brain is so overpowered that it can't focus on one thing. I think that's like...in my head I know that I'm stressed when I'm like just trying to do too many things at once, and I can't focus in on something. [...] Uhm, yeah, I think it's just a bit of kind of a brain confusion [...] [P8]

Uhm, I think it is like no... you know, your head being a bit fuzzy, and not being able to sort of know which thing... [...] and so I think, me, I get a bit fuzzy in the head, like I can't concentrate on one thing at a time, I sort of dot between them which is not of a constructive approach to things. [P8]

So it might be tired-looking, uhm, less, less able to concentrate, less able to focus their attention [...] [P8]

Uhm, if I feel really tired, and not, not like I can focused, and I feel a bit, I feel like crap, really [laugh]. If I feel a bit rubbish, uhm, and yeah, I think, if you can't keep your eyes open, I mean, and often it kind of ties in with time, it's for me, so if I'm really tired, I'm overtired and I can't actually focus probably [P8]

Uhm, I, no. I think, again if my sister's stressed she, she won't, it won't help her. Uhm, it will hinder her quite a lot, because she won't be able to do, uhm, she won't, like it'll kind of cloud her head, sort of process of what to do, and I think that doesn't help her. [P9]

And it wasn't until, like, I seek help from a friend that I've started, like, doing it again, just like I was so, like, confused with myself as to... [P10]

[...] because you're so stressed that get to a solution, you can't think I can't think normally, or sensibly, or... [...] [P11]

[...] when I feel stressed I feel like, you know, when you're feel you can't see your brain, your thoughts, it's all so fuzzy you can't see anything. [P14]

[...] because you're not like, I don't know, doesn't allow to focus your brain. Well, obviously, I wasn't focusing my brain [...] [P14]

[not stressed] You know, you can see it, see clearly. And you're calm. [P14]

[...] the players would, would like 'oh, come on!', you know, abuse the referee, really, the umpire in some decisions, and that would undermine your, that used to undermine my confidence because I'd think 'did I, did I get it right?', and then I would think about that for a few seconds afterwards which meant that I was not concentrating on the game which is where I should be, and that again... [P16]

Uhm... maladaptive is then, perhaps, I'd know if I took on too much, well, like that. So if you are stressed you might not do such a good job because you're not thinking clearly [...] [P16]

If, well, if there's... in incredibly stressful environment that I was working too long hours, I was losing focus [...]

You take on too much, and... you can't read a word in front of you just because your mind is distracted elsewhere [...] [P18]

Yeah, but that for me is what stress is like, an inability to focus, and then panic [...] [P18]

You can't see this far [showing with hands small space], I, the work, right outside the work it's over, it's over, it's not... to feel, to be stressed... I can't see beyond my nose when I'm stressed, the clouds come down, uhm... and I cannot focus. [P18]

I mean... I can't, for me it's a lack of focus [...] stress comes more when either I've done something, or I tried to do too much, and I can't think strategically. [P18]

When I get stressed I lack focus and I cannot pace myself. [P18]

I: So, how did it feel? I mean how did you know that you were stressed?

P18: Because I wasn't focusing. [P18]

But because of all sort of stresses, and for me... that was influencing how I was at work, it was influencing how I was with my wife, because suddenly I'm not focused completely on the job [...] [P18]

Uhm, maybe them being a bit sweaty, being a bit, uhm, you know, uhm, like they're not really concentrating [...] [P19]

If I'm agitated or stressed, I can't just sit down and read a book, I wouldn't be able to focus. [P19]

Uhm, but if you can't focus on your work, when you're at work then yes. Uhm, yes, of course it'll affect it, yeah. [P20]

[...] and also, the problem is when you have that red ball inside... you may not think as clearly as... you get your time to walk [...] [P20]

Whereas I've got another friend who's really stressed her mind goes [making noises], and just like, you know, yeah, 'I think you're not thinking straight', you need to [laugh] step back, and... [P20]

And... not fun driving either, actually, so just that reduced, that, that sort of tunnel vision, reduced attention, it's really hard to pay attention and drive safely with that. I've had times when I've had to sort of mentally slap myself and go 'mind in the car, mind in the car' [laugh] cause it's off galloping round other things [...] [P21]

Yeah, I'd probably notice that I'm, uhm... I feel like my heart, uhm racing quite fast, and my brain is sort of all over the place. [P22]

Uhm, yeah, it can be... uhm, but then in some ways... yeah, it's probably, yeah, I suppose if I'm stressed and I, uhm, my attention, uhm, level is probably less. So I'd probably do more things on automatic and I'd probably have less recall of them. I can, may get back to do something and then go 'oh, I've done that already', uhm, and not remember it. [P22]

[...] if I feel comfortable enough at that point to face that problem then I'll face it, and I'll try to start solving it. If I can't then I'll put it on side because I'm focusing on something else at that time, so... I'll be distracted with that [...] [P23]

Uhm... and what I think in those moments is... that my thoughts starts to become less clear [...] [P24]

Hindered things like sleeping, and being able to concentrate, and, uhm, yeah. So, that was extremely stressful. [P24]

Yeah, I think it affects your concentration at work. So I think you can, if you're stressed, and you've got loads of things, you know, worrying about, and you, you like that. And then you're just not concentrating and you start making mistakes then that's, that can cause issues at work because you, you know, you make mistakes [...] [P25]

## Appendix 9. Study 1a. Lay interviews. Quotes representing *Non-normality subtheme* (Theme: Negativity)

Uhm, and then it can pass by, you know, the storm is over, and you maybe get back towards normality, uhm, for a period of time. [P1]

I think if you know that person, you will notice, there's a change in their behaviour. [P1]

But when my friend, my friends are stressed, though, they do things that they won't do, they won't usually do [...] Just to try and get back to the normal state of mind. [P2]

Uhm, but mainly it's just getting back to normal state of mind. [P2]

I know that when I get stressed I turn into a very, very different version of myself. [P3]

Yeah, I think, [without stress] everything would just be going normal, there wouldn't be any worries about any, or anybody. [P5]

It's your body slows, slows down, and goes back to normal. [P5]

I've noticed that with myself, and with other people that this is, shape of body doesn't, it's not so natural. [P7]

[...] I can't tell what I act like when I am stressed, but, uhm, from people who are stressed, they definitely act very differently. [P9]

Like, normally I'm quite like relaxed, I would say [...] [P10]

And basically, like you're, like, I guess, personality becomes deteriorated, yeah, deteriorated to certain extent, and you start behaving like, I guess, not like the person like you truly are. [P10]

And then, I'm not my normal self [...] [P10]

[...] and they say something that they wouldn't normally say... uhm, only because, obviously they're stressed, to their friend or something [...] [P10]

[...] a certain thing is said by someone else, and they react like with behaviour that's not normally what they would do. [P10]

So, perhaps, they're normally a smiling person, always talking, and maybe now they're a bit reserved, or frowning. Uhm, they've been a bit blunt. [P13]

They've started to... you don't, saw at the moment, but they'd become quick, quick, physically frantic, and... snappy, maybe when they weren't like that. Like the part, their personality changed quite dramatically, and then, actually, their sentences, their word broke, fell over completely, incoherent. [P14]

Sometimes I watch her with the children and I think that's not how you're normally are. [P15]

When I'm not stressed I'm just normal at the time when I'm doing one thing or another. [P16]

I think if you're stressed you can react differently to how you would do normally, and that would mean that you're, you're changed [...] [P16]

So you can, you can, you know, do things you wouldn't normally do, uhm... [P16]

Uhm... they may, when they're stressed, they may, they may be not looking as good as I know normally they do. [P20]

It might also be, yeah, because you're trying to put, most people are trying to put on normal face as well, don't they, so it's gonna... push down, some are trying to make out like, like it's alright. [P21]

You know, there's kind of thing when you look back afterwards and think 'was that me?' You know, it's almost like an alter ego, sometimes, a little bring out, you know, and that's... [P21]

[...] I was realising that OK, the stress, although I sort of decided to normalise it, isn't clearly good for me [laugh] because I'm no longer me [...] [P23]

And, and people that I know, uhm, they may be quite happy, laughing, and something like that, and... so, you recognise with some people that they, when they're really stressed, they might have a different way of thinking, really. So, so, a colleague I knew, this week had a report to write, and I tried to, I was talking to her about something, and she was very short with her sentences, and, you know, uhm, I could tell instantly [P24]

We, we did a sort of, uhm, a sort of, uh... personality type exercise a couple of years ago, uhm, where they were looking at people's normal behaviour, and then saying when they're particularly stressed where does their behaviour go to. [P24]

## Appendix 10. Study 1a. Lay interviews. Quotes representing *Positive outcomes* subtheme (Theme: Positivity)

### Motivator

Uhm... because you will, you, you generally try to do things that you like to do, and then trying to avoid things that you don't like to do. So, you always want to do the things that give you most enjoyment, that from a wellness perspective seem the best thing you do, and sometimes you might have to do other things that you don't want to do, like you might have to go to family gathering that you're not too keen on, uhm, or... uhm, you might have to go to an evening at school to listen to teachers saying something that you don't really want to listen to. That sounds a bit harsh, because that doesn't mean that you're not interested in your children, uhm, but it might be a particular topic at school that you're not really, or don't really have a great deal of interest in. [P1]

[...] uhm, so the stress kind of makes me work harder and get it done. [P2]

Yeah, I think it does. It kind of motivates me to get things done. So if I didn't experience any stress at all, uh, I'd be quite lazy and not do everything, or at least I wouldn't do them properly. So, if I wasn't stressed about my assignments I wouldn't do them, most time I'd do the minimum, and just leave it like that. I think it works as kind of motivator, which is... yeah, it keeps... yeah, a motivator, almost. [P2]

Uhm... they start working harder, the work they're doing, I suppose [...] [P2]

[...] but generally it's for the best, it motivates you to keep going, and it doesn't let you become too lax uhm, I suppose it's a strange way of coping with things, getting things done. [P2]

I think, I think... I need a certain amount of stress to be able to get anything done. [P3]

So if I'm not a tiny bit stressed then... I would just lie down all day, and lounge around, do what I want because, you know, life's a game and it doesn't matter but as soon as you add a little bit of stress, like OK, I've got a purpose, I've got to be somewhere, I've got to do something. I have a reason to get somewhere, whether that's like literally getting somewhere, or like working to get to a job, or to make your life better, you, you need that little bit of stress. [P3]

I need a bit to get me going. [P3]

Yeah. It makes me do more work in a shorter amount of time. I'll procrastinate less. [P3]

Because relaxed people are relaxed for a reason, because they're not, they're not, you can't be relaxed and work hard for something, I don't think. Not really hard, like your hardest, you can't. Because it involves too much mental energy [...] [P3]

[...] because it sort of gives you like a kick up the backside to get things done [laugh]. So like, for example, when I was at uni, I would say that was the good stress because it made me work harder to meet deadlines or stuff. [P4]

I feel like, if we've got, uhm, like, for example, with, you know, work, and, and stuff like that, uhm, sometimes having... a small amount of stress can help us work better. [P4]

Like, for example, if I've got a, a piece of work to hand in, and I'm under, uhm, what I believe is a lot of stress, and, you know, I'm trying to get it done. But I'm working my hardest [...] [P4]

I suppose when you do get stressed about things, you go through things quite quickly [...] [P5]

Part of you really wants just to sit and cry, and can't cope with it, anything, 'why this has happened' sort of thing I think there's stress because you know you've got certain things, you've got to do... It, you, it sort of keeps you up, and just keeps you going through the situation, I think the stress of that situation, the stress at that time keeps you going. [P5]

I think it's quite good, really, because it's, it focuses your mind, and it gives you at least a little bit of a boost, gets your heart racing a bit, and gets you doing something, you know, that you know you can do, but it just focuses you a bit, perhaps, more. [P5]

[...] or I work best under pressure, so for me the stress is the pressure [...] [P8]

It just can make you a bit faster doing things. I need a push to do the things, so for me it can be quite nice, and also when everybody's working together, and you're working towards its goal, and everyone's a bit stressed out, but, you know, you're staying up late trying to get things done, that could be quite productive, and quite enjoyable. [P8]

[stress-free life] I think it won't be, it wouldn't be productive for people. I don't think it would be necessarily a good thing. [P8]

I suppose, you'd just not get anything done, because there'll be no pressure to do anything. [P8]

You wouldn't be able to do, like a lot of things are quite enjoyably stressful, so I think, you know, everyone would not be working within time lines, and everything just... would go at a very slow pace, I think. [P8]

But I also feel quite complacent if I'm not stressed. Uhm... so I'm like 'ah, I can do that tomorrow', you know, and then I actually achieve nothing because I'm like 'ugh, can't really do that, I'll just wait for a bit, it doesn't need to be done' so, uhm, yeah, But at the same time it's not that enjoyable because I find that I spend time less effectively, or I get less done, or I don't finish the day feeling like I've achieved something [...] [P8]

I don't think many things will get done. Uh, because if there weren't deadlines to follow, there weren't like things which you had to do, things wouldn't get done, because people just wouldn't have the same sort of motivation to do it. [P9]

Uhm. Yes. I feel like if... I'm stressed then I actually tend to do things better. So I, I work a lot harder when I'm stressed, because that's what I need to do. And, uhm, I'd say that the standard, the quality of the actual work is probably about the same, but I just do it a lot faster, because I'm like, right I need to get this done now, and get it done, I'm like right now I need to get this done.

And I need to get this done. And I'm just slowly working through things, but kind of faster than I would do normally. [P9]

It's almost like, I guess, sense of achievement, doing all these things, like, within a day, like, being busy, being productive. [P10]

Even like, if it's just a little wee thing, a certain amount of stress is a good thing because, in my opinion, it's, you kind of get stuff done. If you're stressed, and you're worried about certain situations, or certain assignments, you're gonna do it basically. You're gonna get work done on it, and you're gonna be one step closer to achieving it. [P10]

If you just once stressed about, and you now, I guess, didn't care, like just leave it until the last minute, and you'll produce, I guess, a poor, poor piece of work, or not your best that you could do. [P10]

And like, in my opinion, I'd rather have stress in my life than not, because it makes, I guess, me productive, and it makes, it keeps me busy. [...] because I just wouldn't do anything [laugh]. I'd just be too, I guess, too relaxed... That's in my opinion, anyway [P10]

And like, I don't think I have that because I'm always like, I want to be on the go constantly, I want to be doing something, I want to be productive. Like, there's always a tiny bit of stress so like relaxed to me is just literally having, like, no roles or responsibilities [...] and that is like a state of just like complete stress-free relaxation [...] Yeah, I guess it's like, it gets back to the point of, like, being prepared, and just, like, constantly on, like, be on the go, being productive. [P10]

I think, it'll like, it'll, I guess, it determines like how people will act, or like what they would do like, in like a job, for instance, if you're more stressed. I guess, maybe, you'll stay longer, do all, all your work, or like you stay extra hours, like... [P10]

You know, so if you wanna do anything, you're gonna be, you might have to motivate yourself, maybe that's it. Stress and motivation go together too, well, they've got, because if you don't, uhm, motivate yourself... you, you sort of gonna put yourself under stress to get something done. [P12]

It can be a drive. It can give you a drive to do something. [P12]

Uhm... yeah, you need that sort of intensity to get yourself to the deadlines, and you're sure that it's done, I don't know, so it's as perfect as is possible, and... I do work better, I know, like quicker with a large volume. Like when, well, over Easter I had hardly any, I had no one to say 'see something', uhm... and I did like probably half of what I'm doing in a normal way. [P14]

Yeah, I think, it was, you know, I felt the pressure, oh my god I need to do this, so I'd just thrown myself up into it to, to dissolve that feeling and take control of that, I think. [P15]

I think because I raised to a challenge, and I... I would say I'm quite ambitious in terms of... I never feel like I stopped with my career, and I, so if I get a bit of pressure but only it makes me think 'well, OK, I can deal with that, I can go on with it' [...] [P15]

[...] so like helpful stress is maybe more professionally in terms of pushing forward [...] [P15]

No, no, I don't think that would be a good thing at all because I think sometimes when you're under pressure, when you're, you feel stressed it may make you do something that you perhaps would, might not have ever done. [P16]

And if I wasn't stressed I'd think I wasn't maybe pushing myself hard enough. [P16]

How can stress influence my everyday life... it can make me more active because, so for example, when I study for the exams, or when I've got anything going on, I would be up very, very early, uhm, and I would be reading through things, preparing things [...] [P16]

Uh... [laugh], I think no, I think stress can be motivating. Uhm, I think it stops, it can stop me being lazy. If I'm... so, for example, when I was a student I know that, uhm, you know, being at Oxford we had essays that we had to write every week. And, uhm, there was the thing called 'essay crisis' and it was regular thing [inaudible 11:42] the night before your essay was due and you would end up just working crazy hard all night, staying up to do the essay. Uhm, and if you'd been more, if I'd been more organised then I wouldn't have got to that point but there was something about the impending deadline and the stress that that caused that made me work hard in that, uhm, last stressful bit and actually got the work done. And I think similarly that kind of in my job here that's, uhm, it would be easy to sort of sit back sometimes, and just, you know, because in academic job you have to be self-motivated, and you have to kind of push yourself to do things. So if I didn't feel that, if I didn't feel some element of stress and feel some element of 'I must do this' then I wouldn't do it, I suppose [laugh]. So it can be positive. [P17]

But some levels of stress are probably positive in terms of keeping you motivated [...] [P17]

Uh, yes, I do. As I kind of said it can be a motivating thing, uhm, a motivating factor and, uhm, helping me to push on and get the work done. [P17]

If I feel, uhm... if I don't, if I don't exercise at the weekend then I feel stress because I think 'oh, I haven't done the thing I was meant to do', so there's a motivating factor about getting out for a run, for example. [P17]

Uhm, so if there had been no stress present in that situation then maybe I'd have been less motivated. [P17]

Because again, it's sustainability, you cannot, one of the nice things about me working from home is that I can do focused work but if wanted to I could just lie in bed all day long. And no one's gonna chase me up. [P18]

You want stress that's adaptive, so I want stress that might be gentle peer pressure [...] Uhm, it's all good stress because again if you don't have that stress... what happens – I could lie in bed all day, I could just earn a wage and do sort of, and I'll probably get sacked. [P18]

Because I think it's so easy to not do things and you need that gentle stress [...] [P18]

Yeah. I think with a certain amount of stress, enough, enough to keep you doing the things you need to do, and, uhm, not just living for leisure, you've got to live, you know, to work, you've got to help other people, you've got to take, you know, and all of that keeps you, a bit of stress keeps the thing moving, you know. [P19]

[...] but actually that meant that what I needed doing was, uhm, procrastinating for a few days, and when I finally did it, I actually did it quite well, because I, I really threw myself into it, and it meant that I gave it my all [...] [P19]

I think some people do their jobs very well, because they are, they are pretty highly stressed [...] [P19]

Yes. Yeah, that, that would have been an occasion when it was helpful. Another time might have been when, uhm, when you really have to do, uhm, a project, the time is running out and you have a lot to do. [P19]

Yes, otherwise we'd all be kind of like those people in, was it Wall-e, that film, you know, just floating around on lilos in some kind of stupor [...] A bit floating in... there'd be no get up and go. [P21]

I don't know that's, I don't know if you call it stress, that way... It's gonna be stressful, it's gonna be stressful a bit, though, until you resolve it. [P21]

It depends, either, it seems like either you sort of come and hit 'oh dear, oh dear, oh dear', or you go 'OK, got to open it' and deal with it. [P21]

[...] and so sometimes I need, I really need that deadline, I need the stress of that 'I've got to do this by...', and I have a habit of leaving everything to the last minute and I work just to that deadline [...] [P22]

So that what I mean, I mean it's as stress as I make it because I mean, I know that I get everything done, why I answer my emails, why I get my done. [P22]

Well, I think if there's no stress on anyone then not a lot would get done [...] [P22]

Stress to me is how I get stuff done that I really don't wanna do [laugh] like, you know, the pile of admin that I've got. [P22]

I'd find the other one is, uhm, me kicking myself up the ass [laugh] So there's sort of two levels. Uhm, I think I need to have high expectations of myself to be able to do the job that I do to, uhm, to achieve in life. [P22]

So... if there is the small stress of knowing the deadline is due, something is due at a certain point, I can then plan for it, rather than, uhm, leaving it forever. [P23]

When people get too old, maybe five years of before they will retire, they start to slow down [...] they feel secure in their job. [P24]

For me, you could say sort of that is, you know, that somebody is pushing themselves to do something, really. [P24]

So if, so like a relaxing day may be to go to the beach, you've got nothing to do, you're just relaxing, so you're not achieving anything [...] [P24]

An example would be doing my degree. Uhm, probably if I wasn't given sort of deadlines for essays, I probably wouldn't have done them [laugh]. Uhm... you know, if there wasn't some formality of all of it, uhm you have to do it, I probably wouldn't have pushed myself so hard. [P24]

So, so you're... so, for example, I don't know, uhm... that's not really very stressful, but if I was learning, when I was learning to juggle five balls, not very stressful, really, but, uhm, you know, you have to put yourself under that pressure to keep going [...] [P24]

Yes, I think it can make you perform better. [P25]

### **Focus**

Maybe, maybe without the stress I wouldn't be able to... you know, concentrate on what I, what needs to be done. I don't know. [P4]

So it could influence it in a positive way, because it could help me focus more on what need to be done. So if I'm really stressed because of finances, I can focus more on what needs, what I do need to buy, and not spend unnecessarily, perhaps, and, uhm... if I'm stressed with a deadline, you know, I can focus my energy, and my time more to that to make sure that I get it done. [P4]

[...] but I think, perhaps, if you, when you're under stress because you've got to get things organised [...] so, perhaps, you're not really registering what's happening, so that keeps it in, in a grief situation, keeps that grief out of the way for a time, until afterwards. [P5]

Rather than perhaps disappearing straight into the grief side of things, which there was, don't get me wrong, but because you know you've got that things, all these things to do, that you're sort of in the stress, and that having to cope, you know, was my... phoning people, and all sort of things like that, and my brother as well... Uhm, you tend to be, yeah, sort of apart, at higher, I guess. Your body just takes over, and your head takes over, and you just think... it shoves the grief, at that time, maybe, the grief at the back and think 'right now, we've got to all this, this, and this for mum', uhm, so you go through it [...] [P5]

Yeah. I think it does, it gets you, I think the stress makes you, gets you into a focus, because you know, suddenly, all these things have got to happen, when, I think, certainly in that situation when she died, we knew we'd got all these things we'd got to do, because, obviously, you have to do certain things as well. So I think, you get sort of stressed but it, you won't let yourself grieve because you know you've got all these things to do. [P5]

And, and gives you almost that focus whereby it says at the moment you've got to concentrate on this. [P5]

I mean, at that time it was like, obviously, you know, we'd got to do death certificate, and that sort of things, and, you know, undertakers, so it keeps you focused on, on just that, where you don't, where really you don't want to be. Uhm... but you know you've got to be. [...] you'd sort of get, so that all helps you focus on just the tasks at hand of that time [P5]

I think sometimes if you do, you know, you are at work, and somebody says 'oh, I need this', and you think 'oh! yeah, alright, I'll get that done', they need that in an hour time. I think it's quite good, really, because it's, it focuses your mind, and it gives you at least a little bit of a boost, gets your heart racing a bit, and gets you doing something, you know, that you know you can do, but it just focuses you a bit, perhaps, more. [P5]

Meanwhile, with me it kind of helps me focus. [P9]

Uh, it's only really, like, those things, kind of everything else, I guess, is on the side, like, to a certain extent. [P10]

Can be, I mean, if you want to sail around the world, you've got to be single-minded, and be able to overcome all that. [P11]

[not being stressed] Brilliant, but my mind does have a tendency to wander, not wander... devil makes work for idle hands, is that right? There's a term, yeah, I'm sure it is, the devil works, the devil makes work for idle hands means that if you've got time in your hands, you've got to mischief, or you create more work. [P18]

But sometimes you do, and sometimes it's, sometimes it's a... hmm, what is it? It's a... sometimes it kind of gives you a... temporary suppression of all the concerns about it, you get on and deal with the stuff, you know. [P21]

[...] for me because it makes me tie up loose end because I'm quite erratic, my brain goes like a pinball machine, you know, I go to one bit, and I do them [...] [P21]

I: And can you think of any situation that stress was helpful?

P23: Yes. Whenever I had to write an essay. Because I like having a deadline. [...] So, having, having stress in some situations is quite useful because you can... So stressful, stress can be useful because it can help direct your mind. [P23]

So, for example, I know with my own wife, uhm, that if she's very stressed she will become much more, uhm, uh, what's the word, she is much more, uh, sort of process-driven, she is much more thinking about what should be done, what, what are the rules about certain things, and that kind of, so... [laugh] [P24]

### **Energiser**

So I think you tend to, in that sort of situation, maybe just... you're on that high because you're stressed, so you just keep it going on that high, and then afterwards, I think, you get, uhm, when you calm down you get the grief, or whatever, after that, but I think, perhaps, if you, when you're

under stress because you've got to get things organised, like for a funeral, or the things like that, you tend to be on that high plateau [...] [P5]

So I think it just keeps you buoyant almost, uhm, rather than just sitting, which you most probably feel like doing really. [P5]

You know, don't break down, or anything, do that later, which you do [laugh]. So I think the stress of that time most probably just pumps you up almost, because your body doesn't want to do that really, it just wants to sit, uhm, and, and wallow in everything that has happened, and why it's happened, and all the rest of it, coping with it all So I think, yes, that sort of keeps you up high for a time, and helps you get through the situation that you have to go through. [...] At that time, for the situation that you're in, yeah [P5]

Yeah, I don't know, I suppose we all need a little bit of stress in our life, just to, but, it perks us up a bit [laugh] [P5]

I think it's quite good, really, because it's, it focuses your mind, and it gives you at least a little bit of a boost [...] [P5]

Yes, it's good for yourself some stress, some, at least, a less [inaudible 14:34] you're gonna push back when somebody pushes, you know, some... otherwise it's all just, uhm, yeah, I know, I couldn't imagine life without stress at all. [P19]

Stress can help you rise to the [challenge]... so it can go either way, I suppose, can't it. [P19]

So I guess that's a sort of, I guess that's stressful, isn't it, something that sort of churns you up a bit, so I don't know, if you consider that stress then I wouldn't get rid of that one. [P21]

And so, I've come to actually go, you know, is feel a bit of butterflies and go great, there is that's, you know, that's basically the engine ramming up to do it and it comes alive, there's a certain animation to it that comes from presenting live, that doesn't ever happen, you know, in practice. [P21]

[Laugh] Anyway, that thing that I can't think of the word for that, but, yeah, like I, one can call it an edge, the bit of... impetus [...] [P21]

[...] I can't remember what it was but I remember that feeling of OK, you know, yeah, like calm on the top, paddling like hell underneath. But, you know, sort of not actually, you know, you could if you're that calm, you probably couldn't be doing it, you need that sort, an appearance of calm but there's something driving it, is, that feels sort of, again, sort of engine running underneath, yeah, but you don't want people see that engine, so it's... There had [inaudible 1:21:58] I can't remember what it was now, I can't... But it's happened. [P21]

It's like, you know, if I'm, it would wind me up until I do it, and why I leave it to the last minute, I don't know but I guess if no one had told me 'have it done that by that set point' would I do it? I suppose I would but... yeah. [P22]

Uhm, but now, I didn't really I just channelled it into getting stuff done, and got through it. [P22]

Oh, I think it goes back to what I was saying earlier. If you're, if you're not stressed, you're not performing, if, if, but I think you need some stress in order to, to perform, really, uhm... [P24]

So, I think... so you want to get some, you, your whole stress like that, because you're going away, and you want everything ready. You, you know, you're getting ready to go out, and you've got, it's like work [...] [P25]

I mean, yes this is a stressful scenario but just push all your energies into doing something positive out of it, you know. [P26]

### **Tool**

I don't know whether I use stress to help me, or whether stress is always there and so I use it to help me. [P3]

I think it's that one, I think it's I'm always stressed but I've learned to use to my own benefit. [P3]

I'm trying thinking of it like a positive thing, and a tool rather than something that is going to be detrimental to my way of life. It does work, obviously. [P8]

[...] it could be actually strategy that you employ, how are you gonna use stress? [P12]

[...] but maybe there's a positive aspect of it too [...] And I think that's interesting... could be an evolutionary advantage, couldn't it? I mean, if you're an alert animal that's a bit jumpy, you could, you might be able to run away from things that... you know. [P12]

But, yeah, there, odd little places where it's... I can't think of any others out of my head when I found it useful but that ones... [P21]

Uhm, I find it a quite useful tool, if you can use it in a right way. [P22]

Uhm, I find, stress can be a useful tool [...] [P21]

[...] so it's like a singer who goes on a stage, they could be in pieces before they go on, and they use that adrenaline, that stress to actually perform to, to a very good level, I think. [P24]

### **Appropriate stimulation**

[...] yes it can be stressful, but some stress is OK, I think it's, it's good to have some stress in life. [P1]

They won't even go in the aeroplane in the first place, uhm... so I think yeah, there are different people who thrive on doing different things, whatever it'd be, something like a bungee jump as well, I would never do that either. [P1]

I have to keep myself busy almost, even though I do enjoy just relaxing. [P2]

Stress is like my motivator but it's also my biggest de-motivator, so I need the perfect amount, I need this happy medium [...] [P3]

So it's why I was saying about having a happy balance. You need a bit to help you, but too much would ruin what you're doing. [P3]

[...] it's not necessarily negative. Uhm... stress can be positive as well, a good amount of stress. [P4]

Now if you put that into perspective the... a car, if you leave in the garage, so there is no stress on it – it's bad. If you run that car, and drive it nicely every day that's much more beneficial. Although it's under stress, it's beneficial. So that's what I think maybe the out for good stress is there. [P7]

[...] so for me I quite like to be in a stimulating environment that it's quite stressful, but... [P8]

And it's at that point where it's not looked up, where it becomes a negative thing, and it becomes dangerous but, actually, normally it's not. [P8]

Uhm... I don't, I, I've thought, I guess, if I wanted to be less stressed then I would just like not do them, but I'd rather, like I guess, have them, have a little bit of stress. [P10]

You can, you can go to the other extreme, you know, if you're literally like not stressed at all, you don't care, like what you do, what you'll eat, what you behave like. [...] So it's like, I guess, being in, in between where you're like a little bit stressed, like, and like be able to, like, with everyday life, and lead, lead a normal life, I guess. Like, and not going to the extreme of like being so stressed that maybe you see it like you don't eat because you're so stressed [...] [P10]

It is, oh, absolutely but anything's too much is... you know, everything is fine in moderation. [P11]

Uhm, yeah, I would, I would think it's, it's not a good thing to have too much of it but it would be a, a bad thing not to... I almost think the opposite of stress is cushy, having a cushy life, and I don't think that's a good think either. [P16]

And, uhm... and that would be difficult and challenging, and at times could be stressful but not all of the time. Not a lot of the time, a little bit of the time [laugh] [P16]

Uhm... but I've also said that at times I think it can be a good thing because otherwise you could be just too relaxed [...] [P16]

It's just trying to find the balance between, uhm, a positive level of stress and pushing over into a negative level of stress. [...] if you've got kids stressed by exams, want people to be just at right level of stress to be motivated but not to go overboard, to make people feel, uhm, you know, just exhausted. [P17]

Uhm... Can I imagine that? I think it might be a bit boring [laugh]. Uhm, because, because of this need for balance and I suppose, uhm, you know [...] [P17]

So I think it's breaking down those barriers, probably you don't wanna break too many down because then you've just got no inhibitions, or stresses [...] [P18]

Yeah, I do like being relaxed but it's just... if it borders on too, if it goes on too long, then I either get started feeling lonely, or I need a carrot to get me going again. [P18]

Because I think it's so easy to not do things and you need that gentle stress but you also need to be aware when stress isn't good. [P18]

[...] but by being far too relaxed about checking details and the room, I ended up in a state of stress where actually all went, all went to be at wrong, so... [P19]

Whereas actually, actually, you know, they are fine and in charge, haven't completely oblivious to, or unconcerned, but, you know, but sort of more forceful, but then more, I don't think gentle is what they want [...] [P21]

[...] if you've got no stress, or you don't, you know, expect anything from yourself, uhm you're not gonna achieve anything, but if you're expecting too much then your performance is gonna drop anyway, so... yeah. [P24]

So we used to have go from September, or late August to, to Christmas, and when it's really, really busy with all the new students coming but I tend to thrive on that busy. So, I'm, I'm better when I'm under pressure than not. That sort of pressure, you know, like being busy. [...] Uhm, so I, I'm, I'm not good when I'm just sitting, I get bored. [P25]

[...] but when I keep going, and I'm keep going, I'm under that pressure then I perform as a person in my whole life much better. [P25]

### **Quick response**

And because I... having been in management as well, often in most of my career, and being trained into management I'm slow to react, but [...] we had a swimming pool, and both my oldest son and the son of one of our friends, uhm, were basically in the pool, and drowning. And I was very quick. In that situation, which pleased me obviously, I'd launched in the water, and ahhh, otherwise they would have gone. [P7]

[...] oh, I guess, actually, when it really is an emergency , so... you know, like with, like you get back in the car, if I come back, my brain does actually come back to the car, and there's, you know, something happens, and... you know, you kind of need to react fast. It's not gonna be 'oh, oh, you know'... maybe you'll break eventually and it's gonna 'arrghhh' [laugh] There's certain, some, some things do need rapid response to... [P21]

### **Warning**

I guess, you can't cope with things without realising you're under stress, I think. [P5]

The bad stress gives you a reminder that, uhm, maybe you have to change your ways, adapt, you have to think about adjusting, yeah. So they are, they're both good. [P7]

Uhm, I think, you know, it makes people aware of if they like their jobs, or if they like their lives, or they have, uh, spending their time, uhm, how they're simply feeling. [P8]

All the time they do like 'oh, I've had such a hard week at work', so I guess, if you didn't have stress you wouldn't be able to gauge how are you feeling and how your work is going and stuff. [P8]

And then if it's too stressful, there's something wrong with the way things are being worked. [P8]

But kind of that keeps me routined, in the fact that I'm like, I know I need to do, do these things. [P10]

So... stress might be something... an evolutionary mechanism to survive the situation. I mean, it doesn't need to be negative, does it? It could be a positive thing. Because it's... you might be more alert, and that's why I'm saying it's about the environment and that will let, maybe it, I'm alert to my environment so I'm gonna move away to, to survive [...] [P12]

No... but more so because if there wasn't stress at all, even like small stresses like 'oh, they didn't have the right cheese I wanted at the shop', you know, things like that, then you'd never know what would be right for you, and what would be wrong for you, so... [P23]

Yeah. I mean, it's just I've done things, you know, so I'm, you know, learning new things, and crafts, and being creative, or... you know, I was like, you know, driving around Bournemouth, I mean, it's quite like daunting because, you know, I don't know where I'm going, I've just got my phone with the satnav on it. I'm just like, you know, 'oh! I'll go off to New Forest. Oh! I'll go here!', you know, but if I don't push myself, what I'm gonna do? [P25]

### **Point of comparison**

No. No I don't. I don't think, this sounds really stupid but I think wouldn't want a life without stress because without stress how do you know the life is stress-less? How can you appreciate that? [P3]

Uhm... I can enjoy times when I have a little bit of stress but I wouldn't want it without stress. [...] A small amount, yeah, just a bit because it's the same, you know, when they say like, I don't know, like a star can't shine when it's in the daytime because it's light everywhere. But if it's in the night, then it can shine. Uhm, it's like that with stress, so it's like you can't appreciate all the good stuff if everything is all rosy and good. But if there is a little bit of stress it's like 'Oh, I can actually see the difference, I can see what it is worth, I can see that everything's good. Apart from that little bit but that's OK because it's showing me that everything is good. [P3]

[...] but I think without stress you wouldn't be able to appreciate that you're not stressed. You need the stress to know you're not stressed. Whilst you'd just be not stressed, but you won't appreciate it, you just wouldn't acknowledge that is the thing. [P8]

Because when I'm not stressed, I'm like 'uh, it's so nice having a relaxing time!', and then when I'm stressed again 'oh yes, I remember what this feels like, OK'. But it'll be finished soon and then I can relax, and I remember what relaxing feels like. [P8]

Oh god, no! It's like the old thing, you know, it... If you've got everything, you'd never know that you have everything because you've never had nothing, do you know what I mean? [P11]

But I see only difference. Now I would, there are, not to be it's like never took been hungry, you don't appreciate food, or you you've been without radio, or music, or whatever. I'm not an overly,

I can do silence, but god, if you want to, you wanna, you know, if you haven't [laugh], you can't not have something, uhm... anything if you want to appreciate something, in my mind. [P11]

I don't, you know, I don't think it would be a good life to be because... it makes you re-evaluate your, your... if you're stressed, and you're worrying about something, you then might think of all the bad things, and then you might think about all the good things. And therefore you can compare the two and actually decide you're actually doing alright , even though you've got these stressful situations, negativity, that kind of thing. You then think 'well, actually yes, OK, so I've got that but I've also got this, this, this, and this' [P16]

### Caring

Uhm... I, I've, I think people that are completely relaxed are bad, I don't know, like I think like they've been sunbathing all day, or like they, they'd, they'd just, they don't care, they don't care enough, they don't value what they're doing enough to invest their time, or mental energy, or space to that thing. [P3]

[...] and having a job that you can just do with your eyes shut means that you probably don't care enough to progress, uhm, and I like progression. [P3]

But a young relaxed person, I think is careless, and I think is almost selfish. You know, if, if you're relaxed you kind of 'what we're gonna have for breakfast?' – 'who cares? it doesn't matter'. [P3]

[non-stressed person] Uhm, but I think not quite as astute, or sort of considerate, uhm, I think a bit more kind of easy-going and carefree. [P8]

If you're stressed, and you're worried about certain situations, or certain assignments, you're gonna do it basically. [...] If you just once stressed about, and you now, I guess, didn't care, like just leave it until the last minute, and you'll produce, I guess, a poor, poor piece of work, or not your best that you could do [P10]

Like, I guess, without stress, then I'd like, I associate with not, with not caring about it, and just going with the flow doing whatever. [P10]

Like, there's a little bit, obviously, stress to each, but if I wasn't stressed about it, then I wouldn't, I, I guess, bother with... I'll just like say like what I think, I guess, and not get the majority view. [P10]

[...] and just like almost if, like, I don't know whether that, that's relaxed. Relaxed to me is basically just like, literally just like lying in bed for as long as you want without a caring a world for anything else's going on. [P10]

You can, you can go to the other extreme, you know, if you're literally like not stressed at all, you don't care, like what you do, what you'll eat, what you behave like. [P10]

bit of anticipation, I'm much happier once it's got started, and I realised a while ago that that just kind of meant I cared. So I would hate to go on and present without any nerves at all. [P21]

But if you had no stress then you go 'oh, let's pick that cheese', and it wouldn't matter to you at all. [P23]

If there's no deadline to something, then I'd sort of go 'well, is it really an issue?' [P23]

Stress-free life, I think it'd be a bit selfish in a way to be completely stress-free because, you know, even just from being alive in this world you're gonna be stressed only by looking at... just being empathetic, I suppose, aren't you? [P26]

### **No pain, no gain**

Yeah, because I, I think, a lot of, you might sometimes have to do a presentation, which for me would be quite a stressful thing to do but you can do that presentation, and then you get the feedback from that presentation, to say here you've done a really good job, yeah, and that can be a rewarding part of it. [...] that did make you stressed, but the outcome was positivity, in terms of good feedback, and recognition for having done something that you've perhaps not initially wanted to do... [P1]

[...] but they're all things that have gone well for me, so yes, so it's been stress there, and ultimately there's been positive outcome from them. [P1]

So it was very stressful, but ultimately everything were there all right, but for an hour or two, during the pregnancy it was very much, uh, probably the most stressful thing I've ever had. [P1]

Yeah, it's, it's, is in some way a paradox, uhm... [...] It's sort of like a necessary evil almost. Uhm... it makes you unhappy, but generally it's for the best, it motivates you to keep going, and it doesn't let you become too lax. [P2]

I mean, I'm partially there, like there are things I'm better at than other people, that make me realise that the stress was worth it. [P3]

And it almost becomes a reward, because you set a goal for yourself, and if you achieve it, you know, the feeling that you get is almost like that, a reward, so I'd, I'd say that it's positive as long as it gets done. [P4]

Uhm, and you know, when you've finished you've had, 'wow! we did so much in that time! We did, you know, you can see it, it's such a big thing [...] [P8]

[...] and then, when I'm not working like that, I mean, I really enjoy my work, but it's not the same sense of 'wow, I've achieved so much', I think stress is definitely a contributing factor to have, feeling good at the end of doing something stressful. [P8]

That's like kind of stressful, but, and it's also like, I associate that stress with like being like proud, I'm representing like this big a course, I'm proud that I'm like letting those voices and the whole of the course be heard. [P10]

[physical stress – exercising] my body is designed to, like, I guess, not be beaten, it's like, it can like, I'd always had it like, it's progress in my eyes, like, like... I always say like, there's like, there's pain like involved, but then that's going to progress me, and I'm going to be like stronger tomorrow,

I'm going to be stronger, like, next week. And, like, that idea of achieving it, I guess, is more like positive, and more reinforcing than the stress that is caused, like, to my body [P10]

So you could actually, I'm just thinking that subconsciously you don't, even don't think about put yourself in that situation. So that actually you could miss out on a heck of a lot. [P11]

So I love new things, new situations. I'm a bit lazy at it now. Uhm... but I will, you know, I'll try new food, or go anywhere, do anything at least once. Whether or not it's art and craft I don't like watercolours as such, but I want to know how to do it, so I'll go and learn how to do it, even though I know I can't paint, can't draw, I'm crap at colours. I mean that could put me in a really stressful situation because everybody wants to be better than everybody else. [P11]

[..] I can go and have my cup of tea, my lunch now when I did it. I put that challenge ahead of me, might be a bit worried and stressed out but actually I did it, so I can do that. Some sense of achievement puts it to one side. [P12]

But maybe it was stressful trying to write right-handed when you're actually left-handed. But I, it went alright for me because I can write with both my hands if I'm pushed. [P12]

So I did it once, when I, I didn't speak to ten thousand people but like, it's the first time I've done something like that, uhm, and it was quite stressful and I was very nervous, but then once I've done it, there's, you're proud of yourself, you're proud of yourself that you managed to do it, you achieved something. [P13]

About saying to children, you can't learn if you get things right all the time, you know, gonna learn as much as if you don't through your mistakes. [P15]

I think stress is, is not necessarily a good thing but it can be a good thing. Because if we didn't push ourselves we wouldn't achieve certain things but that can associate, that can manifest itself in feeling stress. [P16]

So I wanted to, uhm... so, but the relief when it's done, and it's confirmed is great. And that's another good, and positive thing about stress, because when you're over it you feel, you feel good about it because you've resolved whatever it was that was stressing you. [P16]

[...] I don't think you'd ever achieve anything if you didn't, uh, put yourself under stress and pressure, so... [P16]

Yeah, if you deal with the stressful situation, and resolve it, yeah, I think that can be positive. [P16]

And that, and that, that really showed this off with netball umpiring but because I'm me, I stuck with it and I was determined to get better and to get over, get over it [...] [P16]

[...] we wouldn't say that we don't find our job stressful, we do find our work stressful, but we also enjoy some element of, uhm, kind of getting things done, I suppose. [P17]

So it's one of the case, but it was, uhm, if I hadn't been stressed it wouldn't have, uhm, you know, it wouldn't, would have happened, it was only because I was stressed something good happened, really. [P19]

But I think that, you know, in a short term, yeah, it's pretty nice to go off to the beach or something like that, and there's ice-cream, I don't know. Uhm, but I think that, uhm, as a person I wouldn't feel terribly satisfied, uhm, because I like to achieve things in my life, and without any stress at all you, I wouldn't push myself to, to, to achieve those things, so [...] [P24]

[...] but the I thought well, OK, I've actually always wanted to do this anyway, uhm, so now I will, and, uhm, so I put myself under that, I don't know that I'd call it stress, but, uh... you know, I decided to do that sort of thing [...] [P24]

[...] actually it feels great if you, if you put yourself under stress to do something, and then you achieve it. [P24]

And then I, I thought to myself more recently, uhm, that actually I would like to read again, and I'd like to do it in a sort of constructive way to, to put myself under pressure, under stress if you like, to, to achieve a certain amount for different reasons. [...] so I joined the reading group, and initially it was a little bit stressful because I was putting myself under that stress in a negative, slightly negative way, and I was kind of the, the weekend before going to that group I would be just reading, really. Uhm, but now it feels a sense of achievement so I'm putting myself under that stress to plan it out, and to do that reading [...] I'm sort of appreciating that I'm putting myself under stress to do that. Uhm, that it feels good, and a sense of achievement [P24]

So I think, yeah, that was very helpful, because maybe at the time you think that, this is not great, uhm, but actually achieving that, uhm, benefitting from the learning, uhm, is really good, I think. [P24]

Yeah. I mean, I think, so maybe another example... maybe a few years ago I've started going to a club where you practice public speaking, and when I first started, that was a little uncomfortable, and stressful [...] and so I suddenly realised actually it's not a lot in this room they can be looking at, so this is really bad if they're not looking at me, so... then I thought OK, and then I gave better eye-contact, so... then people giving me better eye-contact as I was doing the speech, uhm, and then I was thinking 'oh, this is good'. [...] I was like 'oh, good! now I've got their attention!' and this is, this is great, so... so after maybe the first one or two speeches a bit more stressful but the I, oh, this is, this feels really good. [P24]

If you... if you don't have that little bit to work, you know, to aim higher, to do things that can push you out of you, you know, sometimes you've got to push yourself out of your comfort zone. And it might stress you out, you might think 'uhm, can I do this?' But I don't know unless I try. And it might stress you out thinking about trying but then you do it and you think 'well, see'. So it's good because I think if I hadn't pushed myself, and I hadn't got myself a little bit stressed then I don't know if I'd do that, you know. Then, you know, you wouldn't do a lot of things, I don't think, if your life, if you, if you didn't cause yourself some stress, and make yourself do things that you, that were a little bit out of your comfort zone, you didn't think you were capable of. [P25]

I mean, I didn't know what's gonna, you know, I mean to give up everything I had there, looking after my family, my job, my friends, and then to come down here. It was like 'booo', but you know,

probably [it's] been one of the best moves I could have made. So, you know, you have to put yourself in the situation where you've got to... so although I was stressed to leave my parents, I was excited of what, what I was going to have [P25]

And I think although sometimes you might get a bit worried about it, and you feel a bit stressed, then if you don't do it, but then once you've done it you feel so good, that, you know, it's a good sort. [P25]

[...] there is some confidence there, it's just sort of trying a way for it to, to come to the surface in a positive, healthy way, I suppose, you know. That's the kind of outlet, that is one of the public tour when I look at that. [P26]

### Boredom

I think if you didn't have any stress at all, your life would be a little bit boring. [P1]

I think, if you don't have anything to test you as a person, you'd just become quite a dull person, that doesn't really have much that they can do to challenge themselves. [P1]

I expect that the usual answer will be somebody sitting on a nice, desert island, where the temperature would be not too hot, and not too cold all the time, uhm... reading books, or, uhm, just looking at the sea, but I find them boring after a while, because I would need something to stimulate my mind, thought processes. [P6]

[stress-free life] Uh... I can, but it'd be pretty boring. [P8]

Uhm, but generally, on a daily basis... but I will, you know, do little things that give me a bit of stress, just, I'll cook dinner for people, put time constraints, or whatever, just to keep it... a bit more interesting because... yeah, I think, how I feel unstressed, just, just stretches on and nothing really happens... [P8]

It keeps me like not bored, because if I wasn't stressed, I do, I think I would be bored [...] [P10]

Like, I guess, without stress, then I'd like, I associate with not, with not caring about it, and just going with the flow doing whatever. And I guess, it would be boring [...] [P10]

You've got to do... I love buying gadgets and craft things and whatever, but it's acquisition, it's not actually having it. You had the wool for the craft stuff in the world, I wouldn't... would be boring. [P11]

Uhm, I know some people can, but I can't because I'm kind of... not really full on stress, but actually challenging yourself can be stressful but I think that's quite a good way of going on. Uhm, I don't want to live on a beach, you know, for the rest of my life [...] Just, just cut the days away. No... uhm, stress can be positive. [P12]

You know, I am quite easily... bored, I need challenges professionally, and things. [P15]

Uhm... [laugh] actually it's a really hard one to think about because I'd, I'd, for me, I need something to work towards, be it a goal, or be it something else. I can't imagine just sort of, just

tracking on through life, just having a high old life of it, you know, just taking it easy, I can't imagine. [P16]

Uhm... Can I imagine that [stress-free life]? I think it might be a bit boring [laugh] [P17]

So yeah, it might be quite dull if that was removed. [P17]

### **Cooperation/Helping**

[...] and, uhm, and stressful, but it in a way helped, because we were all, then with my brother, and my youngest daughter, we were all together, so although you felt really stressed because of what was going on, and, and you were, didn't know whether you're gonna cope with it, because they were there as well, I think we got through it, the three of us together, uhm [...] [P5]

And also you're often with other people, and I think other people make, and if you are in a stressful situation with other people, it can bring out the best. [P8]

Because I, I think when I work on projects I'm stressed a lot, uhm, but I finished some, and I've always, I've really enjoyed them, and I really enjoyed, you know, working with people, and stress, because it does bring out the best of people over certain time. [P8]

[...] and I think if I run, has just working on it for years, you'd never see the end, you'd never see the stress, you know, there'd be nothing pushing people together but also I think it can bring out really good aspects in other people, you know, if you see someone quite stressed, you can help them out, or when people see that you're stressed they're like, OK, we'll split this out and make it work, so I think, I think, you know negative things can bring out good things in other people, uhm, and... yeah, [...] [P8]

And you want to reduce it, and... well that's my nature anyway. If I can do something to reduce someone's stress or pressure, I would do it. [P15]

Yeah, because if you're, if you, if somebody is stressed around you that can, that can pass on, you can start to feel their anxiety or whatever it is. You may want to try and help them. [P16]

Another time, there was a time, I mean, years ago, I remember with a project I was needing when, uhm, it looked like, it was all going to be closed down, and we had to pull together at very short campaign to try, to try and get things, get things moving again. And, uhm, and because it was stressful, and, and slightly threatening because if it all had gone wrong I would have had to resign and withdraw, or something. It meant that actually we got a really good solid campaign to get there, and it was fine in the end. [P19]

### **Progress/Change**

I think it almost makes me have everybody walking and singing, whistling and uhm and everybody being happy, flowers that would never die and weather that is always sunny and I don't know, maybe that would be the world, but then we'd probably miss things like the rain and you know, flowers that was so... not having a chance to regrow, yeah. [P1]

And I think it's important to have some stress there because it gives you a mechanism for coping with changes and wrong behaviour. [P1]

[...] but, you know, if you've got to do something in work that you're not quite comfortable with, it's not a bad thing to have that kind of stress, because it keeps you develop and it keeps you challenged. [P1]

But yeah, I think, from my perspective that stress has ultimately meant I've got to go and try to find somewhere different to work. [P1]

Then, there are things that you, to make progress, you've got to meet, criteria you've got to meet, and to meet that requires a bit of stress. [P3]

And to be completely relaxed means that you are content with the little that you have [...] [P3]

[...] I think sometime you do, you need that little bit of uhm, a normal day just to think 'oh, yeah, so I, I need to sort that out'. Uhm, otherwise, I think you could become complacent, and you think [...] [P5]

[...] because without that you're probably not gonna move forward. You're not gonna learn, and so on. [P7]

And I think a lot of people thrive under pressure, so people wouldn't unlock their potential. [P8]

But I also feel quite complacent if I'm not stressed. [P8]

Like, I guess, without stress, then I'd like, I associate with not, with not caring about it [...] and it would, like, I wouldn't be like the best version of me, I guess. [P10]

[...] you just, it, it's, if you're, if it's teaching you something, and you're gonna, maybe, you're achieving something from it, you're learning something, yeah. [P13]

No because I think an element of it is healthy. That I think it helps you strive for, uhm, for better, for yourself, and for your family. [P15]

Yeah, it would be, but then I, it's not really, you know, life, it would... I think you have to draw from stressful situations the positives as well. Like I look back at that time in my life that I just referred to, like it was a really, really hard time for me, but I've drawn a lot from that, and it's made me a stronger person, so I think you need you've got to take from stressful situations what you can, and turn it around [...] and then it helps you move forward. [P15]

[...] and sort of making them resilient then, it's, uhm, taking from a negative situation the positive to help them move forward, you know? [P15]

I'd thrown myself into career, so that I could get to work and push on [...] So in that sense that was a positive step forward [...] [P15]

[...] and then thinking 'right, OK, so I've got to be aware of this when I work with other organisations', so... you know, this is, this can happen, so trying to pre-empt that. Because that's the whole reason for you trying something out, doing a trial, you learn. [P16]

Uhm... it's usually more an, an external factor. So I'm, I'm comfortable that usually if there's a, I can change, and I can learn as I try and fix the problem. [P23]

[...] well if you think about all those people that build bridges, I mean, if they handle stress doing all those buildings, and you know we, the world won't be where we are today, would we, do you know? So it's got to be good stress as well, hasn't it? It's pushing boundaries, isn't it? So pushing boundaries, it's, it's got to be like a good part of stress because the things that are achieved from that, it's amazing. [P25]

### **Learning/Inoculation**

If you said to someone that 'we've got to do a presentation' or some public speaking, a lot of people wouldn't want to do that whereas by doing it sometimes it can tackle that stress and then the next time you do it, uhm, you know, I've had probably five interviews in the last week or so, the first was very stressful, and then you have more than one experience of doing something stressful it becomes less stressful even to the point that you can actually quite enjoy being in that environment, so maybe that's, you know... [P1]

Yeah, I think if you, if you put yourself in a stressful environment regularly you become, you know, able to deal with that particularly stressful scenario [...] [P1]

[...] they do like lecturing because they do, but doesn't like presenting or running the lecture, but the more they do it the more maybe comfortable doing it. [P1]

And then you realise maybe that you won't have that engagement the first time, second time when you do it, it becomes more natural, and the more and more you do it, it become more and more natural. [...] Because you realise that it's not actually gonna go wrong, I can actually do this, and I'm doing it, and it's working. [P1]

[...] and then I think sometimes, if you don't have a little bit of stress, I think sometimes if something major happens, and it becomes a big stress then, I think you'd find that really difficult to cope with because it's such a shock to the system, and you don't know how to cope. [...] Uhm, so I think sometimes if your body's had a little bit [of stress] it doesn't do any harm. [...] Yeah [laugh] just have it now and again. [...] Small doses, yeah. [P5]

[...] you can learn to deal with it from young age, and then you can deal with it actually growing up. And then if you didn't do it, and then it all can be a new experiences to you, it'd be like 'what's happening?' [P9]

Yes, I think hers was a lot more stressful, but I think help herself in a lot of the situations, so, uhm, when there was something which could be stressful, she didn't try, and avoided it. [P9]

If I haven't that sort of stress, then a lower stress is, uhm... you know, if I'm working on a shop floor, or a till, that's stressful to me but then I've never been a manager in charge of hundreds of people in life-threatening god-knows what. [P11]

[...] but once you've done that you're gonna achieve something, you're gonna be proud, you're probably gonna be able to do it again, maybe like it's still a little bit stress, but less stressed, less stressful, then a few more times, perhaps [...] [P13]

Yeah, I think so, but then, it could be if you're suddenly faced with a particularly stressful situation that maybe you haven't encountered before, it could come as perhaps more of a shock, like I say for myself. When I had that situation with my former marriage, and my mum, and everything, I felt to that point I had quite a charmed life, you know, I kind of sailed through school, I had A grades, I went into a job, like, my first interview I got a job, everything had kind of just fallen into place. And, I would have said I was quite a resilient person, yeah, yeah, you know, quite strong and quite successful early on. And then suddenly I had all these things coming at me, I was like 'wow!', this is an, this is unexpected, because things don't happen like this in my life, you know, so then I suppose I had to suddenly develop resilience that perhaps I, previously thought I had. [P15]

[...] but when I first started umpiring I used to have to, I used to have to develop what I would call quite a thick skin [...] [P16]

I found that I developed, uhm, but I'm still not 100% confident, uhm, but I've developed confidence as I've gone along with experience. [P16]

And making sure I was in the right place, and trying to... you can only improve as an umpire if you do the better games. [P16]

[...] but I still get games where I get upset, and... but they don't affect me for as long now, kind of a bit shorter. [P16]

I'm just, I'm trying to kind of think of an example, I suppose, if you are, if in your job you are faced day-to-day with quite difficult situations then you must build up a sense of resilience. [...] you would have to build up a certain amount of mental resilience just in order to keep doing that job, uhm, in order to just not feel stress every day at work. [P17]

There was one stretch when, after I graduated and I was doing a job that was quite sort of public facing, very public facing, and, you know, there was the part of the job that I'd have to actually conduct a public tour. And I did actually see it as a means for me to sort of, you know, if, if I could try and expel some of the stresses that were like surrounding me at the time through this sort of practice, like facing up to my daemons, I suppose, I was looking at it more like so. [...] you've done it once before, you can do this kind of thing, it's fine, you've learned your lines, and all of that stuff, so... [P26]

### **Positive effect on health**

Uhm... yeah, there is, there's... the main things that gonna... And then on the good side, the good stress will... make you go for more walks, I think. Might make you join the gym, it might make you eat healthier food, so... those are the effects of the good side. [P7]

Yeah, I... both good and bad, because the good hopefully gives you a healthy lifestyle, and good feelings, so you feel positive. [P7]

[...] but then, uhm, I think it can also be motivating to do exercise, so it can have, it can really have beneficial effects. [P17]

Because you need stresses... again being a physiologist, or classic sort of real biology, you need... stress is a stimulus. If you don't have, and that's one of the things we see, colleagues in physiotherapy, that now in the UK have ERAS enhanced recovery after surgery, and that's for cardiac, joint replacement whatever. Now, particularly after hip surgery, knee surgery, they'd get you upon your feet after 24-48 hours, so that might be getting up and down on a chair, then building up to walking straight line, then walking up and down the stairs, yadda, yadda, yadda. Stimulus, you need stimulus to... adapt. [P18]

[...] it can have the opposite effect for some people, it can actually make them more determined to get rid of stress by exercising properly, and physically look after themselves better. [P19]

### Creativity

[...] else it's gonna be stressful for you for the rest of the time. You know, because you've never found the solution. Or else, you'll have to get creative thinking what the solution might be. [P12]

Well, you've got to be, uhm... in a way you have to admit to yourself, well, I can't do that. And now I've got to do something else in a different way, or whatever. [P12]

On the other hand you've got to be creative thinking about doing it in a different way. Like I was, I'll tell you this example happened to me a couple of days ago. I'm doing some spring cleaning at the moment. There's a box like that, so I lifted it up, and put it down, and then... I tried to lift it back up to put where I'm gonna, and I can't do it. And I think, well, I lifted it to put down, but I can't put it back. [...] I went back, and I thought well, what I do, I'll empty some of the box, put half the box up there, and then I'll put the things in the box, and then put the lid on. And that's only that... you're just thinking of it differently. [...] So I had to think of a different way of doing it. [P12]

Unless they think of a way around it like I just did with the box. I can't do it, but I can think of a way of doing it. [P12]

Uhm, it might make you do something differently. [P16]

But it can have the positive outcomes. Uhm... if only the positive outcome is that the stress ends because you do something differently. [P16]

Uhm, like we bought a house last year, no, two years ago, and I like, from the physical side I learned to do DIY jobs and things, but it's, you know, I always get it wrong, and it takes longer than you expect, and that's quite a nice thing because you learn again to deal with stress in different ways. [P18]

When people get too old, maybe five years of before they will retire, they start to slow down, and they're like, they, they won't often try something that's more innovative because they don't see there's any point, they feel secure in their job. [P24]

## Appendix 11. Study 1a. Lay interviews. Quotes representing *Positive state* subtheme (Theme: Positivity)

### **Positive mood/emotions**

Going on a speed boat, you know it's quite exhilarating and it can be quite an enjoyable thing to do but you can have the stress it will the boat heave away and even topple over [...] [P1]

Yeah, you need some stress to be positive. [P1]

Naturally, I think, some people thrive on being nervous [...] [P1]

[...] and thrive on stress, you know, people that are in, you know, quite high, high profile roles, like maybe. [...] Uhm, yeah, I think you can... certain people do seem to thrive on a lot more... [P1]

And good stress is when you're doing something that you like... it's, yeah, I said it's good stress. [...] Yeah, you're enjoying it. You, you might be stressing the body, or your mind, but you're enjoying the moment, you're pushing yourself. [P7]

[...] so good stress is doing things that you like to do [...] [P7]

Well on the good side, there's a... a good feeling, I don't want to use word 'ecstasy' because maybe that's taking it too far. Uhm, but just breathing, the air feels fresh when you're feeling good, uhm... [P7]

Well, good side – feeling good. [P7]

Uhm... happy, seeing pleasure in someone else that you've shown the correct way in this, or... you've given them some advice that has worked. You've done something together. An activity where you both liked it, or you know, you've come to view something and you're both excited, let's say the latest sports car if you were into that sort of thing, or an event you're both excited, uhm... [P7]

Yeah. I think the argument, though, you've mentioned about good stress perhaps not being a stress, but when you're enjoying yourself you create what's endorphins, the chemicals in the brain. [P7]

I need a push to do the things, so for me it can be quite nice, and also when everybody's working together, and you're working towards its goal, and everyone's a bit stressed out, but, you know, you're staying up late trying to get things done, that could be quite productive, and quite enjoyable.

[P8]

[...] like a lot of things are quite enjoyably stressful [...] [P8]

At least to me... I think a lot of people would really enjoy their stress [...] [P8]

Because I, I think when I work on projects I'm stressed a lot, uhm, but I finished some, and I've always, I've really enjoyed them, and I really enjoyed, you know, working with people, and stress [...] [P8]

I thrive on like being busy, like, that's like what I enjoy and that doesn't really, like, stress me out.

[P10]

Uh, stress is like a rollercoaster. Sometimes stress is good, and you're enjoying yourself [...] you can have a good stress, as stress, is it stress, or is it excitement [...] [P11]

Some people enjoy being under the pressure, like, I know for me, I do enjoy an element of stress, so like I couldn't do a job maybe that I was just working in Tesco on a shop counter, or something like that. [P15]

I actually enjoy the pressures and the stress that my job gives me, and it makes me kind of hungry for more at the same time, so it kind of that, that balance, I don't know, stressful life, let's say I know that that works for me to an extent professionally, as well. [P15]

So it's kind of that stress of, pressure of a situation, but then, as I say, when I was in the actual situation I just quite enjoyed it [laugh] [P15]

So we used to have go from September, or late August to, to Christmas, and when it's really, really busy with all the new students coming but I tend to thrive on that busy. [P25]

But, but no, to be under pressure and be busy, that – I, I thrive on that. [P25]

Not really. I mean, it is, but it's a different kind of stress, so it's, I enjoy the stress from the course, weirdly. Because I know I can do it, and I enjoy it. You know, also I enjoy what I'm doing [P26]

## **Adrenaline**

Yeah, yeah. I think, there's, there can be positive stress, I think if, it's probably that for being more way, I'd say it's adrenaline rather than stress. [...] but you can have the stress it will the boat heave away and even topple over or, or just it is, you know, a positive you can have a positive adrenaline washes, a very similar feeling to being stressed. [P1]

Uhm... and it feels like, you know how I said when you're nervous you can feel adrenaline, it's like the opposite to that because adrenaline can be a good feeling when it's, when the task is finished, you know, 'yeah, I've done it!' [P3]

Uhm, but sometimes, if, if it's like good type of stress, it can feel like an adrenaline rush [...] [P4]

I just also wonder when we, where I start thinking about it – I'm a very confident person, generally I run on adrenaline and confidence. [P6]

Probably, I'd say. I think you need an element. I don't know, it's not, stress is not the right word, adrenaline, I suppose. I don't know if they can cause the same sort of effect. [P14]

But there was a sense of kind of adrenaline that came with that, and a sense of you're going to the exam room, yes, it's a stressful situation but that, some of those, uhm, kind of, some of those effects of stress, uhm, so you know, the pumping of adrenaline round your body is, helps you write more quickly, and possibly therefore do better in the exams. [P17]

[...] uhm, you know, I suppose with the exams there's a bit of adrenaline that maybe kicks in with stress for that. Uhm... like I said, with, I suppose, I never really put much thought into it. I suppose for some people stress, like, for, for exams, or if you're nervous about something, uhm, it can give that, like I said, the adrenaline, uhm, kicks, so, uhm, maybe to a little point. [P20]

[Laugh] uh... yeah, I think it is because there's still, you're still, you still, uhm, feel the adrenaline, you still... yeah, I think it is... so from a physiological..., may, maybe it's more excitement? But not really, you know, like uh-hu, or anything like that, but, uhm... yeah, I think yeah, I think it is still stress because you're performing, you're feeling the adrenaline, [...] [P24]

## Appendix 12. Study 1a. Lay interviews. Quotes representing *Media and social media* subtheme (Theme: Nature-Civilisation)

[...] I think stress is in the news all the time now. [P1]

And if you turn news on, you know, issues between the UK and Russia, or... you have someone like Donald Trump or uhm... you know, people lives in [inaudible] or people having terminal diseases... [P1]

Because there are pressures of social media, and school, you know [...] And I think it's just, you know, I don't know, it's maybe is this social media that puts a lot of pressure on youngsters nowadays. [P5]

Like, for example, today the kids are very affected by social media – are the teachers doing anything about that? And can the parents do anything about this, because a lot of it could be hidden. [P7]

It's, it's on news, some things, so [...] So, I've, I've seen something and I transferred it's gonna happen to me, it's negativity, really. [P12]

So, uhm, I think expectations on younger people is a quite significant, and a very... very influenced way at outside things, like the things on the computers, and things like that. [P12]

[...] so say lots of e-mails coming in and I know I've got to answer them all, and, uhm, as quickly as I answer one of the another one pings into my inbox. Uhm, so that's stressful because I feel like I'm not making any progress [...] [P17]

I know from conversation we have with my partner, we have similar kind of work situations where we, where we, that we get stressed about, so the, uhm, lots of emails coming in, uhm, we both get stressed about that. [P17]

[...] also in this stage it's managing information overload [...] one thing that I'm aware of now that wasn't around perhaps 5-6 years ago – sheer amount of information. Every day I get, I purposefully have a blackberry because I don't want a phone with the Internet on. [...] Uhm... for me, I get Twitter updates on my emails every day, I get LinkedIn updates, get colleague email me, teachers, students, uhm... and it's, quite easy you can slip into losing... not managing your workload [...] [P18]

And it's the little things of what you, I now give my PhD student, another post, uhm, students advice that we, we get, if we receive an email, the etiquette is you've got anywhere between, you don't, you've got, you don't have to reply straightaway. We, our window for replying to student email is something like 4-8 hours. It falls on the Friday, they shouldn't be get in then a reply until Monday or Tuesday, uhm, however, emails you think 'I've got to respond, I've got to respond', uhm, anyway, I went for long. [P18]

I remember thinking I cannot sustain this all my life and it's, that's another thing that stresses me, and I see every, I'd like keeping abreast with the news, I read the Times, I watch BBC. Sustainability, and I probably watch too much news and we try to detox from this as well because all you get is bad news now. Uhm... but like one minute it's the obesity epidemic, next minute it's plastic in the seas, next minute it's Donald Trump, and it's just pervasive [...] [P18]

[...] and how so many people suffer from anxiety, mental issues, not because of any real reason but because of things like social media, or, uhm... perceived issues of work maintenance, whatever it is. [P18]

[...] I get paid more than I ever have done but it's that month which is fine because I'm good at managing my money but it's just a bit funny because it's like working from home, another one, I just, I could buy like a Starbucks every day, I wouldn't want it buy, it was like, god that's my, I can literally, like the amount of emails I get free, like SportPursuit - buy this new [inaudible 27:15], Amazon – buy this new book, only 20 quid. [P18]

Oh, and what I've just seen on BBC news – the age bracket of 25 to 35 year old bankruptcy has gone up again. [P18]

No, not really. Uhm... I know, as I said the things that stress me now, uh, too much information. [P18]

Because for me Internet is a fantastic thing, much as it's for everyone but... it, it's pervasive and it gets into every facet of your life, and if you don't apply rules... uhm, then I can see how people can become stuck. [P18]

Uhm... I know it myself that if I'm stressed sometime, sometimes, I could have a job that would take me an hour in any of the day, but then I wouldn't finish it that afternoon because I'm thinking, well, I'll look at my emails, because I'm waiting for that reply, oh god, I've looked at me emails, looked at me emails, and I've got distracted because I've got on LinkedIn, I've got on Twitter [...] [P18]

I: Can you tell me about the last time when you felt stress?

P18: Returning from holidays to having 90 emails. Uhm... I wasn't really stressed... There's probably little bit of stress last night actually because you came back from holiday... [...] So working through my emails, and... yeah, it was kind of like a full-on day [P18]

[...] I still get a load of e-mails [...] things are coming in from all over about [...] [P21]

So on Monday morning when I saw two hundred and something emails from five days off, and plus the problems, the things, emails that I hadn't got round to dealing with in these four days in the middle of the previous week – that was quite stressful. [P23]

So that is something I've taken on board from media, from my own sort of calculations, [...] you know, there is an expectation, uhm, you know, a much more equal world where men and women both go to work, so I suppose that, that sort of pressure is, is me. [P24]

I don't tend to be the news watch because... my mum [...] she sits and watches the news and she will, she gets sort of worked up about what's going on and she thinks it's gonna happen to us, and, you know, things like that. [P25]

So sort of put me off ever reading... I'll perhaps watch the breakfast morning news when I'm getting ready for work but I don't sit and I ain't bit more respect to newspapers [laugh], you know, because that, I think, well, you can't control what's going on in the world, and I think if you, if you got that slight bit of mental illness and you weighed up, that can tip people over the edge, you know. [P25]

Uhm... and knowing that you go home and then, I mean it wasn't as bad for us at school because there wasn't social media then when I was younger. Uhm... but, but the fact that, you know, you've got to go back and face them again the next day [...] [P25]

I think as good as social media is, I think it's taken away children's their childhood, they, they're too alert to what's going on-line, the bullying goes on-line, it's, uhm... [P25]

You know I'm quite happy with, with what I am because I just think there world is not very... we didn't even know things were going on, on the telly, we didn't know, you know, we didn't... we, we didn't have to worry about what was going on in the world, or, or anything like that. [P25]

Uhm... well, it was hundreds and hundreds of emails, and the... all of these, uhm, calls I'd have to do during a day, and I had to be, you know, everything had to happen, you know, right on time [...] [P26]

## Appendix 13. Study 1a. Lay interviews. Quotes representing *Relax in nature* (Theme: Nature-Civilisation)

And walking round, I think, you know, if you go out for a nice walk in the fresh air that always helps [laugh] I want to be outside walking. [P5]

You know, uhm, and rest, walk, go out for a walk, take the dog out, go, I don't know, go for a run, just go out in fresh air if you can [...] [P5]

Uhm, I enjoy talking to people, but at the other extreme I'd be more than happy to live on a Scottish island with nobody else there, just me finding my own solutions. [P6]

I expect that the usual answer will be somebody sitting on a nice, desert island, where the temperature would be not too hot, and not too cold all the time, uhm... reading books, or, uhm, just looking at the sea [...]

Uhm... Try and find, uhm, a relax, something to relax with, whether, whether it be crafting, or, I don't know really, lie in the grass [...] [P6]

Uhm, I'm going sit in the sun, and uhm, I don't know, fall asleep for ten minutes? [P6]

[...] or, you know, I'll often do this bit of work outside because it'll be good to have some fresh air, and then I'll feel less stressed out [...] [P8]

[...] it's, it's, you can't achieve as much, so I think you're going outside, having some air, like that will help wake you up, uhm, but also you can uh look at the nature for a bit, [...] [P8]

Uhm... and then just, I don't know, call your friends, go chill out on the beach, uhm, go and have some nice food, uh, have some drinks, have a good time, like, in the end going to bed, get then about ten hours of sleep [laugh] [P10]

And also I am... I've got, I've got a calendar with the moon, phases of the moon, I think I'm stressed at phases of the moon, and I 'well, that's, that's an idea', so [laugh] [P12]

And looking at the sea, going out to the sea. The sea is, uhm, very relaxing for me, as well. [P12]

Well, it's gonna sound soft and pathetic, really but just listening to the birds songs, and listening to the waves on the beach. Uhm... I said to my, uhm, this cousin all stressed out from London, I said 'Look, you sound really stressed out. Why don't you come and tie your socks off and walk down the beach?' You know, just putting your feet on the beach, you know, getting there, the sand going through your toes. That's very, really laid-back . That's me not being stressed out. [P12]

Oh, my first thought is just lying on a beach with no other people around, no electricity, or nothing, so just on yourself, calm. [P13]

So, for instance, our ideal dream where we believe we would be stress-free, would be to have like a... a villa in the middle of nowhere in Italy. So we, I suppose, it's essential to be away from civilisation [laugh] [...] Just away from work, and process, and less bureaucracy... [P14]

Sunbathing, uhm, I don't like sunbathing, relaxing, perhaps reading a book on the beach. I don't know why [inaudible 25:33] but I do think it's a part of it. [P14]

Just sort of wake up in the morning, the sun streaming through the curtains, and feeling 'oh, today is gonna be a nice day'. [P17]

[...] 'just gone to Brecon Beacons because I won't look at emails for two week', he said 'me and my wife love to go every year', and like, likewise me and my wife now go to Cornwall, or go to Lake District because it's just slower, the road, people don't beep the horns you like to do in Southampton, you can cycle, you can walk, you can not have email all the time and it's normal not to have wi-fi on buses and things, and... [P18]

And that's not good because you need to be getting outdoor, you need to be, just getting outdoors, releasing your mind. [P18]

They, well, they, uhm, something physical, I suppose, is what a lot of people do, and, uhm, getting outside, or being, uhm... [P19]

I don't know, it always has, when I was a child, if I was upset I'd go for a walk. So I was grown in the countryside, so it, I did a lot of walking, but, uhm, yeas, that would be the thing that I find, uhm, being outdoors has always helped me. I was happier if I was outdoors, and, uhm, yes, moving is good. [P19]

I think, I don't think there's a stress, uhm, I'm sure someone somewhere maybe has a stress-free life, maybe in the middle of nowhere, on an island where there's no one else there, and quite happy in solitude, maybe that's... [P20]

Or can I kind of sit and watch the birds and chill, or just... sit in there and I wonder, so... [P21]

It's interesting. [inaudible 01:03:40]. It doesn't, I was thinking, you know, utter, perfect relaxation is falling asleep in the deckchair in the summer house in warm, but not too hot sun. There is nothing quite like sleeping in warm sun [...] [P21]

[...] walking is amazing. There's, you know, where's a kind of rhythm, and nature, and fresh air, and... There's, there's enjoyment, there's something that being able to enjoy stuff... you know, so if... yeah, so for example, uhm, you know, the Eden project in Cornwall, big domes, uhm, in go round, inside the hot ones they grow all sorts of fascinating things, they've got coffee plants, and pepper, and bananas, and coco pots. And you go in there, so go around this sort of hot dome, and I just, going round the paths, just marching on through, and not stopping and taking any of it in. It's, it's stopping and smelling the flowers kind of thing, it's noticing, noticing and enjoying quite small things, it's not needing a big thing. [...] the birds flying around, it's that time to pay attention to those things rather, it's having those senses back actually, it's, it's having those senses available to what's happening [...] [P21]

[...] what might be happening is then you fall asleep in the sunshine but, but just sitting there before that is nice, water in the, in the waterfall, birds twitting out there, and bathing out there [...] [P21]

Sitting, sitting quietly in the garden and just watching world going on. And running water is nice. [P21]

Uhm, I... I like the idea of moving in a slight, in the middle of the forest, and just having a hut, and then, you know, and not complying with society, and grow vegetables, and removing that stress [...] I know, it would be lovely, wouldn't it? Or in an island would be even better. [...] Uhm, if there was no such thing as, as stress, or if I was removed from the stress, so, I mean, we're in the middle of the forest, in there, in my hut, uhm, I wouldn't need stress, I wouldn't need stress to get done [P22]

They're getting fresh air which is always good [...] [P23]

But I think that, you know, in a short term, yeah, it's pretty nice to go off to the beach or something like that, and there's ice-cream, I don't know. [P24]

So if, so like a relaxing day may be to go to the beach, you've got nothing to do, you're just relaxing [...] [P24]

When it's cold all the time, I don't like the cold, and I'm a different person when it's like sunny, you know, I know how silly is it but you can... why, everyone's walked around and they're all in the good mood, no one's stressing, and I think you can handle things better when it's sunny. Then when it's, it's horrible and raining, and you look outside and it's day after day it's grey, and, you know, so I do think that conditions of where you are can make it big difference. [P25]

I'm quite, I prefer to be by nature, or, uhm, water, and I'm happy with, with those sorts of elements, so if ever felt stressed, as I say something upset me and I couldn't handle it, I will go and sit by water. [...] so if I ever feel like upset, or while I feel stress, then I'll go and find some water, and I will sit by the water. And that, so I think the elements can, and you know, make an impact on how people react to the stuff. [P25]

And the beach. So I think I'm lucky [laugh] whatever happens I can go and sit by the sea, and... you, you know. [P25]

Unless you went to live it like... some people are quite happy living on a farm [...] [P25]

So, or, you, you know, go for a nice walk. Or go and sit by the water. I used to go and sit, if I was a bit like, feeling a bit like I can't handle this all, you know, then I'll just, you know, go and find some water because that seemed to calm me down, but that's just... me. [P25]

Lovely [laugh]. I went to the beach on Thursday, and I sort of like, I was walking and I was picking up pebbles, and I'm looking at shells, and I'm really calm. You know, I like nature, I think nature is amazing in how it, like, you know, like fish, and crabs, you know, animals, how they're like, you know, so I'd do, I'd just lay down, wind's blowing, sun's shining , and I would, I couldn't have

enough care in the world. It was, it was such a nice feeling, you know, I didn't care about anyone on the beach, you know, on the beach I dare say. It was just me and myself and the sea [laugh] [P25]

Sun makes me happy, the water makes me happy, the beach I'll just, you, you know, like I said today, you know, I would have wanted a holiday, I'd been craving for it, for beach, for sea, to be by that, but now... [P25]

So... stick me by beach any day and I'll be happy [laugh] [P25]

[...] I'd like that, just to be able to, you know, chill out and I'll walk in the sunshine before I get home. [P25]

Uhm... well, I mean, I suppose you'd have to... become a monk and live in the Himalayan hill, mountains, uh... a stress-free life would probably be... I don't know maybe it's achievable for even me, I don't know. [P26]

And actually living outside of London has been, you know, being by the sea... Because I'm really lucky, I go, uhm, I go, on my way to work I have a like at least 2 minutes, uh, cycle ride along the sea, and it's just so calming, it's, it's cliché, but it really is, you know, especially in the morning when it's silent, silent-dead sea... uhm... with no other humans [laugh] [P26]

## Appendix 14. Study 1b. Experts interviews. Theme table

Table 14.12

*Study 1b. Expert interviews. Theme table*

Theme	Subtheme	Description	Quotes
Individuality underpinned by universality	Individual concept	Stress is an idiosyncratic concept, a personal construct that develops over time and is closely related to individual experience – people differ in what they think stress is but because it is based on their own experience, it is true. At the same time, for communication's sake, people must agree (at least temporarily) on some common understanding of stress.	I think it means different things to different people. Uhm, and it's used by different people in different ways at different times. [E1]  Uhm... if your outlook is that you experience no stress then yeah, it's a, it's an individual construct, I guess, a stress-free life. [E1]  So, uhm, you know, stress is a psychological construct which is idiosyncratic to each individual. [E2]  You know, I've done a lot of work on kind of lay approaches. As you know, you know, as somebody once said, if you ask a 100 people you get a 100 definitions. And I do that in my teaching as well. And you get huge amount of [definitions], you know, some people are saying it's mental health problems, you know, mental health symptoms, somebody else's saying, oh, it's when you get headaches, or you may eat problems, they, they kind of a mix the cause and the effect, but also the moderations, and nobody's wrong. That's the thing. You know, they're all right in their own way but of course. [E3]  You know, so you've got the kind of historical interest. The social, uhm, what's the word? Uhm, sociocultural if you, the lay interest as well. Because if you say to somebody, you know, what

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it's like when you're stressed, or about stress, everybody knows what you mean. You know what I mean? [...] In, in Western cultures. [E3]

[...] Jex, I'm sure you've come across, you know, doing research on, when he was asking participants in terms of what they meant by stress, they talked in lots of different ways, the stimulus, response, stimulus-response relationship etc. [E3]

But also that stress isn't the same thing to people, there's such a huge variability amongst people. [E7]

Uhm, what I'm interested in is when people say they are stressed, is their interpretation of what that means for them. Uhm... rather than saying 'don't use that word because, you know, you're not entitled to'. And it's, there's no, I don't think we should ever correct people but I think, sometimes people say that they feel stressed when they're actually just, you know, a teensy-weensy bit sort of like anxious. And sometimes people say they are stressed and they are so stressed that they find it very difficult to leave their house, if you, if you see what I mean. So when someone says 'I feel stressed', I'm interested to know more. What, what it is about, that experience? How does it, what happens in your body when you feel sort of stressed? [E7]

So it's that sort of like, you know, that, that validation, you know, you're not depressed until I tell you you're depressed. You're not stressed until I tell you you're stressed. For me it's unacceptable. [E7]

It's like a concept of mental health – what on earth does that actually mean? We have various definitions but, you know, the best definitions are, you know, mental health is defined by the individual as opposed to, you know, and it's not the absence of mental illness. [E7]

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Uhm, but the idea that there is a definition which cuts off people, to me, I, I'm quite uncomfortable with. [E7]

But that, but do you see what I mean, that might, the second we say stress means this, people would say 'well, that's not me, then I'm not stressed'. And they might be stressed out of their head. But because they don't see it in those terms, you know... [E7]

But we see it as something which is, uhm, not defined, and perhaps, only vaguely definable, we put the emphasis back on the individual's interpretation [...] Well, we'll never get a universal definition of these things. [E7]

Because I'm, I'm nowhere near them, but actually to have someone that have broad range of experience say 'I am like this', you know, someone can resonate with that. Someone might say 'no, that's not me' but someone else might say this is sort of Yalom's group therapy sort of approach, isn't it? You know, the idea that we find resonance with, with people. Uhm... we may not always see eye to eye with people but the fact that someone say 'yeah, I feel like that' – immediately you feel connected. Another person will 'I don't feel quite so much like that but I'm sort of getting where you're coming from. For me it's like this' [...] but we all understand what stress means. It's, otherwise it would be absolutely meaningless. And I know it's a bit philosophical point of view but, you know, it is the concept means the same thing to us all, otherwise there will be no such thing as a chair. [E7]

So the only thing that we can do is to say to people, you know, if we are in a group, just for the sake of our argument, let's agree what stress means. Yeah, for this moment of time. Uhm, that's the only way that we can get some sort of, you know. But I think that general experience

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		mean something. Otherwise we wouldn't be able to talk about it as part of human experience. [E7]
Individual appraisal and stress response	Individual appraisal/perception of the situation is crucial for stress experience to occur. The same situation may be perceived as stressful or not by different people, and by the same person depending on the context. As the appraisal is individual, people may respond differently to the same situation. Also, stress response is complex and involves physiological changes, emotions, cognitive symptoms, and behaviours which do not have follow the same	<p>Uhm... I don't want to just trot out a traditional definition of stress but that's kind of, you know, a discrepancy between people, what they think they need to do and what they can actually do. So, a mismatch between what they want to do or what they think is expected of them and what they can actually do. So causes, causes the stress. Or the feeling of stress. [E1]</p> <p>So we know, you know, there's lots of, there are situations where your biology may objectively change but if it has no impact on the way you feel, to me, in a short term that's, that's less important. What is important for stress is how an individual feels. Because we know that those feelings will translate to stuff that's going on inside but for me the stuff that's going on inside answers a different set of questions. About, you know, the knock-on effect of stress, or, you know, what it's doing in the short and the longer term. [E1]</p> <p>So I guess, I'll buy to the Lazarus and Folkman kind of, uhm, transtheoretical model in terms of... we appraise situations, and, uhm... it's that which decides whether we perceive something as stressful or not. Once we've appraised it, what can we do about it. [E1]</p> <p>Uhm... because, again, it's important to understand the context, any individual differences here, because you can have two people side by side and they're both exposed to the same things, one would report levels of stress and the other wouldn't. [E1]</p> <p>So self-report measures get a bit of a bad press but what better way of tapping into how someone feels than asking them how they feel? And I'd much rather get that and, uhm, take on board all the criticism to self-report measures, and confounds, and biases because most</p>

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pattern in all people. There is some universality in physiological response to acute stressors (as an evolutionary-based mechanism), however, physiological response may differ across people depending on their stress reactivity.

people will give you a fairly accurate appraisal of how they feel. And then you can add other stuff on to that. [E1]

But that person, that same set of stressors doesn't, doesn't impact upon person A and B in the same way. Uhm, so yes, stress does impact on one's life but only if you find it stressful. [E1]

Uhm... just your, your, your way of dealing with stress. And that comes at an individual level, how you perceive something in the very first instance. So if you weigh up the, the situation and decide whatever the situation is. [E1]

Uhm... multifaceted. It's, it's a... I think primarily it's a psychological feeling [...] [E1]

Uhm, so... and a lot of them will be related to a kind of symptoms that people might experience when they are stressed. [E1]

Because I think, fundamentally the first thing that happens when you're stressed is the feeling that you're stressed. [...] But I think the first wave of stress is... is a feeling. [E1]

So we'd measure sympathetic measures, mostly cardio-vascular measures, and, uhm, endocrine and immune measures. So cortisol in saliva or hair. Uhm, what other stuff have I done? Uhm, markers of immune inflammation, anti-body markers, so things like immunoglobulin A as an immune marker. We've looked at C-reactive protein as a measure of inflammation, uhm... The cardiovascular measures I talked about are heart rate, blood pressure, uhm, what other things have we looked at? Uhm, other kind of neuro-markers, like, uhm, alpha-amylase which is a kind of a marker for sympathetic activation. So a whole, a

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whole range of other markers we look at as well. But I think what we always do is look at psychological and biological together. And that gives us a profile. [E1]

So if someone, if someone was taking part in one of our acute stress studies, I think, you know, we know enough about what acute stress does to people that you could describe a gamut of responses that you would expect someone to experience in that kind of acute situation. [E1]

Uhm, so I think, in general, we know enough about acute stress and acute stress responses that you'd be able to ascribe a set of responses to an individual who's experiencing an acute stressor [...] I think we're a bit more general in the way we respond to an acute situation, especially if it's really quite dramatic and life-threatening. You know, so even the most laid-back individual would respond to a very intense acute stressor in a set way. [E1]

I think in terms of chronic stress it's a bit more difficult [...] They might recover in a slightly different way, so there might be where differences start occurring. But I think in terms of chronic stress that's where, I guess, more complex in a way that people might respond and the kind of things they might exhibit. And so it's more difficult to describe what chronic stress might look like for an individual [...] There's, I think, there's lots of things that happen with chronic stress that don't happen with acute stress. [E1]

People can immediately conjure up those feelings. So maybe not a woolly mammoth, or a bear in the woods but they all kind of know what we're talking about. But I might then talk about things, I mean, in the workshops and stuff I run, I'll get people to share those acute experiences, and while they're thinking of them I go 'arrghhh' [roar] and make them jump. So they physically feel what it is that we're talking about. And then we share those experiences

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so the we're absolutely on the same page in terms of what an acute stressor can actually do.  
[E1]

Well, no, my definition is that classic-type thing which I always keep in my head which is the perceived stress, which is the transaction. So it's the idea an individual experiences stress, or strain, uhm, when they perceive that the demands of the situation are not met by the resources, or coping capability we have. So when there is a mismatch, real, or perceived between these two things that's when an individual would experience stress. [E2]

So my personal view of this is that... it comes back to the transactional model. So I'm very much [influenced] by the transactional model of stress which is the idea... every person experiences stress differently. You know, the very simple example of that is you have some people who enjoy exams other people who don't really [inaudible 08:14] appraise. So I think cognitive appraisal is crucial here, central argument. So, and that's why primary and secondary appraisal are important. [E2]

[...] stress response, the, the release of cortisol, which, as you know probably that, is a primary stress hormone. [E2]

I think it's an organising principle, definitely, but I wouldn't slavishly, you know, follow it. You know, but I think, certainly perception is essential. [E3]

But you know, we can... either we need to measure it in different ways, actually, but to capture perception is absolutely essential. [E3]

Uhm, I'm not sure if we could specify 100% if anything would be stressful for everybody. [E3]

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But I mean, even death of a spouse, to some people that can come as a blessing. You know, if you've been really, really unwell for a very long time. So it's all about the process of perception. [E3]

So you're always gonna get people saying 'Oh, personally, I feel like this, and what happens to me is...' You know, and that's an important part of the problem, isn't it. You know, because, of course, you can't talk about everybody else, really. [E3]

You know, you can make some judgements about things that are most likely to be stressful for most people in a kind of utilitarian approach. But you know, it's so not... specific. [E3]

I hate these studies that just measure reaction. You know, physiological, when you actually don't get people's, uhm, perception as well. You know, all... uhm, because of course there is evidence that the two are not necessarily correlated. [E3]

Uhm, but, you know, I think it is like that in a lots of ways, because for me, I get angry, I want to hide away from people and regroup. [...] You know, we're talking about moods, we're talking about behaviours, we're talking about physical responses, you know, because some people somatise to such extent that they can feel like having a heart attack, or you know, [inaudible 39:00] in hospital. [E3]

Uhm, so I then tried, uhm, in that, in that kind of definition of psychological or physiological, you know, homeostasis being put out of balance I do try to incorporate elements and things like, uhm, Lazarus and Folkman's, you know... [E4]

[...] stress is something that is not just something psychological, not just physiological, [it] involves, uhm, perception, involves severity, involves duration, involves people's ability, you

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know, to access resources to cope with it or not. So, I sometimes look a little bit at the challenge, threat kind of side of it as well, but I'm not completely convinced by that [laugh] [E4]

[...] I'm really interested in physiological changes, you know, I kind of use the initial perspective from like Selye and Cannon, and a really sort of early physiological responses in my own definition. But then, at the same time acknowledging that they kind of treat stress as if everyone's response to the same stressor in the same ways. [E4]

Well, you see, the interesting thing with those is that... they don't necessarily experience stress psychologically different to anybody else but their physiological response is different so there seems to be like a decoupling between people's psychological response and their physiological response. That's like for starters, so it's not that the people who don't react don't, don't experience the stress, or the stressful, they still do but they're not responding. [E4]

I would say it is because it is still mobilising on the physiological side, it's still mobilising your stress systems [...] but it's still stress because it's still activating those systems. [E4]

They still psychologically feel stress, so when, when we've compared people with exaggerated, moderate, and blunted responses, all of them score in the same region in terms of, uhm, how engaged they are with the task, how stressful they found it, you know, how anxious they are about the stress task, how well they think they performed. You know, they don't significantly differ. It's just they differ in their physiological response. So they still feel stressed, and they'd actually be amazed if they knew they were, you know, they were really stressed out, they felt really stressed out but actually their heart rate and blood pressure didn't change much. [E4]

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Maybe, maybe it's from earlier experience when, when their heart really did race, you know, the initial stress responses but if they're someone whose responses have blunted over time because of early life adversity of something, yeah, maybe they, they just kind of, they look at it from kind of top-down and just processing, yes, their heart will be racing. Because people have done heart beat detection tasks and, you know, they think their heart is beating as fast as someone who's having a big stress reaction, and it isn't, so... Uhm, but I guess, it says a lot about how the brain is interpreting your emotions, and, and turn them into physical symptoms even if, if they're not there for everybody. [E4]

Yeah, I mean, we found the, uhm, people who have low stress reactions, they also, they don't have activation of, uhm, the brain areas that you would expect to be activating during the stress task compared to exaggerate responders. Uhm, in fact they have de-activation. Yeah, but of course they're not aware of that at all so it's completely unconscious. [E4]

People don't understand that stress just like beauty is in the eye of the beholder. Stress, I always say, is in the brain of the perceiver. So an event is never stressful on its own, it depends on how you perceive it, and that goes back to over my [inaudible 04:08] Lazarus and Folkman years ago, in the 50s, showing experimentally that when you induce a certain appraisal that will cause your stress response. So, the appraisal has a causal role in, in the stress response. [E5]

Uhm, I also like a definition by Lazarus and Folkman that is more or less as following: stress is an event which is perceived as taxing more than your resources can give. So again, the emphasis is not on the response but on the event. Ever since the definition of the stressor rather than stress response but it includes the appraisal. [E5]

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So initially Holmes and Rahe came up with this very long list of events, which was good, but the problem was that they didn't ask people about their appraisal. And so they assumed that the more events you have the more ill you'll be. And then, they came up with this long, long list and they added weights to them. They had people from United States assess them. [...] So today what I tell people is we should make simple events, a questionnaires like five, or ten, or twenty, and on each one give two appraisal questions: one – primary appraisal, 'how bad was this, or how stressful is it?' Two – 'how much control you have on it?' So what I say is how much uncontrollable is it? And then you multiply appraisal of stressfulness times uncontrollability, and then you get stressfulness of it. And then you add up all this multiplications per the number of items you have, let's say ten, and you get a sigma. That's your stressor level, that's the amount of stress you're exposed to. So it takes into account the event plus the appraisal. [...] And it's, it's standardised but it's individualised. [E5]

OK, OK, short-term, I will call, first of all, subjectively I would ask people on a scale from 1 to 10 how stressful it was [...] [E5]

That we can clarify it, that we need to distinguish between event, how we understand events, events never stand on their own, it depends on, their stressfulness depends on how we see them [...] [E5]

I think that I like George Chrousos' term, and he is a biologist, and a physician [...] He talks about, uhm, deviation from homeostasis, which is very right, it's OK, it's a more biological, uhm, definition, but I am a psychobiologist. [E5]

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[...] you can even use a, a balance... that's right. A drawing. And I think that comes back to Chrousos, George Chrousos metaphor of, uh, a definition of stress as deviation from homeostasis. [E5]

[...] I will ask them about mood, you can use PANAS, Positive Affect Negative Affect Scale, there are other measures. Uhm, I can use, we can measure physiological responses such as cortisol, or heart rate, I mean, I use heart rate variability because it's much, much more sensitive [...] there are also inflammatory markers, these are multiple markers, hormonal. So I would say hormonal, cardiac, uhm, and immunological. Uhm... there are many others biological systems, I don't want to go into, you can also look at breath, and breathing, liver function etc. [E5]

And really, when, when we talk about stress in that way, we're actually more talking about people's appraisal of threat, uhm, what people perceive to be threatening. [E7]

You know, however you define it, it is, the personal appraisal of a threatening situation of some description, whatever that is. [E7]

And that, there's no objective measure of that, as far as I can see. It is do with a person's interpretation. [E7]

You know, it's just the same with pain. For me I think of the same thing, you know, there are no inventories of any worth because is a subjective experience, It is purely information which the brain processes. But the person appraises. You know, and your mood can affect the experience of pain. So how there can be some sort of objective measure of pain. It strikes me as being very odd. [E7]

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There is no accuracy when we come to stress. It is the person's appraisal. And it is as interesting to hear of your view, of what you perceive as stress, as someone else... affected by exactly the same phenomenon. Do you know what I mean? That, that's to do with how we are different as human beings. [E7]

I think that's got to do with how you interpret, you know, how, how you appraise threats, and what you consider a threat to be [...] There are of course other things as well, of course. You get completely stressed when you see a car coming towards you, you're not gonna be OK with the fact you have just been run over, you know. But, but there are very few things like that potentially, you know, threat to physical harm is, is a separate thing, that is physiological reflex that we have no real control over. [E7]

Uhm... but it is to do with the way in which, you know, in one sense to do with the way in which the brain interprets that. [E7]

But the other side of the coin, you know, the actual things which, you know, we interpret and we try to make sense of, to me is all to do with threat appraisal. [E7]

You know, it may matter to you as a young person, you know, how you, uhm, appear to members of, you know, the same sex, or other sex dependant on, you know. [E7]

So I think capturing that... to answer your question, what we need to do is to be able to demonstrate how threats, uhm, how stress appears differently to people. [E7]

Uhm, because stress can be inhibitory to change as well as facilitating the change, and it's all to do with individual's, you know, interpretation of what that actually means to people and then in a particular sort of time. [E7]

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The danger is when someone comes along and supplements your view of stress with something which is considered to be a better view. [...] Because I think though that, it's sort of then grades people. It's says you can't possibly be stressed because you don't score 175 points on Holmes and Rahe scale. Or, you know, you don't conform to this, or that, or the other. It belies the human response, and how people vary in terms of, in terms of their appraisal of threat. [E7]

To me I think that, that's disrespectful to individual. I think it's saying we know better than you. We're going to re-classify, re-define your experience, and we're gonna tell you how you should live your life. [E7]

Uhm, about how much individual variability there is. So that's what fits in to the sort of idea that people are quite unique in terms of their responses. So we've always had that. So right from the start, when I began teaching sort of 20-25 years ago, we've always incorporated that. [E7]

Unfortunately for us as human beings is that sorts of threat that our body was designed to cope with are threats to our lives, you know, tigers, and lions, and stuff [inaudible 1:02:56], you know [E7]

And people can be absolutely poleaxed by stress that another person can deal with in a very, you know, [inaudible 07:07] through it

But the point is that everyone has their own threshold. So there isn't an abnormal group of people, there's only just us that differ in terms of our threshold that tips us over into madness

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What was fascinating, and I'm always struck by a phrase that George Kelly wrote in [...] that was 1955 – absolutely profound for 1955, you know. Still it is profound. Do you think, why not? You know, ask them – they will tell you, you know. [E7]

I think the variability amongst people is a fascinating thing. And I think capturing that... you know, this is why sometimes psychological research doesn't talk to people. Because we are not... it, it, you know, it is trying to, you know, to, to say 'this is what the average is'. There is no average person you'll ever find so that's why the average, the mean is, is, uhm, psychologically a meaningless issue for individual [...] People are actually talking about the same thing because it's the same human experience but in different context and in different ways. [E7]

And it's up to the individual then to make sense of what has been... So we'd say how it affects the body, this is how it looks like, so you may have your heart pump more, or your respiration increase. Your eyes may become dilated, and this is for this reason, this is what we understand, you know. But what we also understand is that experience is different for, for people. [...] But also helping people to understand how it might be, you know, how that translates for their experience, it's the important thing. So you'd never say, just because you're not palpitating you don't have stress [E7]

I think all we can say is that when the body is stressed this is what happens, and then the experience of stress for people... [E7]

Individual coping	Coping is only necessary when a situation is perceived as stressful,	Uhm, a good glass of wine [laugh] Uhm, whatever suits them. [E1] It's whatever that person feels they need to do. Uhm, so whatever you feel is downtime, from recovering from that event is important to you. [...] one person would say 'I need to go to the
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and this perception is highly individual. Also, people have individual preferences for coping strategies and what works for one person might not work for another. Individual coping also involves individual responsibility for dealing with stress(or). Research studies look for certain commonalities and patterns (although often it is at a high level of abstraction and only statistically true, so may have no application to a specific individual).

gym', and another person would say 'I just need to lie down on the sofa'. Whatever that person needs to do which is respite from what happened before. [E1]

Or try to cope... well, well people do it in different ways. There's... you know, the classic problem-focused – emotion-focused dichotomy, avoidance stuff, uhm, problem-focused stuff. Uhm, well, people vary in how they do that. [E2]

[...] it's difficult to position people how they cope. You know, uhm, I don't think it's that easy to, uhm, conceptualise coping as problem-focused or emotion-focused. I actually think that Eamonn Ferguson work on functional dimensions of coping is a really interesting approach [...] But the point was it makes more idiosyncratic as individual. For some people exercise might be a good thing, to other it might be, uhm, distraction, or it may be, uhm... you know, having a beer, or maybe go for, you know, [inaudible 31:48] There's many a way people cope, uhm, and the problem is that people use the range of different techniques, and, and its messy because I, you could, we could... a maladaptive, at least on the kind of classic Carver and Scheier type coping inventory... you know, using an emotion-focused coping strategy could be good for you but not good for an x person. [E2]

Well, there's different ways, there's many different ways you can do that. I mean to me there's uhm, so we've got lots of these novel techniques, uhm, you know, [inaudible 34:15] there's a range of strategies, things people do. I think, my personal view is that people should have, should have a stress coping toolbox, never mind, right, where they choose what they think is the best thing for them. [...] I think there's a lot of promise for things like mindfulness, ACT – acceptance commitment therapy, again, as approaches to help people to cope with stress are interesting. And... for with certain coping styles things like CBT might be beneficial.

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But I think that's difficult, isn't it, because we have to... if you look at a whole sector, you need to make judgements, you know, so for most people most of the time [sorry, the dog's here] this type of coping style may be beneficial. [E3]

You know, uhm... some people say that they eat more, some people say they eat less. Some people say that they drink more. You know, they might not be alcohol-dependent, so it's ways of coping in lots of ways. [E3]

So... you know, I think there are very, very, very many ways of coping. [E3]

[...] so the cliché that you should cope the way that's natural – that's rubbish. Because some people choose the wrong way to cope, and they are un-adaptive, OK? [...] We may choose, what, just because somebody likes to cope with stress by taking marijuana or drugs, that we should continue doing that? No, it's unhealthy [E5]

Doesn't have to be dysfunctional, no. But I' just giving that as an example, you know. So some people may be stressed about their finances – well, you can hide the bills, forget about it. That's coping. That's, you know, that's... avoidance. It is not helpful ultimately but it helps you to cope. That's the way in which you solved a particular problem. [E7]

You know, uhm, and what can you do, and what can't you do. So the more people can think 'well, actually, what I can do is I can go for a walk, or I can do this, I can do that' the less stressed, I think, potentially they actually are. [E7]

That's one thing but if I was to say, so if I say to you dealing with stress for me is, uhm, I deal with stress by standing in the corner with the bucket on my head. Uhm, you might say 'No,

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you can't possibly, no, no, no, that's not what the research says. The research says this, that and the other.' But I just told you what works for me. [E7]

Many of options. So, it's, it's all the way from, you know, what the research actually tells us. So what we, that's research, and what we found, what the research says is this. All the way through to what some people have told me is helpful for them. So you're covering all the bases – which one you think would be helpful for you, which one would you like to try? [E7]

It's, if you are feeling stress, what would be helpful? So same with smoking cessation. We know what works for smoking cessation in populations – nicotine replacement therapy, group, and, you know, group support. But for some people it's hypnotherapy, you know. We wouldn't necessarily say what you need to do is you need to start with acupuncture. But what we would say is if someone says 'look, I need to give up smoking but I don't know how', so what actually, there's a whole range of things you could do. The evidence seems to suggest this, however, other people find acupuncture, or acupressure, or homeopathy, or whatever, also quite effective. Which one would you like to try? Which one you think would be helpful? And what the person is actually allowed to then, and what the person is encouraged to do is to find solutions a) which they agree to, which promotes a sense of agency, which immediately is stress controlling. You feel in control of something, immediately you think 'I own this' , you know. But also hopeful that if this doesn't work, there's a whole variety of other things, so hope, not feeling helpless. The actual giving someone many of options is in and of itself very, very therapeutic. [E7]

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		<p>So why would we say 'No, no, no, don't stand in the corner with a bucket on your head – here is something that we know, we know because we've done a population study [inaudible 56:19] [E7]</p> <p>It's saying, you know, there are things that can help but you decide, you decide, you say when it's appropriate for you. [...] You know, you take control of this, you can take control of your stress. We are here to help you, we are part of the solution but you'll decide [E7]</p> <p>But there's so many individual options sort of there, you know. Uhm, recognising it, self-monitoring, self-appraisal, but also what would work for you in terms of coping with your own stress – there it is. So it would be wrong for us to say what you need to do is this. What works for you, what's helpful, what's not. [E7]</p>
Contextuality	Need for context and clarification	<p>Stress is a complex and vague term which is used in both scientific and lay discourse to cover various issues such as: stressors/stimuli, stress response, short-term and long-term outcomes of stress. This obviously a source of confusion and misunderstanding.</p> <p>Therefore, people (both lay public and</p> <p>[...] there's... lots, lots of other words that I think are more useful than the term 'stress'. [...] I think there's lots and lots of other words that are slightly more specific, that explain stress explain a little bit better.</p> <p>I think it's a good catch-all.</p> <p>You have to look at the context, you know, what they're feeling is something and it's genuine so you can't discount that. So I think it is a useful term but it's quite, uhm, a gross term and we need to break it down and see actually what does that mean. I mean one of the reasons we use all these other subclassifications is some of the, some of the acute stressors we use in particular, if, for example, you just gave someone a simple visual analogue scale of 'I feel stressed'... those measures don't tend to be as sensitive in an acute stress situation than, uhm, a measure of state anxiety which, you know, 6 items, kind of, calm, tension, happiness, those kind of things. If you break it down a little bit more and then build a measure on the basis</p>

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researchers) must be specific and provide context when talking about stress to make it clear what they mean.

of that, I think it's a little bit more sensitive than 'I am stressed'. There's, there's a correlation there between our state anxiety measure and, uhm, you know a single visual analogue of 'I'm stressed' but in most of the acute stress work we do shifts you get in, in an index such as 'I'm stressed' are never as dramatic as you think, Which is why, you know, it's sensible not use the word 'stress'.

But I guess, you know, again, it's contextual because someone who, uhm, it's how able you are to describe that source of stress. So I guess a, uhm, a care worker, uhm, who may have, who may be describing chronic stress, 'what's your source of chronic stress?' – well, it's a job that I do. So, yeah, I think, we'll be happy to say that's a chronic stressor but they might be able to break it down in some ways because that happened, and then I recovered from that, and that happened.

Well, I think the easiest way to de-couple that, to clarify, that is, you know, really, everyone uses the term stress and it's kind of interchangeable, catch-all way but in reality we should be talking about stressors, so noxious things in our environment which can be physical or psychological, uhm, which have an impact, cause strain of some sort but in reality we should be talking about stressors, so noxious things in our environment which can be physical or psychological, uhm, which have an impact, cause strain of some sort. [...] But people use it interchangeably. [E2]

So I personally think we should go back to [...] the transactional model which is that classic thing which Tom Cox, and Lazarus and Folkman were behind. A transaction between an individual and environment and that allows us to still conceptualise stressors and strain and then that would, that would reduce complexity, or the confusion. [E2]

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What is exciting about it is that it can be looked at in so many different ways, uhm, from so many disciplines. [E3]

So you can look at it, you know, anyone of those ways, but I think to get a true representation we have to look at everything. [...] A kind of holistic type of way. [E3]

But I tend to go along with the approach, you know the Lazarus approach where the stress is essentially, the word is meaningless now. Because it can mean anything, you know, there's a lot of research on that, my own included [...] So I, I kind of [inaudible 07:11] the Lazarus approach where you have a rubric and then you can place stress under that but you have to kind of precisely operationalise your variables. [E3]

And a lay person will say that: I'm feeling stress, I'm stressed [laugh] you know, so it's, it's really difficult then, isn't it? And as, as researchers, as scientists we do need to precisely operationalise what we're talking about. So I think, uhm, underneath this rubric or this umbrella heading we can place lots and lots of different variables, you know, individual differences, environmental conditions, attitude, whatever. You know, symptoms, mental health problems, burnout, physical health problems, somatic... And also the different approaches. [E3]

But we have to define it and also to measure it, you're absolutely right. But, I think definition can change according to your approach, and according to what you're trying to do. Because we need to be precise but we also need to be broad enough to encompass what we need, to cover, if that makes sense. [E3]

[...] it's that why we need to precisely define it. But I think definitions are contingent in terms of what you're gonna do. [E3]

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[...] I take great care to select variables that are... how can I put this... I don't believe in a unifying theory of stress. I, I would argue very, very strongly against it because, you know, it, it would be so big [laugh]. [E3]

And then, you see that's where stress rubric is really handy. Because, of course, you can fit lots of different things under that. [E3]

And I think if it's good it's not stress, it can't be, there's no such thing as good stress, to me. If it's stress it's bad. Because we have to, we have to have some kind of standard, you know. Otherwise it's gonna be everything in the world, it's gonna be bad things, good things, neutral things, whatever. [E3]

Uhm, but I don't stick with any one theory, I'm trying sort of amalgamate all, all the best bits from, from those that stress is something that is not just something psychological, not just physiological [...] [E4]

So, my first comment is, about stress is that I'm more upset about the professionals that misuse the concept, and that has to be changed. That has to really change [inaudible 02:01]. And it's not easy to get to a consensus, you know . Who am I, or you, or somebody to decide what is the right thing but you understand that gives us a lot of problems, and I've seen a lot. So professionals in conferences, and, you know, and in... and, and then they convey to lay people misused concept and I think that's really bad. [E5]

So in Hebrew, we have the word 'stress' and we have the word that is used more for the event. But it's, not necessarily, but when you say it, it's usually for the event, but then again it's not necessarily clear if that's what you mean, again, because people misuse it. So you'd use that word to more convey, or connote the event but, again, some people, or professionals might

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use it, they make a mistake to convey the response. So again, it's really that issue. That's the first major error in stress terminology. The confusion between the event, the trigger and the response. [E5]

So, it's also important to know, uhm... and again in my language we have a word for that but in French, for example, it's not very clear. So some languages fail to have that, and then it makes the whole discourse and analysis more difficult because of the language. [E5]

And the point is that it's vague for scientists because then we're not clear in what we say, and then we talk about the thing in a ridiculous way, and the worst way possible, actually, to do that to the patients, and to clients, and to the lay people because that's not how you're doing that. It's very bad. [E5]

I think, again, we're back to what I said at the beginning, are we talking about the stressor, or the stress response? [E5]

So I think, we need to be aware of this complexity. [E5]

But he's measure, that everybody uses, the Perceive Stress Scale. It's terrible. Because it includes all of these things that we talked about, it includes the stressor, and the coping, and the outcome. And he calls that stress. Now, I know that people really [inaudible 27:36] him – that's stress! yeah, it includes all these things, and [inaudible 27:42] how are we able, ever able to analyse something if think that the table or the chair, the, the screws of the table and the top of the table, are all the same. No, they are not the same. [E5]

Again I'm coming back to my first question, it depends on what you want to say by stress, do you mean the event or the stress response? If you refer only to events look at life events questionnaires, daily hassles etc. Make sure that they do not stress outcomes like the back

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pain and sleeplessness and that, make sure that they only relate to events. If your question is about stress responses look at stress [inaudible 28:58], so physical symptoms, mental symptoms, these are different things, do not mix the X and Y. That's why I don't have a clear answer, my clear answer is – what are you after? The event or the response? Based on that you'll assess, you'll choose the tools. [E5]

OK, but that's another thing, that's another thing. But let's say you're interested in the exams. Exams are stressors for students. So the event, the stressor is the exams. OK? It's not their anxiety. Anxiety is the stress response, OK? A lot of people will confuse those two. It's very mad, it's, it's silly. [E5]

And then, and then their perception – is it event or is it how they perceive the event? Or how they respond to it? These are three different things. Of course they are interrelated, obviously. Of course they are interrelated. [E5]

They are... right, so those will be maybe the outcomes of the stress response, yeah. It's a very good distinction, good. I agree with you. It's a wise distinction and I agree with you but then again, people will mix all these, and call it stress. You know, stressor is the event. If you were referring to the outcome, call it stress response. Don't say that this, and this, and this is, you know, the table, and the chair, and the blackboard, and the window are not the chair. [E5]

So if you ask them on a scale from 1 to 10 how stressful was this event, we're assuming that their answer for that question, what I asked them, but no. You're, you're right. So maybe we should ask them more particular questions like how, how disturbing was this? How much did that take you out of your balance? How unbalancing was it? [E5]

Basically, that [stress] it's a concept, it's not clear. [E5]

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When I think of stress... uhm, that stress are different things. So stress is... you mentioned the lay... so stress is the lay term. Uhm, within stress you have strain, and you have stressors. So we have to be quite careful about how we use... so strain is the impact on the individual, uhm, stressors will be the things that create that strain. [E6]

It covers the, uhm, predictors, it covers the outcome, it can cover the mechanisms in between. Uhm, it can refer to affective well-being, it can refer to burn-out, anxiety, depression, uhm, if you're looking at the specific impact, the outcomes, the impact on the individuals. So it's an umbrella term that if you start looking at what exactly the, uhm, it means, you go into different territories because you need to ask... also you need to look at... not [inaudible 04:35], not just into the difference between predictors and outcomes, but also who are you, who are you talking to, what are the characteristics of the people who are suffering from stress. Because they may describe stress differently, yeah? So I think it's an umbrella term that, that... because it's an umbrella term, because we know so much more now about stress than we did maybe 20 years ago, it's just, it's a blanket that masks many important things that maybe we should be talking about. [E6]

Again, because I think the umbrella term 'stress' masks too many important variables. [E6]

So we ask people 'are you stressed or not?' but again that masks so many different types of impact, in a way. [E6]

Stress it's a bit like the job satisfaction. It's evaluative, uhm... affective evaluation, or evaluative response, in a way, uhm... it summarises how people feel, maybe if they don't have the, uhm, the words, the vocabulary to describe how they feel. So, if you're burnt out, you may describe this as stress. If you are exhibiting counterproductive work behaviours, you may say

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'I'm stressed'. Uhm, if you are... I don't know, if you are, uhm, absent from work, you'll say 'I'm stressed'. So I think stress is, there's a language problem there because people may not understand exactly what they're experiencing, or what the causes are, or the outcomes. [...] Uhm... so if you ask people to describe their, their feelings about work, they won't say 'I'm burnt out', not necessarily, unless they spoke to an occupational health, or their manager, the consultant or professor that knows what's really going on. They're just saying 'I'm stressed'. There's an important cycle here. I think two generations ago people probably didn't talk about stress at all. But once we, we found a label for something that started happening at work, everything just somehow was attributed to that, yeah? [E6]

Again it's about stress, the word, the concept masking, being a blanket for many important things happening underneath. [E6]

And I was thinking 'but what does that really mean?' Is it, is it mental health, is it physical health? Is it people not being able to balance work and home, family demands? What is it? [E6]

So the term potentially is almost meaningless in that sort of sense. Unless you anchor it to the personal interpretation. That's my, that's sort of the way I see it. [E7]

Influence of Numerous contextual  
the context variables may influence  
appraisal, response,  
coping behaviour, short-  
term effects and long-  
term outcomes. These

Uhm, or lifestyle, lifestyle choices or other background variables that people might think are stressful or perceive as stressful. [E1]

And if we think it's within our capabilities to do something then that will cause less stress than if we don't think we have something in our capabilities. So, I guess, you know, capabilities, resources... that's, that's the Lazarus and Folkman model. [E1]

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<p>variables can be divided into environmental (external stimuli/demands and their characteristics, external resources, socio-economic environment, cultural norms etc) and personal (biology, internal resources, personality, lifestyle, needs and preferences, previous experience). All these factors may interact with each other (within and between the two categories) and change over time.</p>	<p>[...] other research involves observing groups and individuals by virtue of their lifestyle or whatever, who are experiencing different levels of stress. [E1]</p> <p>So, our main group that we study are caregivers. [...] Uhm, looking at caregivers with children with developmental disabilities who have a significant and ongoing caregiver burden. And we know that contributes to, uhm, stress experience. So that's one group that we study quite intensively, uhm, but other... uhm, it, uhm, other caregiver groups, so non-parental caregivers, care workers for example. Uhm, a lot of them... aside from the parental caregivers, a lot of the work would be then be a kind of occupational type stressors. So jobs that are more demanding than other jobs. So, you know, we've looked at, uhm, medical staff, we've looked at front-line care workers, nurses, firefighters, uhm, so those kind of care, uhm, those kind of occupational roles. [E1]</p> <p>Uhm... but also other things that people might not, might not necessarily think are stressful. Lifestyle variables that might lead people to have dysfunctional stress responses, so I've done a lot of recreational drug use research. So people wouldn't consider taking recreational drugs as a stressor but it is a biological stressor to the system. Uhm, and a lot of our work with cannabis users and MDMA users in particular show that over longer period of time the measures of stress that we would administer, they score much higher on those measures of stress than none-drug users . So, a whole host of the lifestyle variables will associate with higher levels of stress or distress. [E1]</p> <p>So it's again... related to resources or whatever it is they think they can do about the situation they're in, their coping style, the... outlook on life, a whole range of other psychological</p>
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constructs that we know feeding to individual differences would impact on whether that person's life is perceived as stressful or not. [E1]

But it, it's contextual [...] That's what we're all after – understanding what is it about some people that makes them perceive less stress. It's a whole host of things, I guess, it's the, uhm, a personality type, their kind of, their learned experiences, their encounters with stress in the past, the way they've model their behaviour on others that have dealt with stress, the objective things actually happen to them, situation they're in, when, when it happens to them, how they generally cope, their general outlook on life. So a whole host of factors would feed in to... a perception of stress. Both. I think it's, it's... I mean, we have to acknowledge it is both but it's hard to tap into what is that thing that they're born with because that thing that they're born with is related to their individual experiences. You know, turn on or off these things that they possess from birth. So yeah, a combination of both, uhm, but yeah, it's, it's their profile as an individual and how they... how they've previously encountered the same situation, in the past. [E1]

I guess there's probably, you know, a latent genetic factor there. I mean, I don't know too much work about twins and stress reactivity stuff, or the way people respond to stress but, yeah, but I think it's... that will predetermine the way they subsequently then deal with stress. But right from the off twins are not treated in the same way, so immediately there's gonna be differences in the way that they experience life, uhm, and that will shape the way that they subsequently experience stressors and respond to stressors. I, I... yes, I think so. You know, uhm, there, there has to be some genetic predetermined kind of part of their profile but I think, yeah, the subsequent experiences are the most important in terms of how, what goes on to shape the way they respond. [E1]

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[...] if there's a, a bit of a stressful day because there's a lot of stuff to do, uhm, and not enough time to do it, so there's a resource [...] [E1]

[...] When does something become chronic? And I think it's virtually impossible because it's contextual, again, uhm, it's... it depends on kind of paradigms you're looking at as well in terms of, you know, stress paradigms, it was a lot, a lot of debate early on about what, what exam stress was for example. Uhm, because some people using an exam, a single exam as a stressor but you don't a single exam in isolation, you have a period of revision, and that revision is kind of a little bit closer to chronic stress but I would say a period of, well, I think most of undergrads start revising a night before so it's not that chronic in time-wise but that's a world away from the ongoing decade of caring for a spouse with dementia kind of stress. So it, it's very difficult to... when does an acute become chronic. I, I don't know, it's contextual again. [E1]

I think the source of, the ultimate source of the stress regardless of what you're doing, how you're responding to it, I guess, the ultimate source of stress must be ever-present, I'd say. I've never really thought about it but, uhm, I guess in a lot of our, uhm, more chronic or lifestyle stressors the thing that those, those experiences have in common is, there's an underlying continual source of stress. Be it a job or caring for someone with complex needs. So that it never goes away, there's no respite from it. Whereas acute stress, it's there, you may take a long time to recover from an acute stressor possibly, depends on how intense it is, but it's an event, or a short series of events that the event's got... whereas I think, yeah, chronic stress is typically associated for me with... the underlying cause is always there. [E1]

Uhm... the event that doesn't go away. So an acute event could become a long-term event, I guess, so the acute event could be like diagnosis of an illness but actually that diagnosis of

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an illness then retains and becomes sorts of continual... stress. So it's, it's when the thing doesn't go away. [E1]

I think that can still be... because what would... what would still be present is a source of the stress. It might not be the original source but I think, yeah, a series of continued acute stressors, one might go away... [phone calling]. Yeah it can be a series of acute events but what, again, in common with my definition, they won't go away. One may go away but you've still got, there's an underlying source, or an identifiable thing is still going on. [...] I think that could be a chronic stressor, yeah. But it's, it's being caused by series of... you can break them down into acute events. [E1]

So, yeah, I think, we'll be happy to say that's a chronic stressor but they might be able to break it down in some ways because that happened, and then I recovered from that, and that happened. It's just no opportunity for respite from an ongoing events or exposure to single events. [E1]

It's contextual, again. It's whatever that person feels they need to do. Uhm, so whatever you feel is downtime, from recovering from that event is important to you. Uhm, so, yeah, I've spoken to other people, emergency services for example, and when they talk about coming back from being in an acute emergency situation – bear in mind there is no timescale on this now, be it a 5-hour road traffic accident – but, uhm, one person would say 'I need to go to the gym', and another person would say 'I just need to lie down on the sofa'. Whatever that person needs to do which is respite from what happened before. [E1]

[... it is important that what's feels right for an individual is the thing that you do. Uhm, you know, recovering from a physical stressor, something that just requires physical exertion, then

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clearly, you know, just physical relaxation is gonna be important, so you can kind of replenish your physical resources, just relax. Uhm, however, if there's some kind of trauma involved, you know, just a bit of physical downtime is not necessarily going to be as, uhm, recuperating for you, you know, you might need to kind of... do something more psychological in terms of how you address what you've experienced, whether that's a formal procedure, or just something that you do yourself introspectively. [E1]

Uhm, you might not be thinking that's stressful because you could be engaged and you could be kind of enjoying it but a period of overload where, you know, you really are working at you maximum, I think, uhm... that can wear down your resources and that can lead to kind of physical minor ailments. [E1]

Uhm, but again, even in the short-term people respond to, people's cognitive performance is affected in different ways. You know, so, in a peak, acute stress situation some people feel really on top of things for a short period of time but other people are already overloaded, uhm, so they can't cope in the short term, so in an emergency situation. [E1]

And that comes at an individual level, how you perceive something in the very first instance [...] Uhm, but that [inaudible 46:10] down to a whole host of personality variables, coping variables, appraisal variables. [E1]

[how stress affects cognitive performance] It's very, very complex, uhm, and it depends of kind of people's perception of a stressor, time-frame, and things like that as well. [E1]

Uhm, I do kind of talk a little bit about the transition from acute stress to chronic stress, I'm trying to get people thinking about, uhm, how repeated acute stressors could actually lead to a feeling of chronic stress. Because there's no period of respite. Uhm, or if the stress just

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doesn't go away, so imagine that woolly mammoth just keeps chasing you for ever. You've just got no respite. [E1]

[...] we need to ascertain the cause, I think, and what it is that's causing it and what can we do about it. Uhm... a lot of this is easier said than done but addressing whether it's something that can be... dealt with. And if you can, if it's something you can deal with then let's work out strategies of dealing with it. If it's something you can't deal with let's work out the strategies for how you gonna cope with it. [E1]

You know, so a work colleague pissing me off, I need to work out what that, how that actually impacts upon me. [E1]

Well, I mean, I think the sources of stress have probably changed over the years. But what we know certainly from the occupational and work-related stress literature, so particularly in the 70s and 80s there was a huge increase in self-reported stress, uhm... depression and anxiety in the workplace. That kind of peaked in the kind of late 90s – 2000s but it stayed stable, if you look at the statistics [...] [E2]

But I also think work environments and demands have probably changed over the years, uhm, and in different context it will impact differently as well. [E2]

[...] in that model [Karasek & Theorell] you get demands and control in this quadrant model, and you've got this active, active job quadrant which is the notion that we've got, we still have high psychological demands but when it's coupled with low control and low decision latitude that's when an individual experience, oh, sorry! So, so high demands but also coupled with high control is an active job [...] But when you've, uhm, you're able to control that that's fine. [E2]

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So we've got the whole life events things, right? And we've got this cascading model which we are lining up in a paper of ours 'Psychology and Health'... I think the problem is, yeah, you can have people have stressful life, so you could this, if you're unemployed – unemployment is a major life stressor, death of a partner is a major life stressor, chronic disease is a major life stressor. All these things can impact and that has a big impact, and that, that's in itself can impact, but then there's also cascading effect so the impact, that big stressor as I call it there, can impact on these minor stressors as well, these daily stressors I've done a lot of work on. So, you can have stressful lives, absolutely. So you can have people who experience chronic stress and the nature of these stressors... is just unrelenting and last for a long time, caregiving comes to mind. Which means that they day-to-day stressors become more amplified. So I think there's this kind of complete interaction between these big background stressors but also the daily stuff as well. [E2]

So I have done a lot of work over the last, many years, on moderating factors. And a classic one [...] is personality, OK? [...] Well, those Big 5, under all of the facets, will, uhm, modify how damaging or otherwise a stressor is for an individual. [...] Conscientiousness is one of the big five, one of the facets is self-control. Now, what we know is that entirely moderates our response to a stressful event. Both behaviourally and physiologically. [E2]

So, someone who's for example high in conscientiousness when they encounter stressor on a particular day, we've shown and proved it they are more likely to exercise. So the high conscientious person is more likely to exercise the day they've experienced lots of stressors and that helps them cope with stressful events. The converse would be true as well. Somebody who is low in conscientiousness are gonna be less, more likely, sorry less likely to, uhm, exercise in this context. The other example would be, uhm, self-control. So these, these facets

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can either have pro-active or inhibitive functions, so self-control is an inhibitive factor, so you may have someone who might be more likely to smoke when they're stressed, for example. But if they're high on self-control they might inhibit that, for example. Or if it's alcohol, it's more of it... unhealthy eating. So, you're gonna have people who differ on these other trait-like factors and that will influence, that will influence the impact of big and small stressors on them. [...] so conscientiousness modifies impact of stressor on exercise. [E2]

[...] work that certainly we've done, which has shown that personality can influence your appraisal of the stressor. So we've done that work which shown that individuals... you ask people to think about stressful events they've encountered in the last 7 days and then, we're able to show that how they appraise that in term of primary appraisal, threat, challenge, loss, and coping [inaudible 14:40] is modified by the extent to which they're high in control, or high on self-achievement, or these other factors. [E2]

Perfectionism is again a multi-faceted construct which modifies how damaging a stressor would be or not. And also can be protective under certain circumstances. [...] situations when individuals encounter a stressful event, a period of stress, those high in self-oriented, uhm, socially-prescribed perfectionism, the impact of stressor is more negative on those individuals. And, and that can be cascaded through all sort of different, you know, the larger stressors and the smaller ones [inaudible 16:11]. So I think it's just another example of, uhm, another personality which can influence how you experience stress. [E2]

[...] we know that there's a small, substantial enough genetic component for personality. Uhm, it just shapes a lot of other things. Uhm, and we know also, for example, neuroticism, good example, we know, there's evidence, you know, some evidence, I think of genetic basis of neuroticism as a big five. We know, we also know neuroticism hugely influences how people

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respond to stress [...] if there's evidence neuroticism is genetic, neuroticism influences stress, we know it for certain, then it must be a link there, of some susceptibility. But there's also things that we need to fully learn, to cope as well, there's difference about your, your environment, lots of these things can, intergenerational things can influence stress response.

There are individual differences in how people respond to stress and the amount of cortisol release [...] individuals who, in an analogues, when they're in a lab they release more stress, cortisol to an acute stressor in the lab, they are subsequently in the real world as you'll see tomorrow in my talk, uhm, that they also, days when these individuals encounter daily stressors, they're significantly more likely to eat high-fat food. So... that's an example of a physiological, individual difference variable which influences, modifies the stress, eating outcome in this context. But I'm sure there's other aspects of HPA axis and of immune functioning etc. which will be, have some genetic component which will confer some level of variability. [E2]

Uhm, but even people, for example, who are low on conscientiousness, you would imagine don't really care about stress that much, who just let them come and go, they also are exposed to lots of stressors because of the nature of life that they often lead. [E2]

Uhm, and then there's, you know, it depends on things like social support and stuff and there, uhm, and other protective factors that often... uhm, they will modify the impact of the stressor on the direct biological outcomes as well as behavioural outcomes. [E2]

So what we should be doing is trying to understand how, where it was wrong, who's vulnerable and then try to tailor interventions to those individuals. [E2]

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You know, the general rule is mostly problem-focused is a better approach assuming you can control the stressful things in your environment. Uhm... and emotion-focused is also... well it's known as maladaptive but we know that it's not a clear-cut dichotomy. [E2]

Or could be good for you today but not good the next day depending on the stressful event that you're dealing, you're trying to deal with

It'll all depend on things like controllability so to what extent can you control that stressor. Uhm, I think, uhm, the predictiveness, sorry, the predictability of the stressor could be relevant, how long it lasts, uh, your social support networks. There's lots of things going to modify how you respond to stressor and what coping strategies you might use.

[...] his view of stress, we shouldn't talk, anything [inaudible 33:18] we shouldn't talk they're stressors, should only be this big stressors. I completely disagree with that. Uhm, I think they interact, uhm, but it's still an interesting argument, nonetheless. [E2]

Uhm, and then there are things like controllability and that's environmental as well as personal. [E2]

Uhm, because that's an environmental issue, you know, the idea that individuals from the lower social groups are, you know, they have differential exposure

and differential vulnerability, so it could, it could... There's [inaudible 38:19] cope with stress in addition to that they are also exposed mostly to more noxious environments which means it's more damaging for them all the time. [E2]

Influence of the context

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And then, of course, you've got the cultural aspect where people in different cultures don't really understand what we're talking about maybe because they may talk about it in different types of ways. Uhm, you've also got the individual differences component. [E3]

But, of course, the problem is people's beliefs, and personal experience, and feelings will interact, won't they? [E3]

But I think what you need to do is look at things that are, that resonate, that are relevant to different groups of people [...] Like with, uhm... academics, you know, lecturers and researchers in higher education, uhm, I've used a theory called effort-reward imbalance, you've probably come across [...] Now, that was really appropriate for academics. [...] also looking at something like change fatigue – that was appropriate because across, in the sector we've experienced huge amount of change, you know, whereas that might not be appropriate for other groups. [E3]

[...] the research I have done with prison officers [...] And I had no idea what their working life was like. So I spent, uhm, I had lots of meetings with the representatives of the organisations, you know, who had been prison officers or who worked prison officers. And I kind of built a general picture with them. Of what their working day was like, what their issues were, what the political climate was. And I kind of pulled together some possible variables, you know, in questionnaires, sent them to them, and then it was a process of checking, almost like number checking, you know, where, if it's appropriate, does this resonate with you, like, in the next survey I'm doing with prison officers a big issue at the moment is, uhm, drugs. Psychoactive substances, you know, spice [synthetic cannabinoids]? It's very, very prolific in prisons.

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Massive. And of course, the officers are really struggling with it because they're exposed to it [...] So it's adding to their workloads. [E3]

Whereas if we kept looking at the same demand-control whatever, you know, we wouldn't be capturing the real things that would be going on in people's lives. Now, you can use demands-control-support role relationship change [laugh] as a kind of organising principle, can't you? But you would need to slot in the things that most relate to these particular groups. [E3]

Uhm, it just depends very much on the circumstances that you're in certainly. Uhm, I'm not sure if we could specify 100% if anything would be stressful for everybody. You know, going back to the life events approach when it was, you know, this consensus approach where, you know, you get the usual death of a spouse, and then a job change, and whatever, the whole thing is about adjustments, and if you have to adjust that's stressful etc. But I mean, even death of a spouse, to some people that can come as a blessing. You know, if you've been really, really unwell for a very long time. [E3]

Now, they can be good health, where you're kind of robust [laugh], and that can help offset, you know, any kind of stress. Uhm... temperament, you know, in terms of resilience, the ability to see the positives in situations. [...] But if you're 40 and you've never experienced any problems, and all of a sudden something happens to you, you know, you don't have coping skills then, do you? [...] Uhm, personality, individual differences, coping styles as well. [E3]

And a lot of external resources. You know, money, it's obvious, because if you have some problems you can pay somebody to take them away a lot of the time. You know, the childcare, or whatever. Uhm, social support is massive, absolutely massive. Uhm, but again we need to look at different types of social support. And, uhm, you know, I'm sure you've come across,

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uhm, the matching hypothesis, you know, where the type of support needs to be matched with demands. You know, so if you're having emotional demands, you should have emotional support. It sounds a bit logical, but you know, psychology [laugh]. Uhm, what else? External? Uhm, person-environment fit as well. I think that's really important. If we look at the models of stress that are out there, you know, we can find them very useful. Because, you know, if you're a square peg in a round hole [...] You know, no matter how good your job is, and no matter how much money you're earning, you're gonna feel out of place and unhappy. [E3]

You know, so it's a very individual thing. Your resources and how you use them. Your ability to set goals, and to meet them. Learned helplessness, you know, empowerment. Lots, and lots, and lots of things, I think. [E3]

And the problem is that this level's gonna change over time. In different tasks, according to how you feel, what you bring to the task as well, if you took it. [E3]

[...] it's that three principles. You mustn't be too hungry, too tired, or too angry. And, because these are the trigger points for people who've got addictions, to actually start again. So in some ways it's a bit like that with stress, isn't it. You know, you've gone into a task, or a situation, with what you've got already. You know, your amount of energy, your mood, your, whether your... physiology, you know, your appetite has been sated, and, and it's very dependent on that, how you're gonna react in the situation. [E3]

Uhm, social support – absolutely essential. You know, all of these things work together, I think, as well. [E3]

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And making change where change is necessary. I think, you know, uhm... it's difficult, you know, isn't it, because I think the skills that you need depend on the situation. Because I'm very, you know, context-driven in the work that I do. [E3]

Because like, if you've got a prison officer who's facing violence every day, you know, they're stabbed, they've got boiling water thrown over them – we have no idea what their day-to-day work is like. We whinge about too much marking, and you think 'how they can live on a day to day basis?', you know. But they do. They develop strategies to deal with it. And one of their strategies is, uhm, social support from colleagues. You know, they watch each other's back. That is the most satisfying thing in that job. You know, so that is important in that situation, if that makes sense. And being vigilant as well, you know, for anything that may be happening before it starts happening. [E3]

Uhm, so I think, again, we can have core things like, you know, social support, self-kindness, the ability to... talk to others and get support, accept support, uhm, and to see yourself as being weak etc. And all of these things can be called but then I think the actual everyday coping skills that you need will depend on the context. [E3]

I think it goes back to what I said to one of the previous questions about, you know, about all of the things about lack of support, temperament, you know, personality... situation that you're in as well. [E3]

Uhm, and what they found was it was a combination of life events and chronic stressors that kind of weave through people's lives. You know, so maybe a single parent living in poverty, uhm, but then of course when something comes along you don't then have the resources to be able to deal with it. And that taught me a lot because I don't believe we can separate life

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events, and, you know, things like daily hassles, chronic stressors. I think they weave into each other. [E3]

Researchers look at, say, students doing exams and may call them acute stressor. But it's not, is it? It's not acute at all. It comes at the end of a really kind of long, drawing out chronic approach where they well may have been having sleepless nights, not eating properly, you know. So you can't really separate that out, can you, and look at your acute response to a particular situation. [E3]

You know, there's evidence now that women who were stressed when they were, you know, pregnant, they're likely to flow the foetus with stress hormones, so the child may be, may have exaggerated startle reflex. [E3]

But of course, quite how we can separate the nature with the nurture, that's quite difficult, isn't it. You know, because, of course, you may well have the propensity to be easily stressed, let's say, but it's a bit like the... what's, what's it called? The stress diathesis model, you know, when you may have the genetic propensity of something but if you're in an optimum environment, you know, if you've got money, and you're loved, and you've got good education, whatever, you won't have any problems. It's only if you've got, if you're in an impoverished environment. So how the genes express themselves, you it's the genotype and phenotype, isn't it... uhm, really depends, depends on that. You know, I don't see genes as destiny. [E3]

A lot of these coping checklists have been developed in relation to particular situations and particular illnesses. You know, you can get coping scales for coping with IBS, or, you know, particular types of illness, and that's quite useful. But I think judgements about what's a good

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coping style and a bad coping style are very difficult to make. Because it really does depend... again on the situation. [E3]

You know, I always think that denial gets a really bad press because of course I think under some circumstances denial can be positive. You know, like, if somebody, there's evidence, if somebody had a heart attack, they need to have elements of denial in order to exercise, to get themselves up and moving. That that may be positive for a certain period , but then if they keep on denying, they're not gonna change their lifestyle. So, again, you know, I'm being really difficult in saying it... it depends. On individual but it also depends on particular times. [E3]

You know, like emotion-focused coping, you can't say 'oh, that's always very good for everybody'. It may not necessarily be the case Because you know, everybody's got a friend, because I've got somebody in my life at the moment, who's doing it, who is outpouring emotions all the time. As a form of attention seeking, you know. So, of course, that can't necessarily always be positive. Whereas people who cope by solving problems, sometimes don't focus on the emotion side of its... and may intellectualise, overly intellectualise issues. [E3]

But even within that, as well, we've got society in general, haven't we? You know, so it's kind of a macro, it's going from the micro right the way up to the macro where we've got people's expectations of themselves and what success is. You know, like 'I've worked 90 hours this week, aren't I fantastic?' That type of thing, it's about self-worth. Your self-worth isn't about being good parent, or spending time with your family and friends, and having good hobbies. It's about your output, isn't it. You know, the amount of hours you spent at work. [E3]

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[...] I think we have the luxury of thinking of ourselves too much. How am I feeling today? You know, uhm, all the monitoring of our moods and emotions... Am I happy? How happy am I? Whereas, if you've got people who are... living in, you know, the aftermath of the tsunami, whether they're happy or not is gonna be completely not, irrelevant. They've just gone through one of the most stressful things that anybody could ever go to. And they're still alive. You know, the immediate needs, you know, food and safety, and water, clean water. So I think, really, it can almost be a problem of our... a society that's actually quite comfortable. That you have the luxury of thinking about yourself. [E3]

On the other hand looking at how other psychological and personality factors might relate to the size of somebody's stress reaction in the lab. Uhm, so with that we've looked at, uhm, social support, depression, self-reported health, uhm, physical fitness, cognition, uhm...we, at the moment I'm looking at behavioural perseverance and whether that relates to somebody's stress reactivity and it looks like it relates to, uhm, blunted reactivity rather than exaggerated stress reactivity. [E4]

But we have also looked at whether people's stressful life events, experience, influences their acute stress reactivity. Uhm, and found that it seems to blunt their future reactivity and I'm looking at that in relation to childhood adversity at the moment as well. [E4]

But because of that it can still also be either an acute stressor, or a chronic stressor. And if I'm talking about an acute, I would mean seconds, minutes, maybe hours. And if I'm talking about chronic I would think days, weeks, months, years. [E4]

I'd also break down stressors in terms of severity, uhm, so in terms of, uhm, things that are like cataclysmic events, you know, like war, and famine, and tsunamis and things. Differentiate

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those from life events, negative life events or positive life events, and then I would differentiate those from like daily hassles. [E4]

When we're measuring chronic stress we either look at it using a caregiver model, uhm looking at caregivers versus controls but then also look within caregivers, amount of burden, their perceived stress, and a lot of factors that can relate to their caregiving experience. On the other hand, I would also consider a lot of the life events that you get in a life events scale to actually be chronic, so... like bereavement [...] [E4]

We've called that a chronic stressor, so even if the initial bit of the research has started at someone ticking a box 'yes, this event happened to me in the last year or two' I would deem that a chronic stress because the effects are chronic, Uhm, even if the event might be quite acute. So I often look at chronic stress in terms of the duration of the impact of, of the event, not just the event itself. [E4]

I think, I think you can perceive life to be less stressful than other people depending on your, you know, your personal history, and your personality, and your support, and your general optimism, and all those sort of things. [E4]

But I think also if you're having a lot of acute stress responses, one after the other after the other, actually that would, that would be chronic even if the chronic stress was a series of acute reactions and acute events. [E4]

And in terms of why they don't respond so much... partly it seems to be genetic, partly we think it comes from early experience, so we think childhood adversity maybe... sets you up, maybe initially you'd be... quite a large responder but then because of experiencing childhood adversity your system would reset and you'd actually become a low responder. And well, at

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the time of resetting it is probably... is adaptive but in a long term it's, it's not adaptive to be, to be someone who has, has low responses. Because then they're unable to respond when they need to be able to. [E4]

[...] get the kind of support they need, whether that's emotional, or information, or just some sort of tangible help. I think that's one massive thing that people can do, that's actually quite easy for most people unless they're very isolated. [E4]

Because it's quite difficult to change reactivity because it's partly hereditary, and it's partly early life experience but it'd be worth a try [laugh]! [E4]

So it could be the same stressor with different people, or the same stressor with the same person but on different days, you know, it can alter how they might perceive it. One day it might be challenging, the next day it might be threatening depending on context, and, and how they're perceiving their resources at the time. [E4]

In terms of physiological responses, there supposed to be different physiological responses associated with whether you think something, you perceive something as a challenge or a threat but it's not always replicated in the literature. And I think that might be because there's so many other factors that, that influence somebody's stress reactivity, as well as a challenge/threat perception that sometimes, you know, you just don't get a clean look, oh it's challenge, oh it's threat – here's the difference. [E4]

You know, there's others, there's other factors, you know, like the gender of the person doing the test, and the number of people in the room, you know, background levels of social support, you know, there are so many other factors, too. So I think it's not as clear-cut for that but that might just be because you can't take out the influence of other factors. [E4]

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Uhm, I mainly heard people talk about it as a cardiac responses versus more vascular ones but, yeah, I guess, it makes sense that people have looked at cortisol as well. And it would make sense that, you know, when it's a threat you'd have bigger cortisol response. [E4]

Uhm, I think, yeah, if you haven't got, I think if you're socially isolated or lonely and you haven't got a social network then you haven't got the same resources than other people might have. Or if your social network is, is one that you can't access very quickly because of mobility issues, or because of, you know, geographical location. Uhm, I think that can make it really difficult. [E4]

I think also if it comes on top of other comorbidities, so I think, if you, if you've already got underlying anxiety, or underlying depression that might change your threshold to be able to feel you can cope with stress. Uhm... and make it, make it more difficult and also make it more likely that, that you feel stressed when things happen to you that, perhaps, somebody who didn't have underlying other issues might not perceive it in the same way. [E4]

Uhm, and I think another thing is if you not, if you're not getting enough sleep. That's, makes you feel more stressed. And of course if you're feeling more stressed that can make you not get enough sleep, or not get good quality sleep, uhm, and I think that can contribute, uhm... I mean, I think that health behaviours, I think, you know, intake of alcohol, cigarettes, and food, I think they can all influence our perception, you know, of how well we're feeling generally which will also be an underlying element... connected to how, how well you feel able to cope with stress. Uhm... so yeah, lots, lots of different factors, I would say, you know, contributing to that. [E4]

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And the interplay between what the situation demands and your coping capacities. It's a sort of a bit of a broad definition. [E5]

But denial and withdrawal, they're also coping. Just another kind of coping. And they are very effective in certain situations. [E5]

Now, here comes Lazarus and Folkman, what was a stress response at one point, can then be the stressor at another time. So now it's possible that my ongoing stress response can be my new stressor [...] [E5]

Another example is, uhm, people that have heart attack, and then they have unemployment. Unemployment is the stress response. Or the outcome, rather. They're depressed – that's response. But the fact they're having unemployment, or depression, can be another, new stressor that they need to deal with. So, and they would argue that's the dynamicity, the dynamics of stress [depends? 24:49] on an outcome. [E5]

People with higher baseline vagal activity responded faster, they were more resilient, they recovered faster from the event. Uhm, and it's possible that by training people in vagal nerve activity, you can actually respond, you can recover faster. There is a study where they did that in soldiers, they trained them in doing vagal breathing and biofeedback before they went into combat. And they showed less PTSD. [...] And the vagus and the frontal cortex are crucial in this. [E5]

That we can clarify it, that we need to distinguish between event, how we understand events, events never stand on their own, it depends on, their stressfulness depends on how we see them, if they're controllable, uncontrollable [...] how we deal with them – the coping. [E5]

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And again, we need adapt the coping to controllability, so the goodness of fit. So use the problem-focused coping in changeable situations, emotion-focused coping like denial and meditation, relaxation in uncontrollable situations – a lot of data supporting that. [E5]

I assume that some, some of these things have to do with lack of frontal executive function, control. So binge eating, alcohol consumption are related to lower executive function. And lower heart rate variability. And it's also possible that there were bad examples in their education. And maybe genetic predispositions. So it's complicated. There's no, no one simple answer. [E5]

Uhm, and we look at factors that are in work environments so job design, workplace climate that, uhm, impact on these outcomes [...] So it will be the characteristics, the attributes of the job, specifically, so whether you have autonomy, competence, uhm, if you're knowing your competence, whether you're having variety, and so on. [E6]

I think, but anyway there is some evidence, we found that in a paper, in a study, we didn't publish it, that says that too much social support can be distracting, it, uhm, then reinforce negative things like gossiping, for example, and so on. So even things like social support that we, we have up there, something really important, is, is... there's a limit, there is a tipping point to that. [E6]

The absence of the autonomy is a negative thing, or too much autonomy can be a negative thing. So the same job characteristics can have a positive or a negative effect on the outcome, yeah. You don't categorise them into positives and negatives. This is what the data will show. And it is the extent of something rather than the existence, or a lack of something that will have a positive or negative impact, yeah? [E6]

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[...] you look at the extent of, so where the individual falls on the autonomy scale will, uhm, will determine how much, how stressed they feel, and so on. [...] for certain people as well, yeah. Some extent. It can be positive and negative to different extents. [E6]

Yes, so this is where the mechanisms come... are important. For example, resilience. Things like negative affectivity. [E6]

So you may have specific individuals who are pre-disposed, or, uhm, you can have different preferences for autonomy, for example. Some people prefer to be, uhm, less autonomous. Uhm, and then some people may like monotonous jobs, as well, where, even jobs where you don't have to take initiative, you are told what to do. So it's personal preferences, individual differences, characteristics are coming to play in there. [E6]

And if you have someone interfering with, with how... managers should be supportive but not interfering. This is the inverted-u, there's a tipping point there. [E6]

Uhm, but there is another side to it, I think, as well, which is, uhm, stress relating to specific people under specific circumstances which is really relating to research. [E7]

And what Zubin and Spring re-conceptualised was that anyone can tip into madness. Based on the whole variety of different, you know, sort of factors. Factors within the body, in-born, you know, vulnerability, you now, such as genetic or those sorts of things, yeah. But also things like early life experiences, things that the person has no control over. And some people have an awful start in life. [E7]

The point is, is the, you know, those two things perhaps together create a threshold by which stress in later life can have an impact. So if you had a very good start in life, whatever that is, however that's defined, uhm, you threshold may be much higher. So the life stress, the

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ambient stress you, you experience, uhm, in your life, there may need to be quite a lot of it before you tip over to madness, whereas someone who had a very unfortunate start in life, they don't need a huge amount of life stress. [...] the importance of, you know, how these factors in our life, the ambient stress, the background stress, and also these, you know, these life stresses can have a huge damaging, and compounding effect to us. [E7]

But the general idea that a loss of a spouse, which can be a very stressful thing, is also compounded by the possibility of the loss of home, the loss of, you know... financial problems, you know, problems of raising children by yourself. [E7]

Because what we're interested in is the relationship between psychological and social variables and biochemical markers, you know, particularly, sort of, cortisol as a stress hormone. [E7]

Travel, you know, whether someone was a night bird, you know, this sort of, you know, whether someone had, yeah, they had, uhm, more of a predilection for working during the day, during the night. Because that can have a huge impact. [E7]

And I think to some extent stress is like that as well. It's affected by mood, it is affected by context, by audience, by gender, by all variety of different things, isn't it? Uhm... and variability there is very difficult to capture, I think. [E7]

And they change over time, the things that we find threatening today may not be threatening tomorrow. [...] As you get older that doesn't necessarily become, yeah, so it matters when someone, you know, has a go because of your appearance, as a child or adolescent you become stressed about that. [...] But as later, as you get older, you say 'eh!' [laugh], you know,

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			it doesn't matter quite so much in that, in that sort of particular way. Although for some people it possibly can, you know. [E7]
			So we are the product of our experiences, uhm, and those experiences can be insidious and subtle, they can be quite, you know, overt. And conditions, you know, and that can be all the way from, you know, the way in which the family has a particular belief in a particular culture, or the individual, as worked things out for themselves, you know. [E7]
Positivity versus negativity	Unpleasant experience	Stress is usually described as unpleasant experience which stems from negative or undesirable events and situations. Most often it involves negative emotions, psychological discomfort, and unpleasant cognitive effects and physical sensations.	<p>You know, if you break it down, what does stress make you feel, it makes you feel tense, makes you feel anxious, uhm, makes you feel tired. [E1]</p> <p>Uhm, well, one that I've just said, feeling anxious, feeling nervous, feeling tense, uhm, jittery, uhm... those are kind of words associated with short-term, or stress in a short-term. [E1]</p> <p>Uhm, just simple state measures of anxiety or, uhm, feelings of tension, or...[E1]</p> <p>So in the acute study we would may have some state measures of mood, and we know that the kind of stressors that we administer, we know, across the board, generally, what that does to people, you know, shifts in feelings of anxiety, reductions in feelings of relaxation, increase in tension, uhm... [E1]</p> <p>So we know that, you know, 10-20 minutes of some kind of stressor, people usually self-report increase in anxiety, reduction in the feeling of calm. So we've got a standard set of state measures that are quite important in terms of determining levels of stress. [E1]</p> <p>Well, again, any, anything that they perceive is beyond, beyond their capabilities. [E1]</p>

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[...] a measure of state anxiety which, you know, 6 items, kind of, calm, tension, happiness, those kind of things [...] There's, there's a correlation there between our state anxiety measure and, uhm, you know a single visual analogue of 'I'm stressed'. [E1]

Uhm, just, again, uh... having things you don't feel in control of, I guess. [E1]

What, what do you consider a stress-free life – if someone says 'I have a stress-free life' and then, I don't know, there's a, a fly buzzing around inside the window, and it irritates them, then, if they're irritated, then that's one form of stress, so... that's not a stress-free life, there's something, it's transient, temporary, doesn't really matter but it's something. It's maybe an irritant, and a stressor of some description. [E1]

So... uhm... being flustered, you know, psychologically being a bit jittery, flustered, not being able to think clearly, getting things jumbled up, uhm... kind of mind blanks. Biologically, again, a jittery feeling, you know, butterflies, sweats, heart palpitations, that kind of thing. [E1]

[...] I guess, I, I know when I'm stressed because I feel, I feel anxious, I feel tense, [...] impatient, and angry. [E1]

Well, uhm... well, we know that it affects your well-being. So, uhm, it can, yeah, those, those feelings of anxiety and tension aren't desirable, and so if they don't dissipate quickly then that's problematic. [E1]

Because if we take stress as a negative concept, stress is never helpful. [E1]

Uhm, yeah, uhm... a lot of research I do about different acute stressors, I can weave those in, as well, you know, so 'how would you feel when you're about to step onto a road and someone beeps a horn?' [E1]

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[...] when they perceive that the demands of the situation are not met by the resources, or coping capability we have. So when there is a mismatch, real, or perceived between these two things that's when an individual would experience stress. But it's the idea they feel they can't cope so it's, it's an unable to match the demands of a situation, they believe they lack the resources to do that.

It's, uhm... being uptight, being anxious, being unable to cope – those are sorts of things that come to mind, uhm, whenever you cope with stress. It is often not being able to cope, being overwhelmed, too much work, too much workload [...] [E2]

The, then they may feel as they are out of control, they might feel as they're very tense, very anxious, uhm, they could be, uhm... [E2]

There could be lots of physiological indicators of this, just high anxiety, uhm... [...] Uhm... an then psychologically, uhm, trouble, they're could be depressed, they could be highly anxious, so... that's how I would describe someone who is really experiencing a high level of stress. [...] Some people you might be able to tell, to identify that, uhm... in the sense that they may look very worried [...] They look very tense, people can look very tense [...] [E2]

It's a very popular way of explaining practically anything that you can think about which is negative and you don't like. [E3]

So it's actually, if you ask people if they're stressed, that's all you know is they're experiencing, or they believe they're experiencing some kind of unpleasant state. But that's all it's telling you. [E3]

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I tend to go with the Health and Safety executive approach, you know, that the stress is a demand, when you feel that the demands placed upon you exceed your ability to cope which kind of draws on the Lazarus transactional approach, doesn't it? [E3]

And of course, the officers are really struggling with it because they're exposed to it [drugs], uhm... it can make people really unpredictable as well. Uhm, and it's also very dangerous because they can die. So it's adding to their workloads and it's causing them a huge amount of anxiety. [E3]

And you know, what you can say, I think, is that if your resources don't meet the demands of the situation... that is when you will feel stress, or anxious, whatever. [E3]

And at that time we thought that stress, uhm, she was unfairly dismissed from her job, they said she was running a business on side which she wasn't. [E4]

So I will define stress as something that, uhm, is, there's a stimulus that perturbs you either psychologically, or physiologically, or both and puts you out of homeostasis. [E4]

[...] being, perceiving something as a challenge that's beyond your coping resources, so taking into account individuals' perceptions of severity and their own coping resources as well. [E4]

I think emotionally it can just make people feel very unable to cope, like everything is getting on top of them. Uhm... like if anything happens they'll just won't be able to deal with it, uhm, you know, even the small things, they might normally be able to deal with, if they're feeling stressed already, and then emotionally it's gonna make them feel really unable to, to cope. [E4]

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So there's kind of, you know, there's the emotional side of it at every day, and then there's the physical effects of it as well. [...] some people would feel their heart racing but the interesting thing is even the people who have a blunted response to acute stress think that their heart, their heart is racing. So you feel like your heart is racing anyway. Uhm... you know, people feel very anxious, and nervous, and that they've got butterflies in their stomach. So there's a lot of, you know, emotional symptoms, even before you get on to longer term health effects. [E4]

And then threat being when you perceive something as, as challenging but it's to the extent that you can't actually cope and you feel you don't have the resources to cope with it therefore it becomes more of a threat. So it's seen as more negatively. [E4]

I'm still annoyed about it. So my stress response is not over, OK? [...] Before it was a loud noise, and now it's affected my heart beats fast. and I'm annoyed by that, I'm upset by that, I'm stressed by that, stressed by that, OK? [E5]

Then you can also distinguish between short-term stress responses, so like, uhm... very quick annoyance, but then again it's not appraisal, it could be more, uhm, short-term mood [...] very short-term like change in heart rate. [E5]

[...] because it's, again, because we're going back to, uhm, Lazarus and Folkman, because its demanding, new things, more than you right now can give. So it's demanding a new, new rearrangement of your resources to the given situation. [...] I think that 'unsettling' is a good word. [E5]

Uhm, I'm from the war region, you know, if I walked around in, uhm, Jerusalem, or Tel Aviv, and I see, uhm, a Palestinian taking out a knife, I have to respond, I cannot just, you know,

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just, uhm, let's hold [shake] hands and believe there's peace and love in the world, it's not like that, OK? It's not like that, uhm... I think it's up until ten years ago people in Europe were extremely naïve, you know, they thought that, uhm, for them terrorism was something happening, distant [...] [E5]

[...] if they disturb us, don't disturb us, take us out of the equilibrium or not, destabilise us [...] [E5]

So you'll use 'stress' as a general description of this is how I feel at work, yeah? [...] They won't say 'I'm stressed' and be super happy, and relaxed, and, uh... [E6]

But this is not how people use it. So they won't say 'Whoohoa, I'm stressed!' so I'm gonna really enjoy this, uhm, I don't know, the presentation I'm doing today. [E6]

Uhm, not, uhm, through things like childbirth because I think that would skew all the data. But, things, you know, like redundancy, or people starting a new job, or... you know this sort of thing, you know, where the experience of stress is going to be a period of time as opposed to, you know, giving people a task which is stressful, you know, doing the Milgram type of experiment with, with, you know, that, that's a different type of, sort of stress. [E7]

That threat can be a threat to your life, a threat to your physical integrity but also a threat to things like your social standing, you know, a threat to a belief for an ideology, or whatever. [E7]

I like that sort of idea of people being trapped. And I think that's sort of true of many mental health sort of problems. [E7]

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		<p>And that in itself compounds hopelessness and helplessness which makes the stress experience even more difficult for them, you know. So, I tend to use those sorts of, those words. [...] I think, naturally, you're drawn to that feeling trapped. You know, people who have agoraphobia, for example, are absolutely trapped in their own house. They're trapped because they feel they're unable to, you know, uhm... So that's the way that I sort of describe it, you know, feeling in a hole, feeling, uhm... unable to move are the horrible experience, you know. But panic as well is, is something which, uhm, people have a sense of, because we get 'where are my keys?' sort of things. [E7]</p>
Negative effects	<p>In addition to the fact that stress is unpleasant experience (reduced well-being can be seen as short-term negative effect), various longer-term negative effects of stress were discussed. These are most often related to excessive or chronic stress and can be categorised as effects on health, social relationships, and performance.</p>	<p>Uhm... so I was interested in the, those people who got cold and those people who didn't, and, uhm, looking at stress measures whether there were any differences there in terms of those people who got, caught a cold in the next 48 hrs and those who didn't. [...]. People that were more stressed were more likely to get ill. [...] So all those people who got cold versus those that didn't, one of the measures I would look at would be their stress levels. [...] So I was interested in background stress levels, I guess I didn't know it at that time but I was interested in background stress levels and the link to colds because right about this time there was a lot of work coming out. So this is, you know, the end, end of the 90s, lots of work coming out, with Sheldon Cohen and the like doing the common cold stuff [...] [E1]</p> <p>We know stress gets inside the body and makes our biological mechanisms do different things. So we know that stress gets inside and once it's inside we know that these different mechanisms are responsible for our health and our well-being. So fundamentally the way we perceive stress, the way our body response to it is gonna impact on our health and our well-being. [E1]</p>

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<p>Participants explained two mechanisms responsible for negative effects of stress (these were discussed mainly in relation to physical and mental health). Direct path involves physiological changes (allostatic load) in the aftermath of stress – excessive or chronic stress leads to disruption of body systems and this may contribute to development and exacerbation of illness, as well as hinder recovery from illness. Indirect path refers to engaging in unhealthy behaviours in response to stress, which may increase risks of certain</p>	<p>Uhm, but obviously longer-term, chronic stress... you may, you may report kind of different feelings of fatigue, or feeling run-down, or feeling ill, or...[E1]</p> <p>Uhm, because it might mean, you know, change in behaviour, as simple as somebody might start overeating and somebody might start undereating. [E1]</p> <p>I get quite snappy, uhm, and, uhm, impatient, and angry. [...] I tend to not talk about it, so, uhm... a bit more social withdrawal Uhm... uh... not sleeping particularly well, uhm, waking up lots, not feeling refreshed, feeling tired and rundown would be, uhm, that's the, my, my markers of more chronic stress. [E1]</p> <p>Uhm... well, to the extent some people think they're stressed and other people don't. You know, if, if you feel something is, is stressful, then it's gonna affect your everyday life. [E1]</p> <p>Uhm, we know that when stress activates its biological mechanisms, it, these biological mechanisms that already are responsible for doing a whole host of other things. Uhm, so if you disrupt those processes, it can lead to physical ill-health, poor recovery from illness, uhm, problems with cognitions, uhm, so, yeah, if, if you perceive something as stressful and therefore you then engage in stress responses then you're already, uhm, affecting processes that are involved in a whole range of other systems. [E1]</p> <p>Uhm... personally, from my research point of view I'm very interested in minor health complaints. A lot of work on stress looks in kind of more sinister illnesses, recovery from cancer, you know, uhm, likelihood of coronary heart disease. Uhm... so I'm interested in those things but a lot of work I do looks in minor health complaints, the things we all experience everyday which are not gonna kill you but they're debilitating, they piss you off and they affect you performing properly, uhm, coughs, colds, headaches, uhm, you know, even things like,</p>
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illnesses or exacerbate the existing condition. Stress was also reported to have negative effects on social interactions and performance (e.g. concentration, memory).

you know, eczema, and you know, all sorts of things that we all get, and we all know that feeling of feeling rundown, and anecdotally I think you can often associate that with a period of, not necessarily stress but, uhm, high workload, or, you know, working hard [...] that can wear down your resources and that can lead to kind of physical minor ailments. [E1]

[...] in the long term if you're secreting too much cortisol your glucocorticoid receptors get a bit tired out and they don't work properly. Uhm, and that can cause problems with those systems that, uhm, cortisol is responsible for. You know, so cortisol is involved in everything but it's been involved in memory formation, so problems with glucocorticoid receptors in the hippocampus, for example, may cause problems with, you know, uhm, putting memories in the right place for a want of a better word, and recalling those memories in a functional manner. [E1]

You know, things are diverted to other places which means you're not able to think as clearly as you might. [E1]

Overactivation of these systems [involved in stress response], unnecessarily, tires them out and makes them not work properly. [E1]

Uhm, it's a bit more complicated talking about how these things affect in the chronic... I mean, it's a lot, yeah, it's a lot easier to talk about acute stress because everything goes high and that's great, uhm, but then when you talk about things like cortisol, it's quite confusing, because, you know, very, very chronic stress will lead to very low level of cortisol. [E1]

[...] but I think it's important because it can reduce how long you live, it can kill you, it can impair your, your [course? – 02:07] of life, it can reduce [what you feeling? 02:09], it can, you know, make you eat unhealthily, it can make you not exercise, smoke, drink, everything. Uh,

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it can disrupt your decision making [...] and it can have impact on all aspects of our life both as a healthy individual leading to ill-health but also when you're unhealthy it can also delay and reduce, uhm, outcomes subsequently. [E2]

And the strain is, can be psychological, anxiety, depression, somatisation, or it can also be physiological, changes in biological processes. [E2]

But I use stress in the strain context when there's an outcome which is negative and that could be psychological, and that could be physiological. [E2]

I have no problems with eustress as a concept, I mean, just the reality is that stress researchers have spent most of their career looking at the negative, how the stuff damages people. [E2]

Now, some of these will be more proximal to the damaging effects on health, the daily stressors but they're made worse by the background stressors. [E2]

[...] loss of concentration, all those sort of extreme examples. And then again, there's a lot of maladaptive behaviours, could be drinking, or smoking, eating unhealthily, not exercising

[...] they may behave in a way, you know, so those indicators are, you know, they're drinking too much, or they do engage in maladaptive behaviours [...] their behaviour might be, you know, they could be very snappy, they could be... lack of concentration, all those sort of things. [E2]

So... stress, in my view it's very simple, there are two pathways that stress is damaging. Uhm, day-to-day level which then cascades onto more [inaudible 22:01] it directly influences

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biological systems, it puts extra strain on them, and indirectly it modifies particularly health behaviours. So there are two pathways which I may, to mind it's exactly what happens. [E2]

In my mind I'm very influenced by Bruce McEwan's work on, uhm, on allostatic load. Uhm, what Bruce McEwan argues is that excessive, he's got four, four conditions, but [inaudible 22:59] repeated exposure to stressful events, uhm, and strain and stress kind of those transactions, uhm, if it becomes chronic over time will lead to allostatic load. [E2]

So McEwen's rationale is that if the system is activated too many times will break so it leads to dysregulation and that's across all biological systems, so endocrine, cardiovascular, immune etc. So, uhm, to my mind that's the direct impact of stress. The end product of chronic stress. And then, so that's how I explain the behaviour, the direct pathway. The indirect pathway is [inaudible 24:25] earlier is... that whole behavioural pathway that influences how you behave. But there's plenty of evidence showing that stress, people experiencing high level of stress, a classic early work by Kiecolt-Glaser, you know, caregiver model, hugely stressful, high levels of chronicity, low levels of control, and in these individuals, yeah, we can see modification of immune function, for example, cytokine production etc. So, an outcome of that is can also be explained by an allostatic load conceptualisation. Constant, excessive wear and tear of these biological systems and then they break. [E2]

So that's again, uhm, that will suggest link to, there's a lot of work shows that stress influences cortisol production and other important, uhm, neurochemistry. Because we know that, uhm, [inaudible 25:25], yeah, cortisol passes the blood-brain barrier, or at least of a dozen of it somehow metabolises into something else, a chemical [inaudible 25:33] but the key point we know that there's, for example, receptors, uhm, in the key parts of the brain which are glucocorticoid sensitive. So, if the system breaks lower down, it's also protected higher up. So

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there's really brilliant work by Jan van [Henkers?] and colleagues which show under extreme situations of stress, uhm, that there's reduction in aspects of brain functioning which are linked to key things like decision making, emotional processing etc. So there's a pathway which is influenced, it's mediated by biological and this is linked to cortisol, I suspect, and maybe other stress-related hormones which have deleterious effect [...] in that model we show that people who tried to kill themselves, you know, these people... I see suicide, you know, the... catastrophic, dreadful thing that happen but also from scientific point of view it's like a caregiver model but more extreme. These are individuals who have been exposed to high levels of stress. Uhm, stress level we can barely comprehend because it's so horrific, so they are at their ends and we, and I showed in a couple of studies is that their biological systems had broken. They release less cortisol than other people, right. People that have tried to kill themselves. So their waking responses to, the cortisol, difference in, their response to stress is different. This just means that they're less equipped to cope. I've always suspected, as we know that allostatic variables are linked to things like increased impulsivity, poor decision making, and these are arguably linked to frontal limbic mechanisms. [E2]

[...] Bill Lovallo is a big stress researcher and his, his, there's a very interesting model where he shows that, he uses addiction as his model but he's, he makes a really neat argument linking things like stress, cortisol, early adversities as well into, uhm, clear behavioural and cognitive deficits. And he argues these frontal limbic mechanisms explain that I haven't actually read much of that because I still think on balance stress is mostly a bad thing for people. [E2]

And there's people who eat less but we care about people who eat more because that's generally for you, right? The high-fat, high-sugar [inaudible3 5:27] food. [E2]

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Uhm... so to me that are two fundamental things: stress can influence how you behave, what you do in terms of health behaviours in particular, and also can influence your biology. It can damage your health. I think that's, they are the two key things for the time being. [E2]

#### Effects

Because if you're striving too hard it becomes too much, and, you know, that's when your kind of systems break down, your mental and physical health can break down over a period of time. [E3]

You know, uhm... some people say that they eat more, some people say they eat less. Some people say that they drink more. You know, they might not be alcohol-dependent, so it's ways of coping in lots of ways. You know, we're talking about moods, we're talking about behaviours, we're talking about physical responses, you know, because some people somatise to such extent that they can feel like having a heart attack, or you know, [inaudible 39:00] in hospital. [E3]

Uhm, in some ways, I'm, I'm not sure if there's a huge amount of evidence for it but I think people have their weak spots. Because whenever I get really stressed I tend to lose my voice which is not good for the type of work I do. [...] But other people may have IBS. [E3]

Because, you know, we're looking at stress. People experience it, we're looking at it because we need to understand it in order to make a difference. [Help] people to be more healthy and happier. [E3]

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Uhm, so my sister was diagnosed with multiple sclerosis [...] And at that time we thought that stress, uhm, she was unfairly dismissed from her job [...] and we felt that the stress of that precipitated her getting ill. [E4]

[...] from knowing a little bit about it [stress], uhm, it looks like certainly it can exacerbate people experience of the disease once they have it, and there's a lot of anecdotal evidence about it precipitating people developing it. Uhm, I mean, obviously it's partly genetic and it'll be a lots of other factors as well, but it does look like a contributor, yeah, although I've not, I've not researched the MS specifically. [E4]

[...] I look at chronic stress, either as stress of life events, or as chronic stress of, uhm, caregiving in relation to the immune system. So my early work was particularly focused on the antibody response to vaccination in first, uhm, younger people, and then looking at aging populations. [...] I moved on from that to look specifically at physical stress, physical stress of having a hip fracture, a trauma and then at the precipitation of depression on top of that. [E4]

[I] carried on looking at stress in relation to different immune outcomes so looking at neutrophil cells, and how well they fight up bacterial infection, uhm, how much they, uhm, how much bacteria they eat and which show how much superoxide they produce. Uhm, what else have we done with chronic stress? [...] it's generally been saliva antibodies, vaccination responses, or neutrophils. Uhm, a little bit on some other mechanisms at the same time, so cytokines and cortisol. [...] I looked at chronic and acute stress in relation to, uhm, cortisol changes, diurnal rhythms, how that maps onto the diurnal rhythms of dehydroepiandrosterone, so DHEA. [E4]

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The acute and chronic goes into course as well, and then the just acute, I tend to look at stress reactivity in the lab, uhm, and I've done that in relation to, uhm, predicting who's gonna end up with hypertension, [inaudible 07:23] their extent of acute stress reactivity, doing that from, uhm, psychophysiological kind of outcomes like heart rate, blood pressure, cardiac output and so on, but also cortisol as well. Uhm, so relating that to future cardiovascular disease risk, cardiovascular mortality. [E4]

[...] it looks like there's a whole subgroup of people who have blunted stress reactions, and that they're bad for your health as well as the exaggerated ones. Uhm... and they're related to obesity, and depression, and all those things I just listed, anxiety, uhm, what else, like a whole million tonnes of it [laugh], impulsivity, addictions, eating disorders, uhm, exercise dependence, smoking, like loads of different things. A lot of which are also risk factors for heart diseases anyway, so kind of looking at stress reactivity as a predictor of diseases in aging. [E4]

[...] people need to address it and make sure it's not gonna make them ill. [E4]

I think when it's, it's repeated, or it comes on the top of a lot of ongoing chronic stressors then, then that's when it becomes a problem. [...] And then that would be negative because what it would probably do is, is lead to a shift in, in way you normally are at rest. Your homeostasis would, would change. You know, so if you talk about allostatic load, isn't it, so yeah... I think, if, if there's too much, if it's not resolved quickly, uhm, if it's too much, uhm, if it's too regular, or if it's on top of lots of other situation, or if it's an ongoing chronic problem then it's negative. [E4]

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Uhm... well, as well as, you know, putting you at risk of having immune system downregulation, or putting you at risk of having high blood pressure in the future, or cardiovascular disease [...] [E4]

Uhm... and in terms of physiologically, it seems to put them more at risk of infectious illness, and also, uhm, worsen inflammatory disease, or might even precipitate general inflammation, so the chances are that even if they don't feel immediately feel physical effects, then in the long term they'll notice some, like, you know, more, more infectious illness, or more inflammatory disease, or more heart disease. [E4]

I mean, one of the, the main pathways that we think is, is that it works through cortisol. Uhm, because cortisol can dampen inflammation which is great for inflammatory disease but it isn't good for other immune diseases and infections. Uhm, but it must be more complex than that because we don't always find the direct link between people's cortisol levels and then whatever we're looking at in immune system. [E4]

Certainly, you know, that is one of the pathways, uhm, if someone's experiencing chronic stress, or repeated acute stress, eventually... they can have higher levels of resting cortisol, or a flatter rhythm throughout the day with higher level in the evenings might mean that their immune cells, uhm, are getting, you know, much bigger dose of cortisol and the feedback mechanism isn't working very well. Uhm... in which case they seem to end up with the cells that just can't fight off infections as well. As the neutrophils can't fight off bacteria as well. And, uhm, like the cells that produce antibodies and B-cells don't seem to be able to produce as many antibodies and don't seem to be able to produce as many memories the cells then, you know, still out the capacity to produce antibodies later on, so... [E4]

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Uhm, it's through our stress response system communicates with the rest of immune system, so like, through receptors on immune cells, though, uhm, innervation of immune organs. And certainly one link, uhm, I mean stress also seems to increase sort of circulation of the inflammatory markers. But I don't look much at inflammatory disease myself. Certainly, you can, you know, you can see that stress, uhm, seems to increase people's systemic inflammation, so markers like C-reactive proteins, or various inflammatory cytokines. [E4]

Uhm, but what perhaps is going on there is that initially people may have higher levels of cortisol and they might have higher levels of cortisol but their cells are becoming less able to respond to that cortisol. So you seem to get different groups of people. People with, with high levels of cortisol who are very stressed, people whose, whose kind of system is, has reset, and they've got very low level of cortisol – not good either, so they can't control inflammation. [E4]

Uhm, and in both cases, either they're, they're producing too much or not enough but also then there's only, you know, the receptors are becoming less responsive, or the re-uptake is becoming less responsive, so, you know, you get dysregulation in your cortisol system in a lot of different ways. It's just, it's not as straightforward, unfortunately, as... you know, having high levels is bad, and low levels is good. Uh, it's not that easy. And of course it interacts with lots of other hormones as well which, you know... [laugh] more complicated. [E4]

[...] I think that can affect things like performance, uhm, anxiety levels, and all sorts of other things. [E4]

I don't know, it seems to change your, your cravings a little bit, isn't it? [...] stress can increase your, your craving for high fat foods, and high salt foods, uhm, compared to healthier options.

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[...] it can sometimes cause you to eat more than you normally would, or eat less than you normally would. Uhm, so I guess that's when stress is interacting with some of the other, your other hormones that, that control appetite maybe, like leptin and ghrelin, and things like that. [...] it makes us want things that are gonna make us feel worse in the long run. [E4]

And it [stress] also makes you less likely to be, to be able to control your impulses. Uhm, so therefore, if you're already somebody that never eats foods that are good for you, or drinks more alcohol than you should, I think, you put stress on top of that situation, certainly for academics, you know, they're more likely to reach out for something that's not gonna be good for them. Because it inhibits your, your kind of control over your behaviour a bit, I think, as well. [E4]

[...] it'll be some changes in, yeah, maybe, the sensors that control motivated behaviour, that control impulsivity, so probably the same ones, uhm, that we see sometimes not activated as much in people who have blunted responses to stress. Uhm, and maybe some of the areas that you would see, uhm, respond to reward. You know, I think some of those centres that control that sort of impulsive behaviour, motivated behaviour. I think, stress would probably lead to changes in, in how those areas are responding and therefore that, then there's an output in actual behaviour. [E4]

[...] using the barbecue metaphor of the charcoal. So you have the charcoal underneath. They're also never out really. You know, you just blow up them, puff, and then the fire... takes off again, turns on again. The traumatic memories are a bit like that [...] [E5]

The other thing, and this is, this is less metaphorical is that, uhm, we know that in PTSD victims, they don't activate sufficiently, in some of the studies, the prefrontal cortex. Instead

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they activate too much limbic regions, particularly the amygdala. Very interestingly, there are fibres going from the prefrontal cortex to the amygdala to inhibit it. Now, if they don't have enough activation of the prefrontal cortex, they can't inhibit it. That's possibly one of the reasons why these things keep on jumping up. So the, the memories embedded in a more, uhm, primitive memory region rather than more controllable region. [...] any small reminiscent in a, in an environment, or even that you're thinking about it can easily trigger, can re-ignite the light, the fire. Because the charcoal is really never off, OK? [E5]

[...] and then you can talk about long-term, so you know, the cold, sickness, chronic pain, chronic fatigue. [...] And the outcome, long-term, like fatigue and absenteeism is more long-term, I agree. [E5]

Uhm... you can use other, you can look at immunological, you can look at DNA damage etc. [...] Long-term, you could look at actual diseases, so colds, liver problems, heart attacks, cancer etc., diabetes. [E5]

However, if it [stress response] lasts too much and for too long then it becomes non-adaptive. So if I mean that stress response of staying in a shelter after the war is over, obviously I'm not adapting. It's all about adapting in amount and time [appropriate] to the context. [E5]

So I focus on health and well-being, I focus on outcomes of stress, so behavioural outcomes like presenteeism, for example, uhm, engagement with work, and so on. [E6]

If I don't, if my job doesn't allow me, doesn't provide that, or if the work climate doesn't provide that, doesn't allow me to have, uhm, to experience autonomy, then this may, uhm, as an impact it may demonstrate itself in various, in various ways. Over time it can turn into burnout,

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uhm, it can impact people's engagement, it can impact counterproductive work behaviours. [E6]

Let's say, if you're too stressed, uh, you may withdraw from work, disengage from work and that lead, may lead to an early retirement. Yeah, so you can look at that chain of effects. [...] We look at things like affective well-being, anxiety and depression. Then these can be the bits in between. [E6]

Uhm, we... so the, the experience of, uhm, stress, as a precursor to other mental health issues is, is the point. So the relationship between stress and anxiety, for example. [E7]

And what we're interested in, as well, is to think about perhaps not only how stress can be very damaging [...] [E7]

Uhm, but what we want to do is not wait for people to, for, for stress to turn into some sort of awful anxiety as sort of [health] condition [...] [E7]

So I think it's got quite a lot of [inaudible 10:15] the stress vulnerability model, Zubin and Spring sort of model, uhm, and we use it quite a lot as an illustrative of the, the, uhm, the negative effects of stress. [E7]

If we knew that these factors increase the risk of cortisol, increase the amount of cortisol to the point where it became, uhm, dangerous within the body. [E7]

But crucially what low levels... because that's equally, and perhaps even more damaging. Because within, you know, Selye's sort of, you know, model, he's actually talking about the body being, you know, physiologically exhausted at that point, you know. They've had so much

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cortisol that damage has been done – it's the point where the body's amount [inaudible 17:25], had enough of this, you know. [E7]

One who had 45 [high cortisol level] [...] was someone that actually was in crisis physiologically. So what was interesting, we asked them [...] to get checked out with their GP, and they found there was a significant physiological sort of problem with this person. We thought it would be like an adrenal tumour or something like that... and it wasn't, it was just amount, they was just close to collapse, you know. [E7]

We found what you would imagine that high cortisol was related to anger and so on [...] Uhm, and we found not a huge amounts of relationships between variables but an indication that cognitive disorganisation was related to cortisol. You know, uhm, so high cognitive, high cortisol was potentially inhibitory in terms of this fuzzy sort of thinking, you know. [E7]

So it's quite an interesting thing about how much damage was been done potentially to people, you know, uhm... that way [because of job stress] [E7]

Uhm, Hans Selye as well, of course we talk about that because, you know, that's still a good model. You know, conceptually, it's still a good model, you know. [E7]

But of course, there is a relationship between stress, you know, and distress, and that's the way I sort of see anxiety as being, you know, distress. But that is expressed for me in terms of when it becomes inhibitory and dysfunctional. When it actually impacts of people's lives to an extent whereby they are absolutely poleaxed by their experience. [E7]

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But for some people, they find that very, very difficult, I think, because they become so, uhm, they feel that stress overwhelms them. You know, it envelops them, you know, and then there's no way out, you know. [E7]

Uhm, but when someone, and this point, my clinical point of view, but somewhen someone says 'I'm so stressed, I don't know what to do, I can only see blackness in my future, I can only see...' Then we've got a significant problem on their hands, that stress has become something which is overtaking so much life. [E7]

But stress is very, very insidious [...] Uhm, because stress can be inhibitory to change. [E7]

Uhm... it's, it's difficult to say, I mean it can affect everyone in, in so many different ways, it's actually difficult to say what aspect of life it doesn't potentially impact. Well, I mean, it's all physiological, and sort of psychological. I mean stress has huge impact on the body in terms of, you know, increasing risk of cardiovascular, and, you know, those sorts of issues. [E7]

What I'm fascinated by as well as the impact that it actually has on brain structural function. There's a lot of stuff coming through in recent years about, you know, the impact of hippocampus, sort of in particular. And you may have sort of seen the studies looking at stress in middle age and the, the effect that hippocampal atrophy which is experienced in middle age can have a huge devastating effect later on because there's a relationship between Alzheimer's disease, and so dementia sort of later on. So physiologically you're more likely to have cancer, heart attacks, those sorts of things, dementia, you know. [E7]

But it's also, that's from purely physiological point of view. From the psychological point of view it can inhibit your ability to function socially, you can be hugely inhibited by it. Uhm, and

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	<p>yeah, and psychiatrically too much stress, too much unhelpful stress can lead to all sorts of anxiety disorders. [E7]</p> <p>Unfortunately, because we are appraising individuals, the threats can also be very much to do with other things as well, you know. So the same physiological things occur but because, you know, we're experiencing them for much longer period of time, the effects of these hormones long-term has huge devastating effects in terms of laying, depositing fat in our arteries, and increasing risk of cancer and so on, affecting our brain structural functioning. [E7]</p> <p>But our bodies are designed to do that in short bursts. We're not designed to have that state of readiness and anxiety for any period of time. It is enormously unhelpful to body. It's a huge drain on the body. Uhm, and it makes, it has a huge stores up, huge problems for us in terms of our health in the future. [E7]</p> <p>Uhm, when I say stressed, uhm, trapped, I mean very much that cognitive disorganisation. It's that people cannot, Dorothy Rowe's 'Find your way out of your prison', is that people there, they become, they find it very difficult to think through solutions. [E7]</p> <p>But the actual experience of panic is so profound that it causes people to, you know, running to a road, or... you know, the impact of fight or flight is so profound that they have to get out of the situation, you know, they do all sorts of potentially life-threatening thing themselves to, to escape. [E7]</p>
Positivity	<p>Positive effects of stress were discussed to a much lesser extent than negative. However,</p> <p>[...] but it [stress] can also make you feel energised... [E1]</p> <p>Uhm, you might not be thinking that's stressful because you could be engaged and you could be kind of enjoying it. [E1]</p>

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stress response to acute stressors was often described as normal and adaptive mechanism. Ability to switch on and off the stress response is beneficial, while unnecessary response or overactivation may be harmful (allostatic theory). Stress can be energising and motivating. An optimal level of arousal is important for performance (Yerkes-Dodson laws). Stress may promote learning (including developing coping skills), adaptation and changes (if a situation is undesirable) and has certain short-term benefits in terms of

Uhm, but yeah, we know that, uhm, cortisol, for example, a stress hormone is, can be quite useful in the short term [...] Uhm, but again, even in the short-term people respond to, people's cognitive performance is affected in different ways. You know, so, in a peak, acute stress situation some people feel really on top of things for a short period of time. [E1]

But the stress responses are depending on what that situation is. So, if, if the situation requires that you mount a stress response that help you deal with that then that's good. So, that's, yeah, that's very important. So if, if a bear jumped out you want to upregulate your stress responses to get away from the bear. Because if you don't, it's gonna eat you. So that's why stress responses, given any particular situation are important. And useful. [E1]

But I'll talk about the fact that... when cortisol is going up to help you deal with an acute stressor [...] [E1]

Eustress is motivating. Uhm, I do buy into kind of Yerkes-Dodson type of evaluation of stress. You know, some levels, I mean, some levels [...] [E2]

And allostatic load is defined as... because allostasis is this notion that, like homeostasis, that the body we, we're... you know, stress is an evolutionary adaptive mechanism at a starting point. And given back in the mists of time when we were on the prairies hanging out with [inaudible 23:32] when you avoided to be attacked the stress response was, mount a response fight or flee. [E2]

Well, I mean, obviously there's Kelly McGonagall view of the world, which is very much about the positive aspect of stress. [E2]

I'm not in any way suggesting that there isn't that eustress, those more positive things but that's fine [inaudible 28:45] that just jerks homeostasis, that's, that's...most people, I would

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physiological changes (fight or flight response, anti-inflammatory function of cortisol).	<p>imagine, that sort of... they find their jobs rewarding, they, they don't find them too stressful. [E2]</p> <p>[...] there's a theory called stress inoculation theory, maybe you've come across. What we really need is a small amount of stress in throughout our lives to inoculate us against it. But if you're 40 and you've never experienced any problems, and all of a sudden something happens to you, you know, you don't have coping skills then, do you? You know, stress inoculation is important. You, you're kind of toughened up, if that makes sense, you know. [E3]</p> <p>We would also probably just stay in bed, we wouldn't accomplish anything in our lives. You know, uhm, I kind of agree with the Yerkes-Dodson, you know, the, what's it called, the inverted u shape. [E3]</p> <p>Obviously, we can do it for a short time, we can keep it up for a short time, you know, and when you think about your immune system – under acute stress it increases but under chronic stress it decreases. [E3]</p> <p>I think stress is quite normal. [E4]</p> <p>So if you still perceive something as stressful, whether it be acute or chronic, and then, and that it'll mobilise your stress reactions, uhm, and that's, and it's quite normal for it to do that [...] And thank goodness because if it didn't, like these people who have blunted acute stress reactions, it doesn't seem to be a very good thing if they're not mobilising their reactions, so... it is normal to have a response, so yeah, I'd say it is normal. [E4]</p>
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Uhm, I think it's positive if it's resolved quickly and your physiology returns to rest [inaudible 18:03]. I think it's positive if you perceive it as like a positive thing, like more of a challenge, something you just need to rise to. [E4]

I think in a short term, uhm... if it's, if it's very quick and it's just a natural response to a situation that resolves, then it's, yeah, it's what we're meant to have. We'd die without it. [E4]

Uhm, which is quite odd, really, given that cortisol is, is, uhm, anti-inflammatory. And we think that cortisol rises with stress, and it certainly does with acute stress. [E4]

Yeah. So, so challenge is when you perceive something as, you know, you're gonna have to deal with it, it's challenging. Uhm, but you also perceive that you can cope with it. [E4]

OK, uhm, I would say they need to know that it is a normal response, that everybody has. And, uhm, I think I would want them to know that it's not always negative [...] In fact having a physical, or physiological response in a short term is, is the way our bodies deal with it, and that, that's normal, and we would want that to happen. [E4]

[...] so I've said I want people to think that it's normal and that sometimes they'll feel stress, another times they won't. [E4]

No, obviously stress has something very important. [...] The stress response and the recognition, the recognition that we are in a stressful situation is crucial because otherwise we will, we might, you know, in the past it was a tiger, a lion. [E5]

And, and as pacifist as I am, when there is a threat in front of me, you need to react, you need to react. First of all, you need to defend yourself. So without going to politics, it's natural to defend yourself, OK? So we need the stress response, the recognition of the stressor and...

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to react, to run away, to fight. We have to do that, OK? So, I've been to several wars, and I've been to multiple waves of terrorism, so... I'm... so the stress response helps me to, to... so you hear a siren and you need to go to a shelter, everyone knows it from the age of 3, or 2. Uhm... and that is an example of how the stress response is very adaptive, extremely adaptive. [E5]

That brings me to another, to another metaphor that I really like to use is the pagoda. [...] so I think that our vagal nerve helps us to respond but not break down.[...] because you need to bend, you need to adjust to the demands of the situations but then bounce back. And it's exactly the palm tree that won't break. And I think that, and the pagoda, our internal pagoda is the vagus nerve. It enables us to have the stress response because we need to. But it enables us to resume to how we were before faster if our vagus works well. [E5]

So you need, obviously they were not sitting there in the war, and thinking 'oh, these are lovely guys, let's...' It's not that. Obviously they knew how to respond but they also knew how to say to themselves 'it's over'. And that's all about adaptation. [E5]

I think the really, the key thing is the ones who go through stressful situations better are the ones who recognise, respond and then resume to how they were before. [...] you need to respond but you should go back to how you were before because that's about resilience. [E5]

And it fall beyond that. But yes, stress is, is, can be, uhm, energising in a way. [E6]

Uhm, but also try to normalise the sort of idea of stress with, with people. Because a lot of what we do in mental health nursing is to deal with the pathology [...] stress can be positive sometimes for, for people. [...] So it is not an abnormal thing to, to sort of experience stress. [E7]

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But stress can be a really good motivator with, you know, for change. You know, it can be the sort of things which actually kicks [inaudible 06:37] people. [E7]

When it actually impacts of people's lives to an extent whereby they are absolutely poleaxed by their experience. Stress doesn't necessarily do that to you. [E7]

You know, stress can be the thing that makes you finally decide that you're going to quit the job, because the job is crushing, or whatever. Uhm, so that's not necessary a negative thing, it can be a very sort of positive thing. [...] as well as facilitating the change [...] [E7]

It's, it's a by-product of, you know, it's, so your psychological threat appraisal triggers all sorts of chemical reactions. You know, in order to ready your body basically to flight. You know, fight, or flight. Uhm, so that can be through adrenaline, it can be through all variety of different things. But your, your body is being ready to deal with the articular threat hm, so being in this state of readiness sometimes for fight or flight when we were hunting is what our bodies are designed physiologically to do. [E7]

What it does within the body obviously is that, if you have too much stress hormones is that it, it can divert blood flow away from, you know, non-vital part of the body to the part of the body which will help you to fight or flight. So your big muscle groups, you know, your hearing and sight become much more tuned and so on. [E7]

But our bodies are designed to do that in short bursts. We're not designed to have that state of readiness and anxiety for any period of time. [E7]

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Importance of management	<p>Stress is inevitable and can be beneficial but if it is chronic or excessive it may lead to negative effects. Therefore, stress management is crucial to prevent negative effects and maximise benefits from stress. Individual action (self-care, recovery, coping techniques) is important but insufficient. Putting too much responsibility on the individual can be harmful. Thus, collective actions and stress management at different levels (micro, meso, and macrolevels; primary, secondary and tertiary prevention) are necessary, including reducing stigma,</p>	<p>Uhm, I think... following any... any event is important to be able to recover [...] Uhm, so I think... any, any event, you want some time to recover psychologically, biologically, you know, so if we're thinking about, you know, a physical event where we have to upregulate physiologically, you want a period of recovery to let everything reset and get back down to normal. [E1]</p> <p>[...] important to be able to recover... and reflect, and this is, even subconsciously, is a really important part of how we deal with subsequent stressors. A period of re-appraisal of what happened when we experienced that stressor. So that the next time you encounter it, you can hopefully think 'have I done this before?' [E1]</p> <p>So recovery is important but this also relates to our definition that we've just arrived at in terms of acute to chronic stress which is respite. So, without that recovery, I think things would become chronic.</p> <p>Uhm... they should, uh... have an understanding of what short-term stress does to your body. They all know that but I think being able to label it is useful. Uhm... understanding that when a situation arises making the link between that situation and your, uhm, psychobiological symptoms, so you can kind of are quite happy about cause and effect. Uhm, but I think that's useful and helping individuals evaluate the stressor. And evaluate whether it actually is stressful. [E1]</p> <p>So, in our house we have this term for the kids, it's 'nervoucited'. Because... when you're nervous your heart rate goes up and when you're excited your heart rate goes up. So working out what it is, what's going on, and whether you can actually reframe that as a something that's exciting. Because you could be nervous about something that's exciting and not</p>
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changes in expectations, cultural norms and policies. Participants also highlighted the need for education – people should understand how stress can become harmful, and how to prevent and mitigate the negative effects (awareness of triggers, resources, coping techniques).

stressful, so just working out what it is that's causing this and whether it's worth it. I think all people would benefit from that. We all know it intrinsically because people say 'oh, my heart's going' or 'oh, that made me jump!' People know about these things but should then think about what actually caused it helps people understand whether, what their responses are and then maybe help some to monitor these responses. [E1]

Uhm, I don't know if it's the most important thing, I just think it is useful for people to understand why they're feeling what they're feeling. So they can understand, they can evaluate it. Or learn from it. [E1]

So... breaking that down and explaining what fight or flight response actually is, and relating it to what they're feeling physically can help them understand what caused it. Uh, so I think it's important for people to know that. [E1]

You know, but just getting people to identify that, and you know, just helping people understand their, you know... you know, it's easier said than done, if there's nothing you can do about it don't waste time stressing about it. Think about something else that could be done. A way of you thinking about it in a different way or just setting out an action plan to deal with it, or something. [E1]

Just, uhm, I think things that I, things that stress me out, I would try and say 'is it worth it?' 'Is it, does it impinge on me at all?' You know, so a work colleague pissing me off, I need to work out what that, how that actually impacts upon me and if it doesn't impact on me and I'm just annoyed because they're annoying then try and filter out, try to reappraise, you know, that's why, why am I, why am I bothered by that. [E1]

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It impacts everything that we do, stress is, is pervasive. [...] Uhm, the, it stayed stable pretty much, you know, the, the same nearly half a million people in the UK every year report work-related stress, [...] And that stayed fairly stable. It's come down but it's still alarmingly high. [E2]

So is it the fact that it's more acceptable to say you're stressed. So, uhm, certainly the stigma surrounding stress has become, has reduced. I think that probably, previously, in those years when individuals were stressed, and, uhm, they were on, they felt inappropriate they couldn't talk about being stressed because it would be worse for them as a result, there was an underreporting [...] I think stigma has reduced so more people are reporting it. [E2]

But if we want to, so my view is that's like your eustress, that's the individual working at an optimal level of arousal and stimulation in an environment [...] And the learning mechanism is that work environment's description of eustress, to my mind. [E2]

Uhm, no, I wouldn't say that it is possible to have a stress-free life. That would suggest somebody lives in an extraordinarily cleansed environment where no negative things happen to them. There's no changes in environment, there's no situation where to lose control, uhm... Well, we certainly can have a world where you could be better coping with stress, and you could just be more relaxed. [E2]

No, I think, I personally think you can't have a thing which is a stress-free life if you define that as an experience when one does not encounter any stressful events, won't perceive anything as stressful. [E2]

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We should be doing this, trying to get people learn to cope better with these things, uhm, and with strategies in place, so... I think we can never get away with the fact, away from the fact that we live in a stressful world and most people encounter it. [E2]

So therefore I'm less concerned with the positive aspects because I have got business as usual... for functioning, adaptive human-being. [E2]

We've developed this kind of stress-support tool things which tries to work on this idea, uhm, using [inaudible 35:06] and tension, so planning interventions. So getting people to think, so to knock off, for example, stress and just eating. [E1]

So all kinds of planning interventions, so using [inaudible 35:33] to get people think differently when they encounter stressors. [E2]

And then there are just all other things about time-management, Simple things like time management. So, there's a range of tools that people can use, uhm... to try and cope better with stress. [E2]

And being aware of the damage that stress have. Because interestingly, a lot of people just aren't aware how big and small things influence how they behave or how they respond biologically. So, all kinds of consciousness-raising issue, which is important as well. [E2]

Uhm, there's ways in which that can help you by changing environment, you know, increasing decision latitude [...] [E2]

Social support, so there's... social support things, that could be both at the community level as well as individual level, workplace level. [E2]

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Virgin Airways or Google did the thing, they just allowed people to choose their own holidays. They never ever had to tell anybody they're having a holiday whenever they wanted really. So, they manage their own time. [...] But again, interesting thing – give some control back to, to employees in a way which may be beneficial. [E2]

But at a society level I can't think of, uhm... I mean, overall, we should just try to get more relaxed [...] [E2]

I think, uhm... the most important, I think there two most important things people should know about stress is that stress can influence how you behave in a negative way, and that it can influence your biology in a negative way. People don't really recognize that, I think. A lot of people, the general public aren't really aware that over time it could be damaging to them. [E2]

You know, people... one thing that I like myself is coping flexibility where it isn't necessarily particular ways of coping, it's the extent to which you're able to choose different types, in terms of being flexible. Because, you know, rigidity can be a problem, can't it. [...] And feel empowered enough to choose them. [E3]

And I think, you know, certainly in the training that I do, I try to help people to identify resources that they have, and how they can be used. This, I think, we all have them but we don't realise we have them. [E3]

Uhm, and I think certainly, the research that I've done lately – self-care and self-compassion are massive issues. Particularly in the healthcare professions. Now, people are often, I think I said it in the talk, people are often much harder on themselves, you know, and much less forgiving and much more punitive, and that's something that can make a huge difference to people. [E3]

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I think if we were free of stress we would be dead. [E3]

I think the Yerkes-Dodson approach is, if you, if you have too little challenge in your life, let's say, you're gonna be really bored and you're be really bad at what you do, and you can be really, really unhappy. Whereas if you've got too much of it obviously you're gonna be over, over-aroused, and your performance, your happiness, whatever, is gonna be a problem. It's fine in that level, isn't it. [...] you're striving but you're actually not aware of striving [...] the key is finding this level, isn't it? [E3]

Uhm... recovery. If I could think of anything, you know, the number one would be adequate recovery. Uhm, and you know, we can link that with work-life balance because obviously people need to go down to baseline, don't they, in terms of mental and physical resources. They need to recoup the energy they've expended, you know, to go back to what they need to do. [E3]

Uhm, yeah, I think prioritising, recovery, self-care, self-compassion is important. [E3]

Because, you know, if, if you don't have self-compassion you may not be able to disclose that you've got problems. You know, the whole thing about having to feel, uhm, powerful, you know, and not be weak which, which came out in the doctor's report. You know, the whole thing about stigma of disclosure. [E3]

Having coping skills that work for you. Being able to select the right coping skill and the right strategy, if you like, for the situation you're in. [E3]

Being kind to yourself, not having too high expectations as well. [E3]

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It comes at the end of a really kind of long, drawing out chronic approach where they well may have been having sleepless nights, not eating properly, you know. [E3]

But, of course, the danger is that you attribute symptoms to stress because, you know, there's some really interesting research on, uhm, hypertension. That if people think that hypertension is caused by stress, and they are, they've got high blood pressure, they're less likely to go to GP because they may think 'oh, I've really got a stressful job, so can't do anything about it'. So there are very serious implications, I think, of people's beliefs in terms of what caused, you know, the symptoms of stress. You know, because you may get palpitations, or something. And you may be having a heart attack but if you think it's stress [...] Because you may attribute serious heart problems to stress. [E3]

You know, and I think experts are the same in that as well, doctors, therapists. You know, a lot of us do this. Uhm, and also fail, fail to take your own advice. [E3]

[...] I didn't want to let people down, so I did it. Uhm, and then it takes the energy out of you that you have, you know, so you kind of go back home and 'oh, I need some more time to...' you know. So I'd just been going into work about once a week, and going to meetings, and whatever. And kind of doing it gradually if you like. But of course in my head it's like pull yourself together, for God's sake, you know, you don't want people to think you're weak, and, you know, hope, hopeless and people to feel sorry for you. You know, I've got a reputation to keep up for God's sake. [E3]

Oh absolutely, absolutely... It's also you don't want to burden other people as well. You know, because it's going round, and round, and round in your head, and it's like, well, I'm already bored with this now, I don't want to bore other people. [E3]

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I believe it's part of the picture. Uhm... I think everybody should develop effective coping skills. You know, they should know about themselves, they should know about their triggers, they shouldn't show... keep responsibility for recovery, uhm... but obviously, a lot of the time the reason why people are stressed aren't because of them at all It's because of the organisation. [E3]

So, you know, uhm... it's much more popular to have individually-focused interventions because, you know, they're easier, they're cheaper. You don't have to change the organisation which is a massive problem. Because it means the owners stay and the blame is put on people who can't cope. You know, the idea is, you know, they're stressed so that means they can't cope. Give them a bit of stress management training. Uhm... and I would argue massively against that [...] [E3]

And certainly in the resilience training I do, we always make... a massive effort to say in the beginning, you know, this is just part of what, what you should be having. This can help you develop your skills in, let's say, social workers, because social workers, social work is demanding, emotionally demanding and complex so you need these skills. But the organisation has a duty of care. [E3]

So at the moment we're training, uhm, oh gosh, we've gone from individually-focused resilience to team resilience, now we're working on organisation resilience [...] [E3]

So it's thinking about what they can do to enable, uhm, resilience in their organisation. At a much more strategic level. [E3]

But it's kind of, the danger is, it's packaged as this, well, it's all your fault, isn't it? If you were only more resilient, you wouldn't be stressed. [E3]

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So, you know, uhm, I would always argue for a systemic approach where individual skills, individual stress management skills is that... they're, clearly, very important but they need to be supported by managers' skills [...] [E3]

Uhm, then, of course, team level. You know, what can teams do – take collective responsibility for, you know, managing stress in their teams. Organisational, obviously, you know, you need to make sure that your organisation is not toxic in any way. [E3]

If you... pre-empt problems, uhm... look at demand-control-support model, use the HSE management standards framework to diagnose problems, uhm... if you find any difficulties, use evidence-based interventions and then evaluate them. [E3]

But above that even, we're talking about public policy, as well, you know, because across public policy... look, look at the NHS. A lot of the problems hospitals are facing, are to do with, you know, the change, the unreasonable targets that would've come from, you know, right above. [E3]

So, I think, all of these things, we need to look at, and they all work together, don't they. But the hottest thing is the individual thinks, you know, post something at hundred quid and get, come and do a stress management session. Isn't that easier? [E3]

[...] it's very common for organisations to do their own stress surveys [...] but they don't communicate the findings because they don't love the findings. [...] because they just want to go away, they don't want to admit it. [...] then people stop engaging with that type of thing, become very cynical, and bitter, and twisted, you know. It's, it's not managed very well in lots of organisations. [E3]

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You know, there are some examples of good practice, like a Viva do some really good, uhm, good stuff. Uhm, and they communicate the findings from their surveys really well, by video, you know. Uhm, because they realise that staff can't actually come to face-to-face sessions if they're busy, or not working over there, so they make sure everybody gets information, and it's very participative [...] [E3]

But you know, it all works together, and you can get individuals using participatory approaches, you know, action research techniques... to specify how changes can be made to make their life easier. Because, you know, they're experts in their own jobs, aren't they [...] So staff are far better off knowing what can be done. Both individually, team, and organisationally, yeah? [E3]

[...] they'd probably be whining and moaning [laugh] about different things, you know, but [...] we have to think about that, you know, we have to be grateful, and feel privileged to feel safe and secure most of the time. Uhm... you know, and focus on the positive as well as the negative, which is important, uhm. [E3]

It's not a weakness. [...] Stigma is like the big thing that I'm thinking about. You know stigmatisation is very damaging. [E3]

Uhm... so it's the ability to recognise it in yourself and take steps if you can to manage it. Uhm, but if you can't, do make sure that you get help. [E3]

[...] it's responsibility, organisation's taking responsibility for what they do to their staff, knowing their staff, protecting their staff, you know, uhm, realising that they've got moral and legal duty. Moral duty of care and a legal duty of care. And, you know, people are their greatest asset, and, you know, uhm... not protecting their well-being, and, you know, refusing to

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acknowledge the huge evidence that long working hours are not beneficial, both in terms of health and performance. [...] But so many organisations just do not even go there. I think there's, you know, some more progressive ones and realise that. You know, like, so the lights are out at 5 o'clock – go home. Still, there's this notion. And it's also promoted by the government. You know, like you've got the most incredibly important decisions that have to make, that affects, you know, 65-70 million people, and they're in the room all night talking about. Or Sunday. You know? They need to be role models. [...] They need to be role models, you know? [E3]

I think, you know, things can become ingrained, but I think you can train people to be more flexible. [E3]

But I think we need to be... making children aware of these things, you know, from the very early age, at schools as well. Uhm, you know, having this much more health and self-care culture which is very different from being a snowflake. [...] I think you can be... self-compassionate without this kind of 'look-at-me' type of approach, and 'look-at-my-needs'. [E3]

Uhm... because we are all individuals, but we are all interconnected, aren't we, and we've got to think about others people's needs [inaudible 1:18:08] the other, you know, it's not all about me. It's about the group, it's about the collective. [E3]

Uhm, looking at this in relation to younger and older populations, looking at [...] whether exercise can buffer the effects of stress in an aging population in terms of what the cortisol rhythm is doing [...] at the moment I do quite a lot on aging and physical activity and stress is one of the outcome measures that we look at to see if, we're trying to improve people's physical function, uhm, older, frail people. [E4]

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[...] the exercise intervention that we're doing, it's physical activity with specific machines, or, or seated activity for frail older people, and we're also looking at whether it might impact on psychological health as well. [E4]

No, because we are humans and we have to interact with other humans so I'd say it's very difficult to have a stress-free life. [...] I'm not sure anyone would ever say that their life is stress-free. [E4]

It's actually when it gets out of control that it needs to be, you know, dealt with really. [E4]

What can they do? Uhm... I would suggest first of all that they increase their resources to help them emotionally deal with stress, and to physically deal with it which would then have knock-on effects on their physiological responses. Uhm, so I would say social support is, is really important, so people should mobilise their social networks. [E4]

Uhm, another thing is, uhm, physical activity. Because it has so many positive benefits on physical health and emotional health and reduces people's perception of stress. Uhm, and also it's something that can involve social support, so you can kind of do both of those two things at the same time. [E4]

Uhm, I guess, with endorphins, uhm, in the brain sort of making people perceive stress and perceive less pain just because of the neurotransmitters that, you know, you are releasing as a result of being physically active. [E4]

Uhm, I think it could help them feel less stressed, whether it would change their reactivity, I don't think we know yet. [...] Certainly people who are fitter tend to have more of a moderate response rather than exaggerated response, so perhaps increasing fitness will actually, you

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know, change how your cardiovascular system responds, so that would, could help them potentially. [E4]

Uhm, but if it becomes an ongoing problem, uhm, then that's when they need to, you know, reach out, and, and mobilise resources. Uhm, if it's going for long time that might be when they need to try and get some sort of help, or get some sort of advice, or uhm, they could look at the new Public Health England campaign on-line which I was in talking about stress, and there's a lot of self-help, and self-care, rather than just referring people to health services. [E4]

But if it's something they're feeling quite regularly maybe they should try and get more information in terms of what they can do to help themselves to feel better and help themselves to feel they're coping. There's a lot of things they can do themselves before they have to seek medical help. [E4]

I think organisations, and, uhm, policy makers have responsibility as well as the individual. I think that kind of change is a lot harder and would take a lot longer. Uhm, so I think the individual still should take responsibility because I think you'd have more chance to having positive effect in a short term, itself, by doing that. But at the same time, I can see why, yeah, bulk of responsibility has been put on the individual. It almost takes away the responsibility of the workplace, or whatever. It, it does need to lie with both parties. [E4]

But another way that we can potentially influence organisations is by being more open about, about stress and how we're feeling, and whether we'd feel like not coping. I think there's a lot of fear about expressing that in the workplace in terms of job security or being seen as weak. Whereas if we start to think that people feeling stress sometimes is normal, it's not weakness, it's normal, and we're more open about it, and we're more open about the sort of things that

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contribute to it, or make it worse, particularly if it make it worse to the point of mental, or physical illness. Then, uhm, that would make the organisations realise they can't just bring in along training courses and tell you to go off and sort yourself out. Then they might have to make, you know, system-level changes for everyone's well-being. But I think that's a lot harder to do. [E4]

But I think that awareness is one of the first things you can do. You know, not, not hiding, not hiding when you're feeling stressed. [E4]

Uhm, one of the things that came out of that was that a lot of the things that you can do to help you cope are quite simple. People may not be aware of them, or, or they may sound so common-sense that people don't really believe that they actually have a big impact. But they can. [...] things like physical activity, the biggest changes that you see in terms of, uhm, physical and mental health are always between people who go from doing nothing or not very much to doing something, not necessarily between those who are already doing quite a lot and then do more. [E4]

Uhm, so there are little things that you can do that people might think, well, you know, of course you'd say that, that's common sense, but they actually do have quite an impact. [...] don't just think that you need to go and, and get tablets. There are things you can do yourself, so... [E4]

So the key, key, key word is flexibility and adaptation. [E5]

Uhm, physical activity. Physical exercise, it's not only healthy but it also increases vagal activity long-term. [...] anything that you can do to make you have higher executive function, and one of the definitions of executive function is flexibility, is role-switching which, again, is

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correlated positively with heart rate variability, with vagal activity. Which is increased by exercise, certain diets, meditation. [E5]

Healthy lifestyle, indeed. Healthy lifestyle is a good one. I believe healthy lifestyle will increase your vagal activity which will increase executive function, and adaptability, indeed. [E5]

[...] there are other things we can do. And one of the good things is that we can choose which way to cope, we should choose [...] [E5]

[...] why do go to a doctor or a dietician? Because we do things that are not correct. And the same thing with stress. [E5]

So, uhm, so we need to train, educate people that you can choose healthier ways to cope with stressors. And that, that there are very simple, rather not simplistic, but simple techniques such as learning to appraise, learning to match the coping to situation, and vagal breathing and meditation which can really help us to, to increase our flexibility, our flexibility, and adaptation. [E5]

[...] there's that inverted-u relationship between stress and performance. [E6]

We do a lot of research on the organisational-level interventions, but not individual-level interventions. So, the work is done at the job or workplace level. You need to focus on improving jobs, designing better workplaces, and so on. Not on changing individual's, uhm, character, traits and so on. [...] if you improve jobs, improve the working conditions, the you have a chance to influence more people than if you're focusing on individuals one by one. [...] if you look at interventions theory, organisational-level interventions make more sense, and they're more effective in, uhm, long term than individual level interventions, although individual-level interventions are easier to administer. And easy, uhm, to persuade managers

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to invest, the employers to invest money. [...] these foundations are, uhm, improving of jobs, and improving workplaces. [E6]

Well, things like autonomy, providing more autonomy, changing the choice, changing the policies. Uhm... if you have a policy, attendance, or absence, absence policies, then changing these policies. Improving collaboration, and communication between colleagues to improve social support. And, uhm... yeah, so there are many interventions on improving jobs for specific, uhm, groups, as well. [E6]

[...] we looked at workplaces policies and practices. So we took a macro approach in a way. And we looked at how we can develop interventions to improve jobs in terms of team work, [inaudible 33:32] disciplinary working, working with some hospitals as well, uhm, with the aim to improve, uhm, engagement, work ability, future work perspective, and ultimately, uhm, impact on people's decision to retire earlier. So we said, if we improve teamwork, well, this group was midwives, for example, uhm, then all the important things will just fall into place in a sense, yeah. [E6]

Give them the brief, give them the tools and let them get on with, with work. [...] in most cases just let people get on with what they are experts at. [...] they have a lot of experience, they have implicit, the tacit knowledge to, to do a good job. And I think a lot of management interferes with that, a lot of managers, you see... they're maybe too intrusive [...] [E6]

Uhm... I think, in fact, a lot of managers are more intrusive than they should be and they should just let people exercise their expertise and knowledge, their initiative, to do a good job. [E6]

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[...] we're moving on from talking about stress, and risk assessment to more positive, and more constructive, more constructive language. [...] I think with stress especially at some point there was such a big hype about billions of days lost to stress, and so on. [...] So, there's been that huge hype about stress that may reinforced some of that negative [views]. So we have to be mindful of that, as well. [E6]

Uhm, but in sort of more recent years we, we've tried to think about, uhm, the value of people taking charge of self-managing, identifying they're managing their own stress levels. [E7]

Even though, sometimes, I think [stress] it's portrayed as a being something quite, sort of out of normal. [E7]

[...] to help people to understand how people's experiences of stress can lead to subsequent difficulties. Uhm, about primarily to do something about it at an early stage. So, being able to identify your own responses to stress, and being able to cope with it is really about how you promote your mental health and well-being, as opposed to waiting for things to deteriorate to the point where you need to... [E7]

So, it's such an important thing for people to be aware of their own stress levels because mental health care is a very, you know, difficult environment to work in. But also to understand the relationship between stress and distress. [E7]

However, there is a fine line between stress which can be, you know, eustress, helpful stress, and stress that actually becomes inhibitory and dysfunctional. [E7]

Stress can be managed usually quite simply, even though unhelpful, dysfunctional ways like avoidance. [E7]

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So the insight into a) the experience of stress, and b) what is causing you stress, and then what you can do about it is a very, very powerful package. [E7]

Well, what we do is a part of what we call psychoeducation, is helping people, uhm, these are people with anxiety or stress problems to understand what we know about stress and how stress can impact lives and body. [E7]

So helping people to understand what stress looks like for majority of people. [...] helping you to understand how stress looks like. Because once you become aware of it, potentially you can do something about it, so...[E7]

We had sometimes found that people have, you know, their interpretation of their experience is that they have physical problems. You know, that they have heart problems, when they don't have a heart problem, they actually have a stress problem, but the symptoms are very similar. They think there have been heart attack because they're palpitating, you know. So, helping people to understand the impact of stress. It's a difficult one for them because they're convinced that their problem is not psychological, it's physical. [E7]

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## Appendix 15. Study 1ab. Conceptual metaphors identified in lay and expert interviews

Table 15.13

*Conceptual metaphors identified in lay and expert interviews*

Source domain	Conceptual metaphor	Sample quote(s)	Other metaphorical expressions
PHYSICAL OBJECT	STRESSED PERSON IS A PHYSICAL OBJECT	I mean the stress can be caused by, uhm, people wanting to <b>take you out</b> of your comfort zone. [P6]	<b>be put/get under stress; edgy, sharp</b>
	STRESS/STRESSOR IS A PHYSICAL OBJECT	I kind of just, it's almost like I just <b>put it in the cupboard</b> , shut the door [...] [P4] [...] not complying with society, and grow vegetables, and <b>removing that stress</b> , but then I'd still find stress somewhere. [P22]	<b>put/get somebody/oneself under stress; bring/put on/take stress out on somebody/oneself, displace, find, leave stress (out) somewhere, take stress on/in/away/out (of life), kept to oneself, hidden inside the person, stress attached to duties or responsibilities, push stress aside, put stress off/aside, give stress to someone, throw stress out, handle stress, stress gets out of hand</b>
	STRESSOR IS A BROKEN OBJECT	I knew it was kind of <b>beyond repair</b> . [P15]	<b>fix a problem, break into smaller pieces</b>
	STRESS IS A POSSESSION	[...] little things that <b>give me</b> a bit of stress. [P8]	<b>have, share, get rid of stress</b>
	STRESS IS A PRODUCT	I think sometimes being unfamiliar is something what <b>creates stress</b> .	<b>generate</b>

	STRESSOR/STRESS IS AN OBSTACLE OR BARRIER	[stressful situation is] like you won a jackpot in a casino, but <b>you can't collect</b> the money. Like <b>there's that barrier and you can't collect it</b> [P13]	stress(or) <b>gets in one's way, blocks</b> someone, <b>stops</b> someone from doing something; a person <b>finds a way around</b> the stressful situation, <b>gets stress(or) out of one's way, overcomes, gets/comes over</b> the situations and stress-related feelings; <b>unsurmountable</b> <b>tool, use</b> stress (to one's own benefit)
PHYSICAL SUBSTANCE	STRESS IS A TOOL	[...] stress can be <b>a useful tool</b> for me because it makes me <b>tie up loose ends</b> [...] [P22]	
	STRESS IS A (HOT) LIQUID	So it kind of, for the people that you care about, you almost <b>absorb some of that stress</b> yourself, because you want them to be OK. [P15] But I think the first <b>wave of stress</b> is... is a feeling [E1]	<b>bottle up, flow/pour out, channel, sweat out</b> stress; <b>source of stress, draw from</b> stress, <b>wallow/stew in</b> stress; <b>feel out of depth</b> (in a stressful situation), jump in (a stressful situation) and <b>sink or swim</b>
	STRESS IS GAS	So I think it just <b>keeps you buoyant almost</b> , uhm, rather than just sitting, which you most probably feel like doing really. [P5]	stress <b>pumps</b> somebody <b>up, keeps</b> somebody <b>up high</b>
	STRESS IS AN UNDEFINED SUBSTANCE	[...[ I'm not going to be able to do anything and I can just like – it's done, I can <b>rub it off</b> . [P10]	<b>hold/keep</b> stress/stress-related feelings <b>in</b> (oneself), stress <b>is within</b> somebody, <b>have stress in one's body</b> ,
PHYSICAL PHENOMENON	STRESS IS HEAT/FIRE	[...] you're just too busy <b>firefighting</b> , trying to fix everything, and kind of... [P21]	chill out, burnout/burnt out, meltdown,
	STRESS IS A NOISE	Which means that they day-to-day stressors become more <b>amplified</b> . [E2]	

PHYSICAL FORCE	STRESS(OR) IS A GENERAL FORCE	<p>[...] they think that's gonna make them feel better, they'll do it. Just to <b>counteract the stress</b>. [P2]</p> <p>I think that our vagal nerve helps us to respond but not break down. Or if you like another metaphor it's <b>a palm tree that bends from the wind</b> and then <b>it stays strong</b> because you need to <b>bend</b>, you need to <b>adjust</b> to the demands of the situations but then <b>bounce back</b>. And it's exactly the palm tree that won't break. [E5]</p>	<b>stress, strain</b> , stressed person is <b>wound, worked, or wrought up</b> , stress <b>makes somebody shaky, forces</b> somebody to make rush decisions, <b>distorts</b> one's ability to cope, <b>drives</b> somebody to do something, <b>impacts</b> on (e.g. health), <b>gives a boost/impetus, perks, churns someone up/ brings out</b> the best of people,
STRESS(OR) IS A WEIGHT/LOAD		<p>[...] they wouldn't <b>have a massive rucksack</b>. I think stressed people <b>have massive rucksacks</b> because they've had to plan for the whole day, and they've had to plan for <b>million and one things and stuffed it into that rucksack</b>, a bit like their brain [laugh], and this old, old person would, I don't know, they just, doesn't matter, <b>take a little handbag</b>, take nothing, doesn't matter, because can go home [...] [P3]</p> <p>It's like, I guess, <b>holding a weight</b> [...] it's like <b>holding a weight</b>, like, in a certain position, and you can't return to the top until, like, it's passed</p>	Stress: <b>workload</b> , having <b>loads of e-mails or jobs</b> to do, information <b>overload</b> , <b>(massive) weight</b> of demands and responsibility, <b>carry</b> (or not being able to carry) <b>a burden or weight</b> , things (demands) <b>piling/mounting up</b> , <b>having too much on oneself/one's shoulders</b> , a <b>massive amount</b> of stress, feel <b>unbearably stressed</b> . things (demands) <b>weigh down on</b> somebody, feel <b>overloaded</b> , being <b>dragged down; tonnes of bricks falling down</b> coping or getting un-stressed: <b>offload</b> things, <b>shrug things off, get something/weight off one's chest, decompress</b> , feeling as if <b>a weight has been lifted; allostatic load</b>

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	and <b>there's like a weight</b> on you [...] having someone to help you through that time can be a big help, and it can, like, <b>relieve that weight from your shoulders.</b> [P10]	
STRESS(OR) IS PUSHING/PULLING	[...] it can be a motivating thing [...] helping me to <b>push on</b> and get the work done. [P17]  Stress is like, yeah, I'm getting an image now, of a <b>rubber band</b> and you <b>pull it</b> , and you know there's a point where... you sort of, in your feelings, in your hands, your muscles in there, you know there's a breaking point. [P7]	<b>push one's energies into doing something</b> , stress <b>pushes people together</b> , stressed person <b>pushes others away</b> , being <b>pulled in different/million direction</b> , <b>strung out, distraught</b> , and <b>stretched too thin</b>
STRESS(OR) IS AN INTERNAL PRESSURE	I guess, it's like... <b>building up inside</b> you kind of thing and then you've got like <b>let it out</b> like, like punching a punching bag or something like that. [P13]	<b>pressure</b> (inside the person) <b>comes/gets out, release, vent</b> stress
STRESS(OR) IS EXTERNAL PRESSURE	So, if I feel really stressed then I feel like a <b>pressure</b> , almost, uhm, <b>a physical pressure over my, my head, chest.</b> [P6]	<b>time pressure</b> , pressure, stress(ors) <b>builds up</b> , stress makes people <b>deflated, drained, exhausted, depressed</b>
STRESS(OR) IS TENSION/TIGHTNESS	It feels, uhm... as if, as if <b>things are constricting, life is constricting</b> to the set of, uh, challenges, or to these, this job, or this expectation on you, or, uhm, <b>life stops being broad</b> , and yes, it is, it's just like a, <b>like a heart attack, you know, when the arteries sort of,</b>	<b>tension, tense, tight, relax; tension</b> in a relationship, <b>relaxing time, things being tight, relaxed atmosphere</b> <b>(re)solve</b> the problem, <b>solution</b>

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		<p><b>you know, they can get tightened, it's like that, everything just gets squeezed down.</b></p> <p>[P19]</p>
	STRESS(OR) IS A DESTRUCTIVE FORCE	<p>"[...] I felt like my <b>world came crushing down</b> [...] family life was just <b>crumbling around me</b> [...]" [P15]</p> <p>So it's quite an interesting thing about how much <b>damage</b> was been done potentially to people [...] [E7]</p>
MOTION	STRESSORS ARE MOVING OBJECTS	<p>[...] it's almost like you're in a layer of wax, and inside that layer you've just got like, oh, I've got to do this, <b>just bouncing around</b>, oh' I've just got to do this, still got to do it, and then something else be then, and that <b>all just be bouncing around inside</b>. [P9]</p>
	STRESSORS ARE OBJECTS WHOSE MOTION HAD BEEN DISTURBED	<p>[...] you <b>don't</b> necessary <b>have everything going smoothly all the way along</b>, and... [P1]</p> <p>Or frustrated, or <b>things aren't going your way</b> wherever you want them to [...] I've had a really bad day', <b>everything's going wrong</b> [...] [P25]</p>
	STRESSED PERSON IS AN OBJECT/PERSON IN MOTION	<p>[...] like <b>in a race</b> where they have big kind of flags and then like the ribbon you run through, it's like a walking towards that, and then <b>you</b></p> <p>flip the lid, blow the top of head off, breaking point, damage (e.g. health, relationships), makes people fall apart, ruin performance, bring things down, undermine confidence, erode resilience, wear somebody out, make feel torn, devastated, frazzled, make someone go in pieces, break somebody down, devastating effects, collapse</p> <p>things (stressors/demands) going on, going (a)round, coming from all over about/different angles, coming in, popping up</p> <p>stress: things go badly or wrong, not one's way/ not where somebody wants them</p> <p>no/low stress: things move smoothly, nicely, normally, at a nice pace</p> <p>stress: agitated, fidgety, jittery, not able to sit down/ sit still, go quickly through things, make things faster. thoughts run, race, gallop, churn, go on and</p>

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	<p><b>pick up the pace</b> but it's still far away, and you can see it but it's so far away, and the like someone flicks on a little time race 'oh, you've got ten minutes to get there', and it's like 'oh my god, I wouldn't get there in ten minutes'. [P3]</p> <p>"[deep breath and relax] it's probably to <b>slowing down</b> the metabolism of your body, really, because when you're stressed <b>you're going at nineteen to a dozen</b> [...] you're <b>running to keep up</b> [...]" [P6]</p>	<p><b>around one's head, mind or psyche; butterflies in one's stomach</b>, stomach <b>swirls</b> or <b>churn</b></p> <p>no/low stress: <b>quiet, calmness, stillness of things around</b>, relaxed person is <b>calm, laid-back, moving slowly, sitting quietly, goes with the flow, sails through, floats about/float in nirvana</b></p>
STRESS IS RESTRICTED/IMPEDED	"[...] you just <b>get into that, sort of narrow line</b> almost, you're just <b>travelling down</b> . [P5]	crawl through/ <b>fight with brambles, push and plough through, plod/plough on, spiral of decline</b>
MOTION	"[...] it's the feeling like <b>they can't go on</b> [...]" [P16]	get <b>wooden, petrified, numb</b>
COPING IS MOTION (FORWARD, BACKWARD, AWAY)	"I just <b>went through it</b> , really, and when I <b>get to the other side</b> and I said what a bloody idiot I am, really, and that, that was it really [...]" [P19]	walk/run with it, move/walk away, or withdraw, <b>take a step back, steps to take, give oneself stepping stones</b> to meet a particular demand, <b>move on/forward, upset, support, unsettling, shaky, not steady on one's feet, overwhelmed, (re)gain/maintain fine, nice, or happy balance, not going to the extremes, getting a perfect amount / an optimum level of stress balance/ juggle</b> (tasks and responsibilities),
IMBALANCE	"[...] it's just <b>balancing everything at the same time</b> , going to work, doing your work well, helping and supporting people, then you get back home, pick up the kids, their dinner, it's constant, constant, constant [...]" [P14]	

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		<p>"I've got some really, some very good hobbies, and things like that that I enjoy doing, so, uhm, they, so it will <b>balance it up</b>, I think." [P24]</p> <p>"[...] if you're stressed and you're really having a bad time that can just <b>tip you completely</b>" [P25].</p>	<b>deviation from homeostasis</b> , stress takes someone <b>out of the equilibrium</b>
PLACE/CONTAINER	STRESS(OR) IS A	[...] if you'd seen me 12 months ago you'd have seen <b>quite a grim place</b> it were and then I had some 4 or 5 months of some support from work and <b>got to better place</b> . [P1]	<b>be/get in, put</b> somebody <b>in</b> a stressful position, environment, situation; <b>be/end up in stress, put/throw</b> oneself <b>in</b> stress, <b>be in the middle of</b> stress, sad place, dark place, weird zone  <b>be talked/helped out</b> of stress, <b>get (mentally) out of a situation, go/get/come through</b> stress/a stressful situation, <b>work one's way through</b> a stressful situation, <b>be coached or helped through</b> stressful time, <b>get out of/ remove</b> oneself from stress
PLACE/CONTAINER (related to MOTION)			<b>open up</b> and talk to somebody, <b>talk stress out of</b> somebody body depicted as a container for stress and stress-related feelings which need to <b>get/come out, be let out, released</b>
STRESSED PERSON'S HEAD/BODY IS A CONTAINER (related to FORCE/INTERNAL PRESSURE)			

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LACK ORDER/CLUTTERED SPACE	OF ORDER/CLUTTERED SPACE	STRESS IS LACK OF  STRESSED PERSON'S BODY/HEAD IS CLUTTERED SPACE	<p>Yeah, or just like all of it, a <b>build-up of things</b>. [P13]</p> <p>"[...] you sort of <b>cleared the gap of all the bits</b> [...] you've got <b>space to do the next bit</b> but there are always <b>little things there popping up</b> [...] [P21]</p> <p>[...] I could really feel like I was having a dialogue with, with a sort of real sense of who I was, <b>underneath all of the garbage</b> that see it happened for years and back home, and stuff so... [P26]</p> <p>"I find if I do start getting stressed then I can feel the whole body, my internal is <b>getting mixed up</b> in a way." [P5]</p> <p>[...] like behind a desk or something, you've got <b>all these wires going to different plugs and stuff, and sometimes you have to look for where the wire's going, where it's gonna end up?</b> I feel like that's my head, if I've got lot, a lot <b>going on</b>, if I'm stressed, whereas I'd prefer if <b>all the wires I could individually see</b> where they're going then it wouldn't look <b>so messy...</b> [P4]</p>	<p>stress: <b>have lots of demands/a lot on one's plate</b>, <b>busy situations, things not aligning, building/mounting/ piling up, mess things up</b>, everything being <b>all over the place</b></p> <p>no/low stress: things are <b>straightforward/ falling into place</b>.</p> <p>coping with stress: <b>get things right/straight, put things in order, get one's ducks in a row, clear matters up, clear one's workload, unpick problems, sort things/problems out, sort through stress</b></p> <p>feel knotted, having things <b>at the back of one's mind</b>, have <b>a full head</b>, thoughts moving in one's head: <b>bouncing, running, racing</b>  <b>clear up one's head, rejig thoughts, sort things out</b> in one's head, have <b>freedom in one's head</b></p>
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	STRESS IS LACK OF CLARITY	[...] when I feel stressed I feel like, you know, when you're feel <b>you can't see your brain, your thoughts, it's all so fuzzy you can't see anything</b> [P14]	feel <b>confused, brain confusion, foggy</b> thoughts, have a <b>cloud in one's head</b> , be <b>fuzzy in the head, not be able think straight/ clearly,</b>
RESTRICTION/ CONFINEMENT	STRESS IS ENTRAPMENT/ RESTRICTED MOTION	<p>Uh... I guess it's a bit like <b>quicksand</b>, because you're sort of <b>trying to keep on the top of it, but you're sinking a bit.</b> [P8]</p> <p>[...] there's almost like there's a layer around you, where, and there's kind of things which you have to do are constantly bouncing around that layer. [P9]</p> <p>Uhm, I suppose, being stressed is a bit like being in... one of those like medical, you know, the... [showing with hands being strapped to a chair] when <b>they tie you up</b>, and, uh... when you're kind of <b>incarcerated</b>, when you in one of those, it's a bit like that, I suppose. Uhm... you know, just <b>trapped, kind of trapped inside of yourself</b>, maybe. [P26]</p> <p>So it's just a, like <b>a freedom to do whatever</b>, and that's what gives a good feeling. [P2]</p>	<p>stress: feeling <b>stuck</b>, as if <b>in a traffic jam, wrapped up to top, trapped, unable to do anything, constrained</b>, be <b>unable to get anywhere/out of stress, try to get out of stress, escape</b>, find/figure out <b>a way out, bail out</b>, be <b>winded in the sea, time limits/ constraints/ confines/ restraints/ restrictions, shut oneself away, "no door that you can open", vicious circle, downward spiral, get bogged down, be stranded, be in somebody else's hands, point of no return, falling down the hole</b></p> <p>no/low stress: <b>freedom, have space to oneself, have headroom</b></p>

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		[...] it's as if someone had <b>cut open the back of the thing you were trapped in</b> , and you were just <b>able to take off and walk away</b> .
	STRESS IS RESTRICTED VISION	"Sometimes I feel like there's a <b>border around everything I see</b> , so like there's a thick, uhm, yeah, a <b>border kind of enclosing in everything that I envision in my head</b> . [...] it's like the <b>window from which I can see everything in my head get smaller and smaller</b> the more stress that I get." [P3]  You <b>can't see this far</b> [showing with hands small space] [...] <b>I can't see beyond my nose</b> when I'm stressed, the <b>clouds come down</b> , uhm... and I cannot focus. [P18]
MAGNIFYING GLASS	STRESS IS A MAGNIFYING GLASS	Uhm... she seems to <b>make a big deal out of the little things</b> , and worries about them a lot, uhm... [P2]  "[...] they're like <b>being... very tiny...</b> as unable to, you know, very weak and vulnerable, and powerless but needing to get things done, it's... just like not, <b>not being able to reach things on the shelves</b> [...]" [P21]
ILLNESS/PAIN AND INSANITY	STRESS IS ILLNESS/PAIN	I was literally the <b>walking version of a headache</b> [laugh] for everyone else
		go <b>blindly</b> into a situation, <b>inability to see well/forward</b> (to a solution), <b>inability to see a way out</b> , <b>what is happening</b> , <b>the end of stress</b> , having someone's <b>hands over one's face</b> , <b>tunnel vision</b> , go <b>into a cone</b> and be <b>unable to see anything</b> , sense of <b>anxiety multiplied</b>
		<b>cannot see a bigger picture</b> , things are <b>blown out of proportion</b> , <b>every tiny detail is significant</b> , stress turns things <b>into something bigger</b> , makes it <b>seem horrendous</b> , <b>ten times worse than</b> it really is, <b>everything becomes too much</b> , <b>small things grow up in one's head</b>
		suffer from, mitigate, alleviate, relieve, recover from stress, acute, chronic stress, debilitating,

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		<p>"I'm being reduced slowly down. It's like a waste, <b>wasting away disease.</b>" [P23]</p> <p>[...] stress <b>inoculation</b> theory [...] What we really need is a small amount of stress in throughout our lives to <b>inoculate us against it.</b> [E3]</p>	<b>detrimental, painful implications. be prone, susceptible, vulnerable to stress, (self-)inflicted, cure stress, pass</b> stress from one person to another, the <b>worst hangover</b> in the world, <b>recuperate</b> from stress, stress <b>symptoms</b>
STRESS IS INSANITY		<p>So you just jump into that, straight into that <b>manic mode</b>, almost, when, when you're, when you feel stressed, then you're almost <b>gone manic</b>, uhm, without going to a stage, perhaps, of actually trying to think about it first. [P5]</p>	be <b>frantic/frenetic</b> , go <b>mad/berserk</b> , <b>manic-panic mode</b> , be <b>hysterical</b> from stress, <b>feel like going crazy, anxiety coming crazy</b> , be <b>super-crazy</b>
WAR/FIGHT	STRESS(OR) IS AN ENEMY/INVADER	<p>"Stress is like someone having their hands over your face, no! Someone having their hands over you heart and scrunching it down." [P14]</p> <p>[...] if there was an exit, and I had to try and get to that exit, and no matter how much I tried to get there, I could never get there. And if there's <b>someone chasing me at the same time</b> – that would be the most stressful thing. So if it felt like <b>they're always just about to catch me</b>, and it felt like I was always just about to get to the exit, that for me would be incredibly stressful [laugh] [P23]</p>	<b>cope with stress, challenge, be faced with, struggle, everything is against somebody, interfere, take over, get on top of/control somebody, take stress(or) on the chin, try to keep on top of stress(or), stand firm, become defensive, give up, give somebody kick up the backside, hinder somebody, hurt relationships, bring something/somebody down, be overpowering, insidious, get on the cornerstone, invade everything, get poleaxed, get inside the body, impair, kill</b>

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	STRESS IS A WAR/FIGHT	[...] stressful situation would be like, uh... being pinned to dart, or to <b>having like darts thrown at you</b> , that you're just trying to dodge and juggle, you know to get out of the way them and sort of stay, <b>survive</b> [laugh] [...] Yeah, sort of that, the fact that <b>it's just firing at you</b> the, you're trying your best to, sort of, not get, let them get you down [P15]  “Uhm, I’m just thinking about <b>two little men in my brain and like a fight</b> [...] trying let the kind of calm and rational bit, uhm, dictate what I’m doing rather than the anxious, crazy bit, yeah.” [P17]	being <b>fired at from all angles, strive, deadlines, fight, coping strategies, mobilise resources</b> , have things in <b>one’s armoury</b> to <b>defend oneself, withdraw from the battlefield, pick one’s battles</b>
LIVING BEING	STRESS(OR) IS AN ANIMAL/PLANT	The way we manage things, and <b>manage stress</b> is definitely individual [P4]	stress(or) <b>comes up/ along, goes away, jumps up, creeps in/upon somebody, eats away, tackle/manage stress, take the bull by the horns, nip it in a bud, stress grows on somebody snap at somebody, snappy, unable to manage oneself</b>
	STRESSED PERSON IS AN ANIMAL	[...] if you don’t <b>I’m just gonna bite your head off</b> , like you need, you need to stay away from me. [P3]	
	STRESSED PERSON’S THOUGHTS/MIND ARE LIVING BEINGS	[...] mind just gently <b>wander and ramble about</b> at times, when it’s stressed there’s, there’s just <b>like a load of horses galloping around in it...</b> [P21]	<b>run, chase, gallop, racing, play on one’s head, niggle, clamour</b>

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MACHINE	STRESSED PERSON IS A MACHINE	[...] an appearance of calm but there's something driving it, is, that feels sort of, again, sort of <b>engine running underneath</b> , yeah, but you don't want people see that <b>engine</b> , so it's... [P21] [...] I'd have to sleep, just to get away from it and the it gives your body like <b>a period of readjustment.</b> [P22] People with, with high levels of cortisol who are very stressed, people whose, whose kind of <b>system</b> is, <b>has reset</b> , and they've got very low level of cortisol [...] [E4]	biological/coping <b>mechanism, system</b> , manic-panic, fight and <b>auto-pilot mode, triggers switch off, shut down, reset</b> , turn off and on again, <b>take a downtime</b>
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## Appendix 16. Workshop W0 – LEGO® models

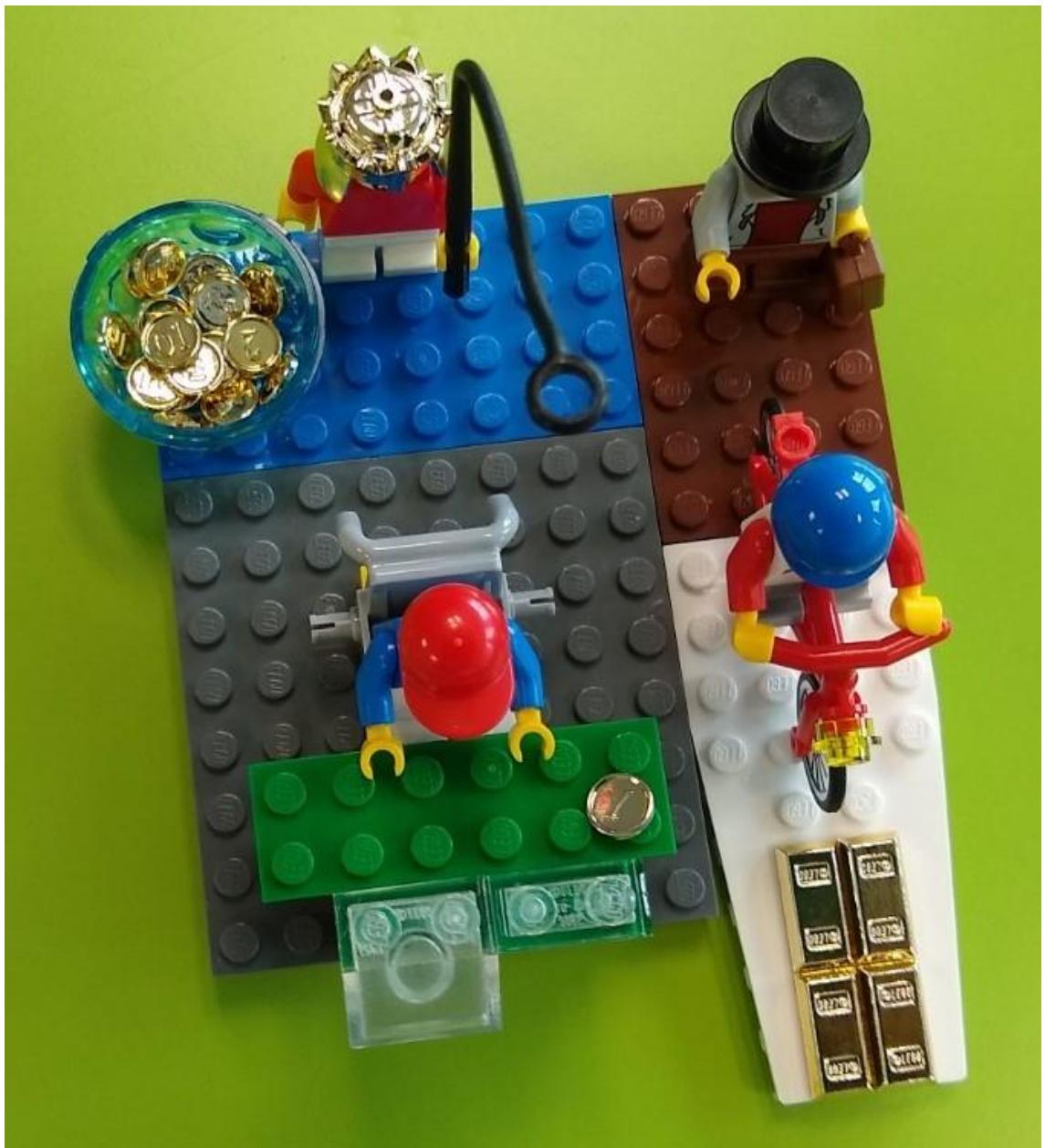
Table 16.14

Model W0P1 "Whipping dude" - notes

Aspect	Description
Focus	stressors/demands, effects
Short description	small/compact model with four figurines representing more and less successful people and power relations, money-related inequality
Key features	overbearing mentor-skeleton with a crown and a whip; wheelchair without wheels, seated (confined) person; successful, ultra-confident, ultra-good 'gentlemen' in a bowler hat; a person riding a bike towards gold - at first meant as a representation of a relaxed person who have time for things other than work (exercise) but interesting co-creation of new meaning 'fast-track' and 'stationed' stressed person
Metaphors	STRESS IS ENTRAPMENT/RESTRICTED MOTION (being seated at the desk); A STRESSOR IS AN ENEMY (person with a whip); COPING WITH STRESS/SUCCESS IS MOTION (moving toward gold); STRESS IS PRESSURE (verbal – "then you've got the pressure from behind")
Colours/size/shape, special elements, symbols	skeleton head of an overbearing mentor (threat?); crown for success/power, whip for power (and threat?), bowler hat for success; pot of gold for success/money
Other comments	Transparent blocks in front of the student (confined at the work station) - invisible barrier? Cyclist is smiling and has a helmet - happy and safe?

**Photo 16.1**

*Model W0P1 “Whipping dude”*



**Photo 16.2**

*Model W0P1 “Whipping dude”*



**Table 16.15***Model WOP2 "Trying to take back control" - notes*

Aspect	Description
Focus	experience and response (feelings, coping)
Short description	A big and complex model with a relatively small base and a combination of long, thin elements, only partially on the table, two figurines linked together: one on the left, hanging over the precipice and one in the central part of the model standing on a firmer, more stable bit but not entirely safe and well-balanced. On the right, linked to the person in the middle there is a column with blue ball and a ladder leading to the table surface.
Key features	a hanging figurine with a skeleton head representing emotions/emotional part of a person which is out of control, hopeless and helpless; figurine in the centre has a better base and better outlook (higher position) represents the part of a person that tries to regain control, is more logical (rational) and so can rescue the emotional bit by pulling them up from the precipice; blue ball of hope with a ladder - a way through hope to safety; long, thin elements depict the mind-map from the first part of the workshop where participants discussed various demands and stress-related feelings; parts of the model more flimsy (tubes, sticks), and parts more stable represent life in which one can have good and bad days, demands and supporting networks
Metaphors	STRESS IS ENTRAPMENT/RESTRICTED MOTION, STRESS IS LACK OF BALANCE (hanging over precipice, likely to fall down); LOGIC AND REASON (AS OPPOSED TO STRESS) IS STABILITY/BALANCE (higher position, safety); COPING IS MOTION (moving to safety)
Colours/size/shape, special elements, symbols	skeleton head of the hanging figurine - despair, negative feelings of hopelessness, and helplessness; thin, long elements to make the model 'flimsy' – precariousness of the whole structure; blue ball representing hope because of its nice colour and prettiness;
Other comments	high position of the person in the middle gives them advantage of a better perspective on the situation (look-out) but does not seem very safe (perhaps not intentionally but coping with a situation described as moving on to the stability of the table)

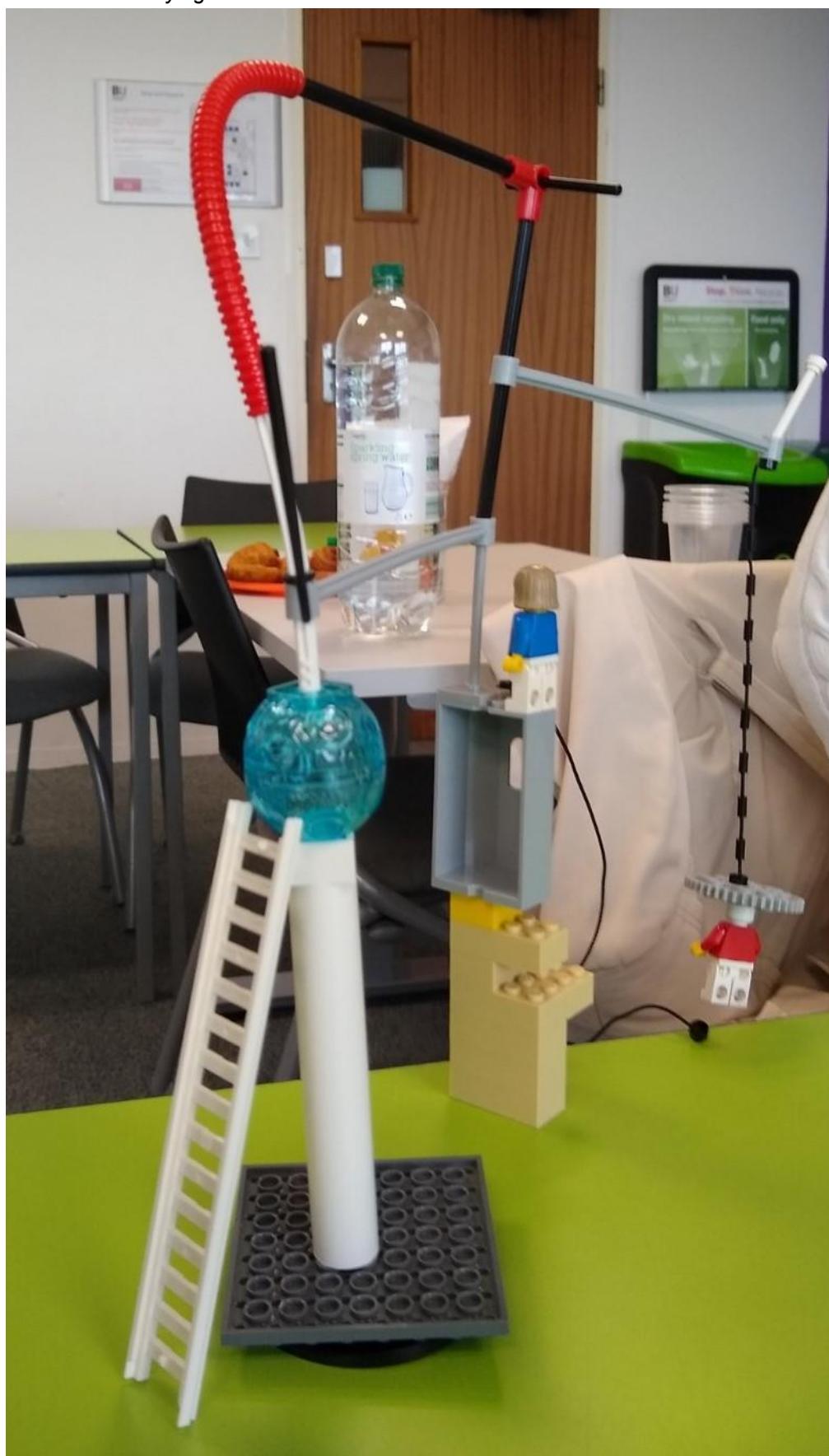
**Photo 16.3**

*Model WOP2 “Trying to take back control”*



**Photo 16.4**

*Model WOP2 “Trying to take back control”*



**Table 16.16***Model WOP3 "Cyclical nature of stress" - notes*

Aspect	Description
Focus	experience and response (feelings, coping)
Short description	a relatively sturdy model but with a thin and tall base which makes it precarious (highlighted often by the participant); a kind of balance with a circular structure in the middle and a figurine at each side
Key features	the whole model is a scale; having some demands may lead either to a more 'normal' person on one side representing motivation or a skeleton on the other side representing procrastination; the circular structure represents the cyclical nature of stress but also shows (the top element) how the whole model is precariously hold together and easy to destroy; balancing between productivity and procrastination but unstable structure means that it is easy to knock it down and then it needs to be built up from scratch which is difficult
Metaphors	STRESS IS A LACK OF BALANCE (model of a scale, balancing between procrastination and productivity, instability, precariousness of the whole model); COPING IS MOTION (moving from one side of the scale to another between procrastination to productivity as a way of dealing with demands)
Colours/size/shape, special elements, symbols	a bit cluttered in the middle and chaotic in terms of colours (but not necessarily intentionally) - possibly representing the amount of issues/demands, skeleton at one side on the balance and normal person on the other
Other comments	none

**Photo 16.5**

*Model W0P3 “Cyclical nature of stress”*



**Photo 16.6**

*Model WOP3 “Cyclical nature of stress”*



## Appendix 17. Workshop W1 – LEGO® models

Table 17.17

Model W1P1 "Trapped under a tonne of rubble" - notes

Aspect	Description
Focus	experience and response (feelings, coping)
Short description	a big, random pile of LEGO blocks brought together with a figurine among the blocks tied up and with a skeleton head on their own head
Key features	lots of different blocks heaped together creating the sense of chaos and overload; an overwhelmed person 'trapped under a tonne of rubble' additionally constricted with a cord around them; a skeleton head above the 'normal' head representing negative thoughts, depressive and possibly suicidal as a result of excessive stress
Metaphors	STRESS IS ENTRAPMENT/RESTRICTED MOTION (being tied and trapped under the rubble); STRESS IS A CLUTTERED SPACE and STRESS IS LACK OF ORDER (pile of blocks put loosely together, rubble); STRESS IS A PHYSICAL (DESTRUCTIVE) FORCE/(OVER)LOAD (blocks crushing a person); STRESS IS A WAR/FIGHT (verbal: trying to fight one's way out of the rubble);
Colours/size/shape, special elements, symbols	random mix of blocks of different colours, shapes and sizes to represent chaos; skeleton head as a symbol of negativity (negative/suicidal thoughts and effects of stress)
Other comments	very negative picture of stress; verbal references to FIGHT metaphor highlighting difficulties in dealing with stress

**Photo 17.7**

*Model W1P1 “Trapped under a tonne of rubble”*



**Photo 17.8**

*Model W1P1 “Trapped under a tonne of rubble”*

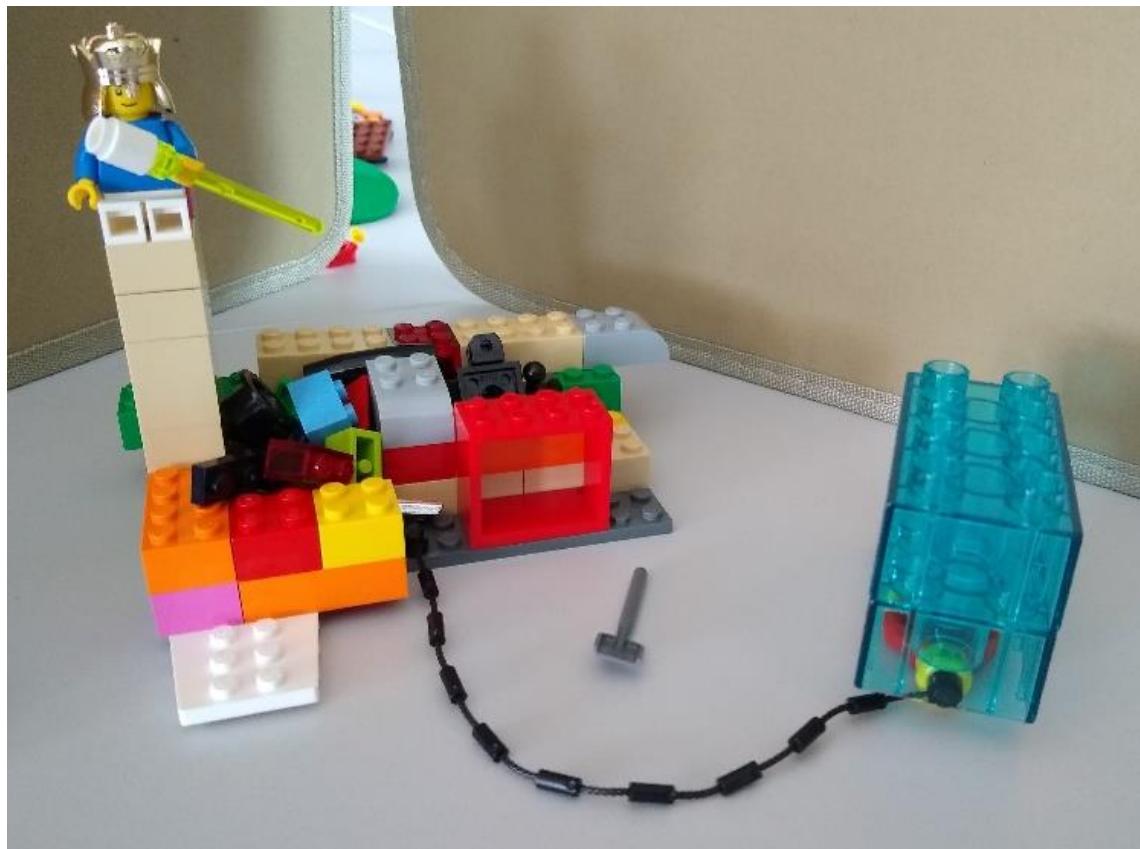


**Table 17.18***Model W1P2 "Squashed person and happy king" - notes*

Aspect	Description
Focus	experience and response (feelings, coping)
Short description	relatively small, non-symmetrical model with three distinctive but interrelated parts: a crushed person, a set of chaotic blocks mixed together and a happy 'king' looking at it from above, scattered blocks representing resources and nice things
Key features	a relatively big part of the model was space cluttered with objects piled together and a blocked window; this is linked to a person (with unhappy face) crushed under a big transparent block; tools (a ladder and a shovel) and money out of reach of the crushed person – resources to deal with stress identifiable (?) but inaccessible; a smiling person with a crown and a sceptre sitting on a column, above the cluttered space of stress and able to see a small composition of 'nice things' representing a non-stressed person
Metaphors	STRESS IS A CLUTTERED SPACE and STRESS IS LACK OF ORDER (a number of blocks in disarray, just piled together); STRESS IS A PHYSICAL (DESTRUCTIVE) FORCE/(OVER)LOAD (a block pressing on/crushing a person); STRESS IS ENTRAPMENT/RESTRICTED MOTION (blocked window, being chained and crushed under the block with tools/resources out of reach); NO/LOW STRESS IS UP (sitting above the stress)
Colours/size/shape, special elements, symbols	mix of rather jarring colours reinforcing the idea of chaos (possibly unintentional); transparent block as 'invisible' trap as the crushed person can see their ideal (happy person) and the resources but cannot reach them; a flower, a bush, a blue semi-sphere as 'nice things' – positive things in life?; a crown and a sceptre as symbols of happiness and well-being (no stress);
Other comments	LEGO tools (literal) as tools and resources which can be used to deal with demands; the happy person sitting on a relatively thin column which gives them better perspective and ability to "benefit from nice things" but might not be particularly stable - only temporarily safe and happy?; similar in metaphors to W1P1 but a bit different - stressed person not located among the rubble but also crushed, their life seems to need decluttering as well, however, positive elements included, so the general picture less negative than W1P1

**Photo 17.9**

*Model W1P2 “Squashed person and happy king”*



**Photo 17.10**

*Model W0P2 “Squashed person and happy king”*



**Table 17.19***Model W1P3 "Girl on a tower" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (coping)
Short description	relatively small/compact model with a person on a high column, a ladder leading down, and scattered LEGO blocks at the bottom
Key features	a figurine representing the participant sitting on a column - a safe place above the stress; the surface below covered with wheels, cogs, a wheelchair without wheels, and other 'mechanically-looking' bits representing car parts (as the participant's current stress was related to fixing her car); pink elements as a counterbalance for unpleasantness of stress and a reminder of that it will be nice when the stressful situation has been dealt with
Metaphors	STRESS IS A CLUTTERED SPACE and STRESS IS A LACK OF ORDER/CHAOS (not only things that need to be organised and managed but also the fact that the body under stress is 'is just not quite working cos everything's a bit disorganised'; NO/LOW STRESS (SAFETY) IS UP; COPING IS MOTION (getting down the ladder to deal with the situation, controlled motion as opposed to 'jumping/leaping into a stressful situation)
Colours/size/shape, special elements, symbols	pink (participant's favourite colour) flowers counterbalancing negativity of stress; demands represented mostly with dull, dark colours (grey, black, brown though this might have been unintentional - shape (car-related) more important than colour (but the base also quite dark))
Other comments	interestingly, the participants talked about a leap down to start dealing with stress even though the figurine had no legs (which may suggest some immobility at the thought of the stressful situation), also there was a ladder which provided a less 'drastic' method of coping; just like with other models where a figurine was placed on a high column but with relatively small space, the figurine's position may suggest only temporary safety; also, from this high position (which at times offers a better view/bigger picture) the stressful situation may seem worse than it is (as the participant commented that when she started dealing with something, she realised that it is not as bad as she thought and she actually liked it)

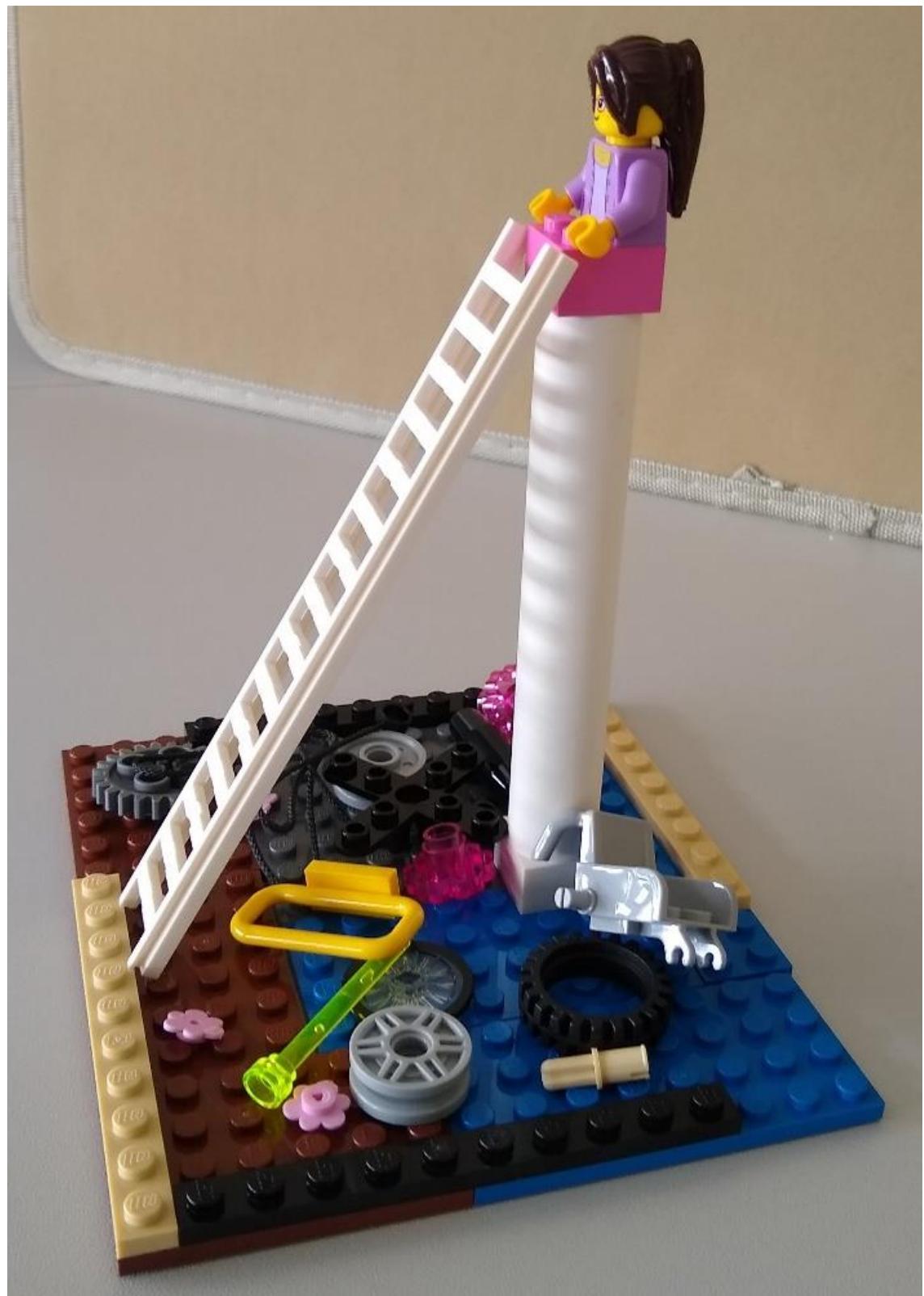
**Photo 17.11**

*Model W1P3 "Girl on a tower"*



**Photo 17.12**

*Model W1P3 "Girl on a tower"*



## Appendix 18. Workshop W2 – LEGO® models

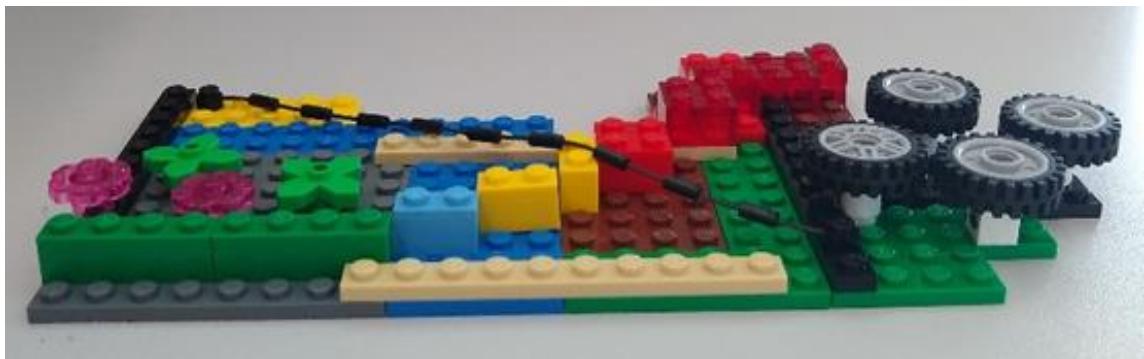
**Table 18.20**

*Model W2P1 “Demands-resources imbalance graph” - notes*

Aspect	Description
Focus	stressors/demands, resources
Short description	a two-dimensional representation (like a graph) of balancing demands and ability to cope, illustrating how demands can change over time and finally exceed the ability to cope
Key features	left side of the model representing nice (non-stressful) situation through relaxing/subdued colours (blue, green, grey) with green and pink flowers; a line showing how the ability to cope diminishes while demands - illustrated with changing colours from light blue to yellow to red - increase; a point in the middle where demands and ability to cope are balanced; red blocks and four wheels as a reference to a specific phrase 'having one's wheels off' depicting highly stressful situation
Metaphors	STRESS IS A LACK OF BALANCE (between demands and the ability to cope); STRESS IS ENTRAPMENT/RESTRICTED MOTION/IMMOBILITY (“fallen off wheels”);
Colours/size/shape, special elements, symbols	green and blue plates as more positive, along with green and pink flowers; red blocks used to represent stress associated with physical/physiological symptoms and exacerbation of the chronic condition; wheels that have 'fallen off'; bits of greyness but not necessarily with negative connotations
Other comments	as the participant talked about holiday, the blue and yellow plates remind of the seaside; clear reference to Lazarus & Folkman transactional theory of stress (demands exceeding resources);

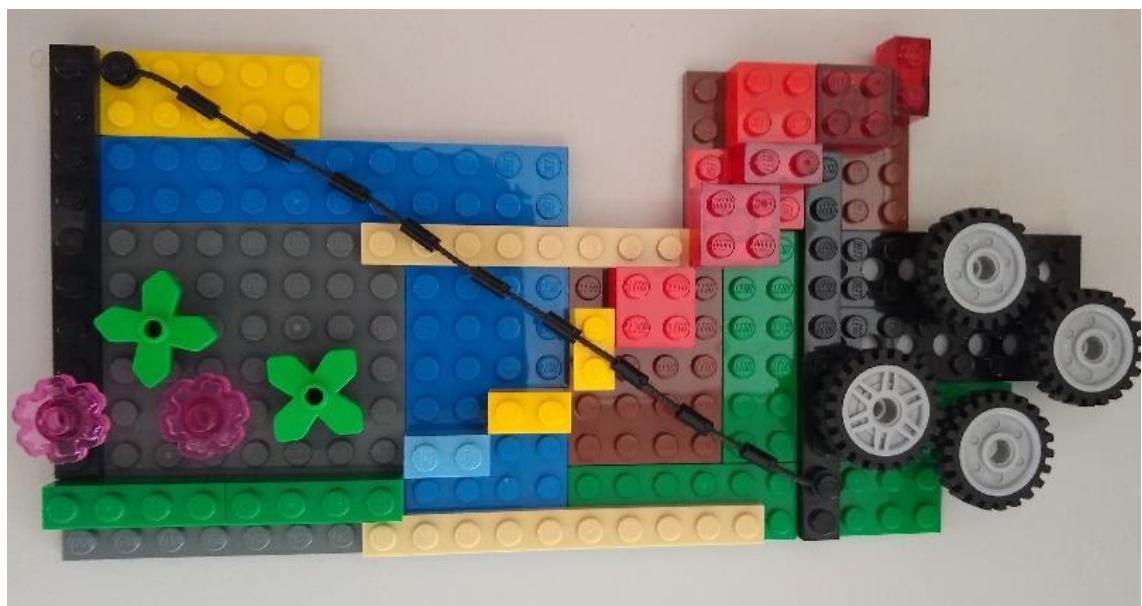
**Photo 18.13**

*Model W2P1 “Demands-resources imbalance graph”*



**Photo 18.14**

*Model W2P1 “Demands-resources imbalance graph”*

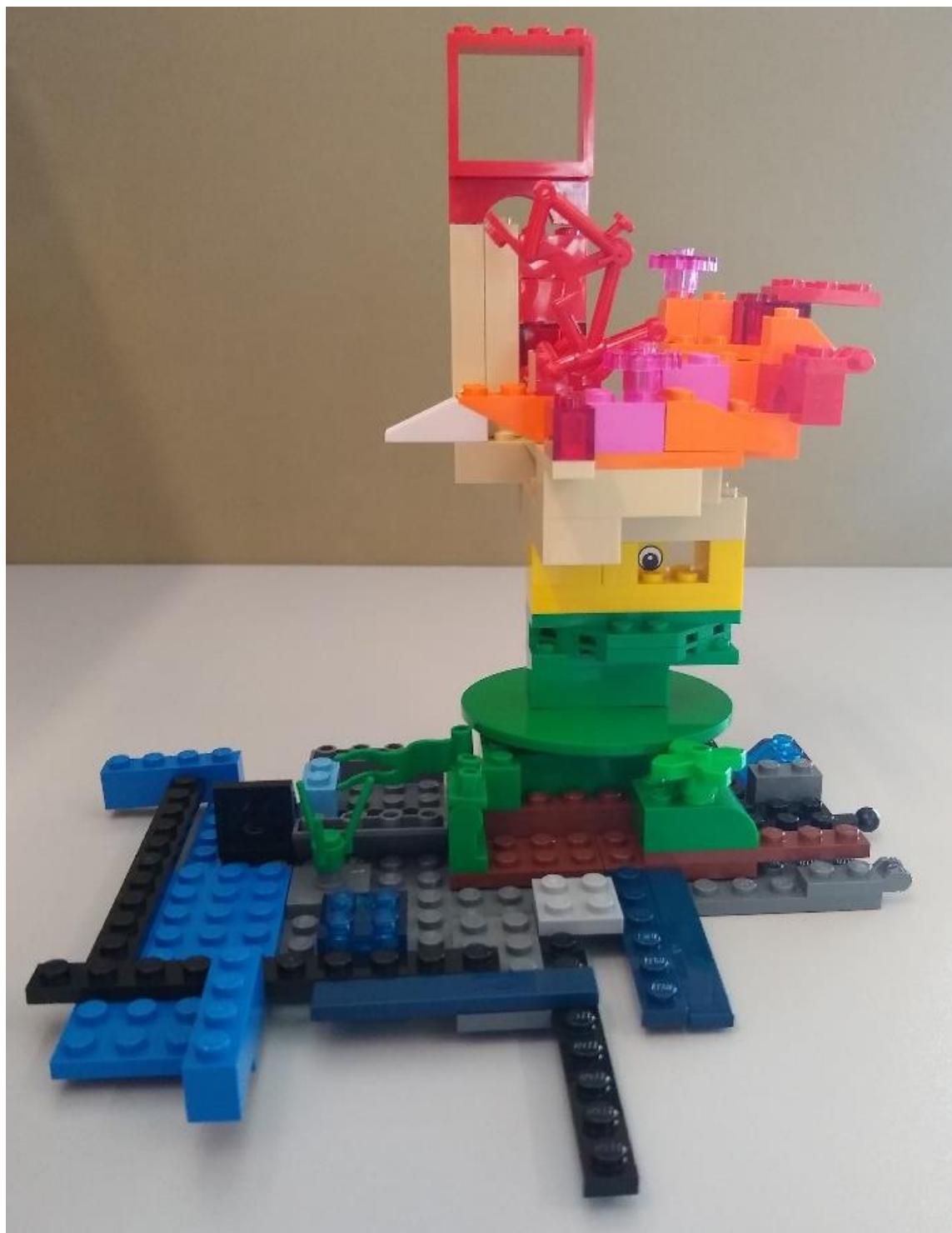


**Table 18.21***Model W2P2 "Colourful tower" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (coping)
Short description	an abstract tower-like structure using colours to depict demands spreading and building up
Key features	a flat base built with more subdued colours (grey, blue, black, brown) representing a situation with low demands and low/positive stress; a tower constructed with more jarring colours, green at the bottom followed by cream and yellow, then orange to pink and red blocks showing how stress increases and turns into negative
Metaphors	STRESS IS CLUTTERED SPACE and STRESS IS A LACK OF ORDER/CHAOS (chaotic structure, overgrown garden), STRESS IS A LACK OF BALANCE (precariousness, overload/physical objects building up at risk of collapsing)
Colours/size/shape, special elements, symbols	grey, blue, black, brown and green colours as more 'relaxed', calm colours – black and grey not necessarily bad; yellow/cream, orange, pink and red as more stressful, red particularly associated with anger and discomfort, as well as physiological changes (blushing)
Other comments	stress can be positive to a certain extent (as long as the demands are manageable); the model looks quite precarious and chaotic, unstable (even though the participant did not talk about it explicitly, but it was picked up by another participant) – lots of blocks at the top, less at the bottom (not very good basis), unbalanced/not well-organised structure which gives an impression of instability and is likely to collapse

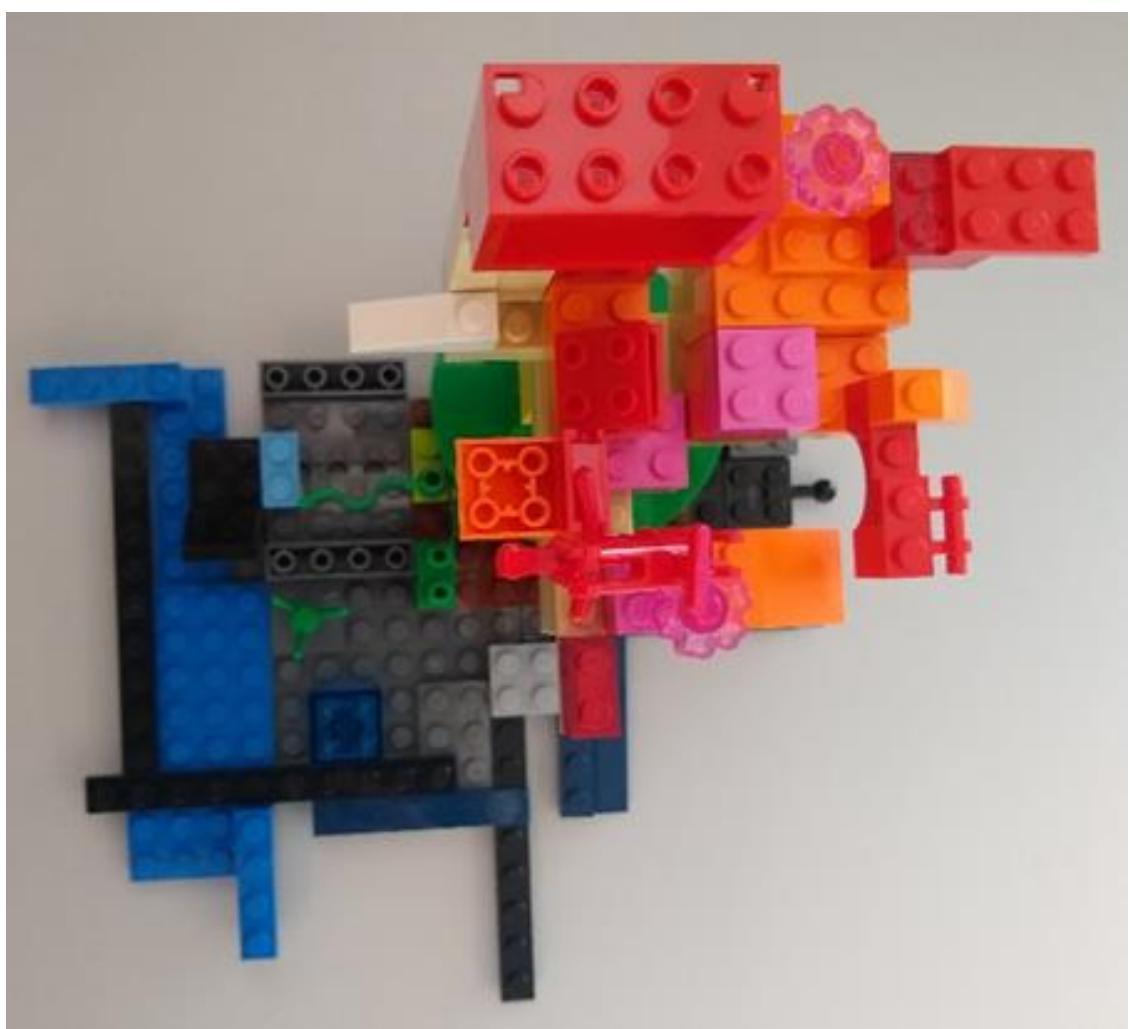
**Photo 18.15**

*Model W2P2 "Colourful tower"*



**Photo 18.16**

*Model W2P2 "Colourful tower"*

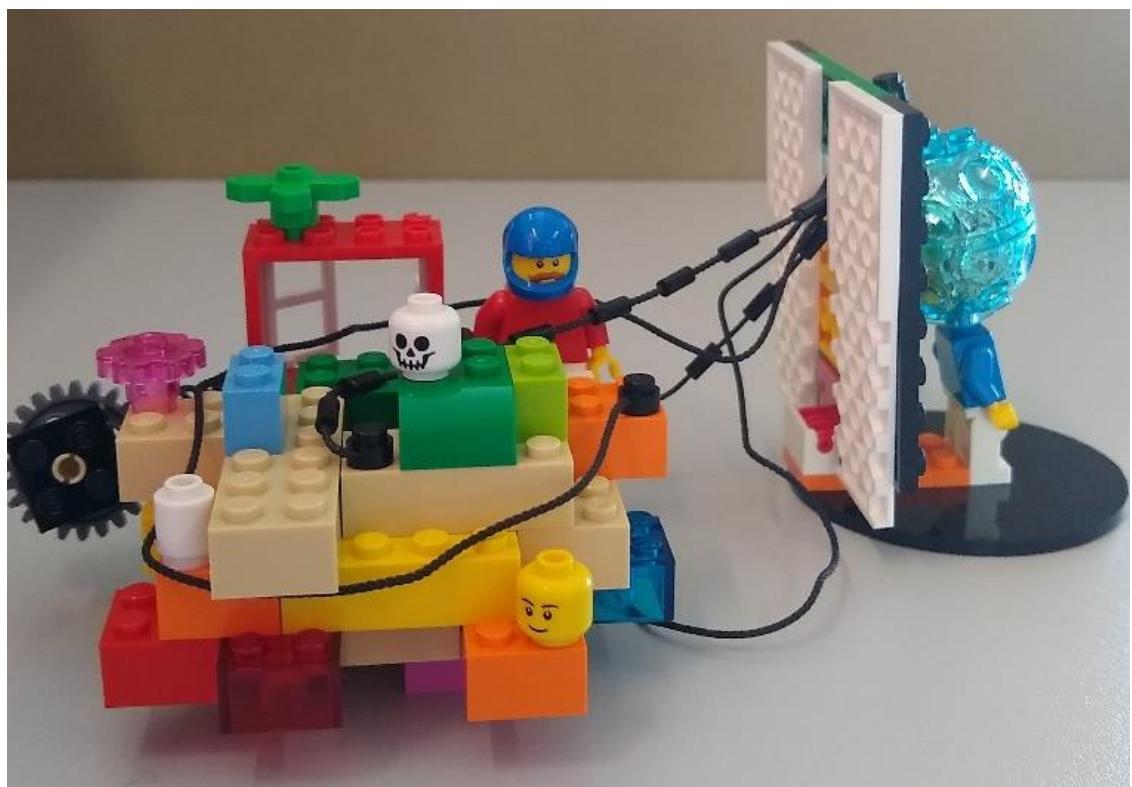


**Table 18.22***Model W2P3 "Hidden behind the façade" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	a small, quite compact model depicting a person tied with several strings to a 'clump' of stressors/demands behind a façade
Key features	a figurine (representing the participant?) with a blue ball filled with money/gold instead of a normal head, a wall between the figurine and a chaotic structure with layers of bricks representing various demands ("a clump of stress") which is linked to the figurine with a number of strings going through a small hole in the façade; this messy structure is holding the figurine back, restricts their movement
Metaphors	STRESS IS CLUTTERED SPACE and STRESS IS A LACK OF ORDER/CHAOS ("clump of stress"); STRESS IS ENTRAPMENT/RESTRICTED MOVEMENT (being tied to, held back and slowed down by the 'clump of stress') STRESS IS A PHYSICAL FORCE (PULLING) (being pulled back the "clump of stress");
Colours/size/shape, special elements, symbols	mix of colours and shapes reinforcing the idea of chaos and overload; skeleton head representing overthinking and health deterioration; flower representing home-related demands, cog representing work-related demands, heads as symbol of possibly stressful relationships; blue ball filled with money instead of the figurine's head representing things that the person cares about
Other comments	the demands behind the facade are linked (and pulling) the figurine's head suggesting inability to detach mentally from stress(ors) and possibly draining mental resources; this model prompted a discussion on individual differences about how people may have different things to which they are tied and which can possibly block/hinder them, and for some there might be only one brick/one demand or stressful issue that can block them, while others can have a set of stressors; also the same things might be appraised differently; an important element of the façade and people not realising that someone who is seemingly fine might have a 'clump of stress' behind (might be linked to seeing stress as a personal weakness)

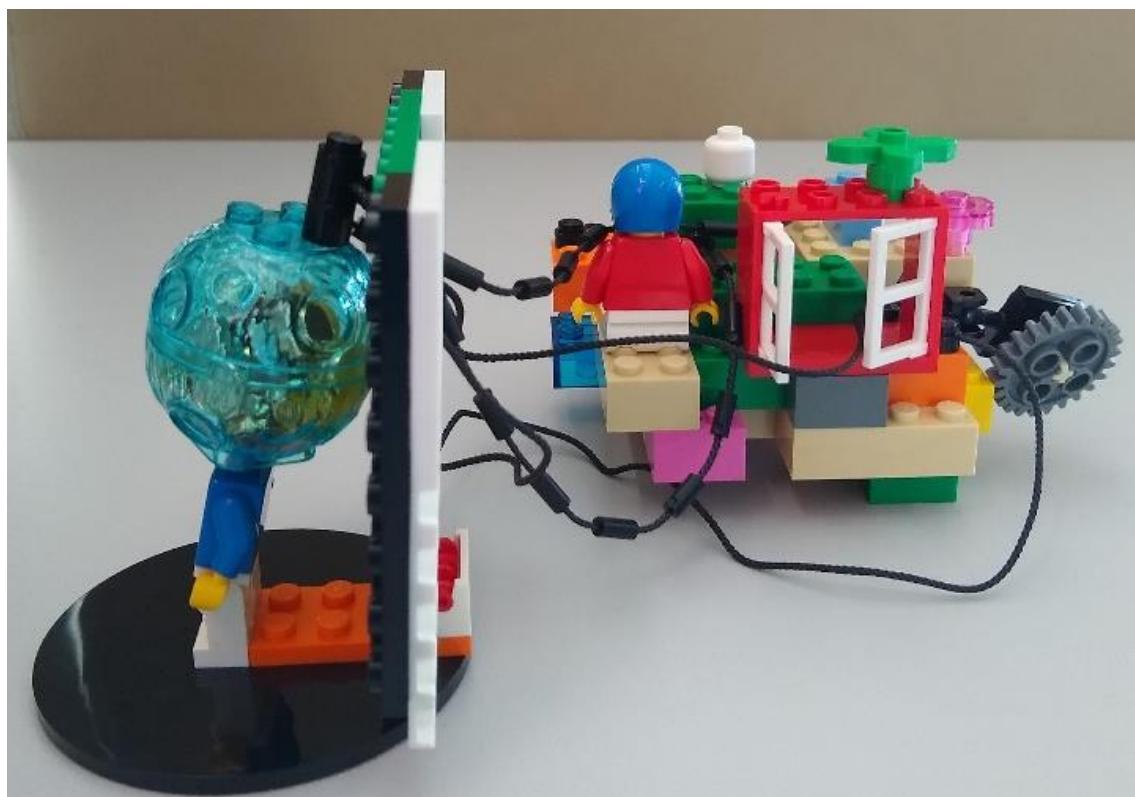
**Photo 18.18**

*Model W2P3 "Hidden behind the façade"*



**Photo 18.17**

*Model W2P3 "Hidden behind the façade"*



**Table 20.23***Model W2P4 “Accumulating stress” - notes*

Aspect	Description
Focus	stressors/demands, resources, effects
Short description	a dynamic, quite complex (but not in terms of physical structure) model representing a time scale and a person moving along encountering different demands and using resources to deal with them
Key features	three plates arranged in a line representing three consecutive days with several blocks of different colours on each depicting both opportunities for recovery and demands which can be dealt with or moved to another day where they may accumulate; plates connected but separated - the space between (nights) empty but for flowers representing recovery; a mobile construction made up of a person with blue semi-sphere on their head linked with two other semi-spheres along a bar; these semi-spheres are containers for persons resources; when a person moves through the day and encounters some demands, the resources from the semi-sphere in the middle ('mental pool') are moved to the 'used-up' resources on the far right container; stress is when there is nothing left in the middle container but there are still demands; in such case, the person has to take the resources from the semi-sphere on their head i.e. their health (a point when a person starts "giving parts of yourself over") – neglecting one's health and wellbeing due to lack of time (self-neglect)
Metaphors	LIFE IS A JOURNEY (moving through the days); STRESS IS A LACK OF BALANCE (between demands and resources), or STRESS IS AN IMBALANCED BUDGET; STRESS IS A CLUTTERED SPACE/OBSTACLES (bricks on one's way, cluttering space, while nights/recovery time as empty space);
Colours/size/shape, special elements, symbols	"traffic lights" applied to demands: green bricks for easy tasks requiring only small amount of resources, yellow and orange - more difficult issues, still within person's capacity provided that all the resources have been replenished, red - very difficult, using lots of the resources; flowers representing recovery; gold/money as a symbol of resources;
Other comments	clear reference to Lazarus & Folkman definition of stress and fits in with DISC-R model (de Jonge, Dormann, & Tooren, 2008); interestingly, the participant saw mental pool resources as recoverable through respite, sleep, exercise but health-related resources ('reserve pool') are irrecoverable - they can be gathered and developed but once they are spent, one cannot recover them but develop new e.g. by going for

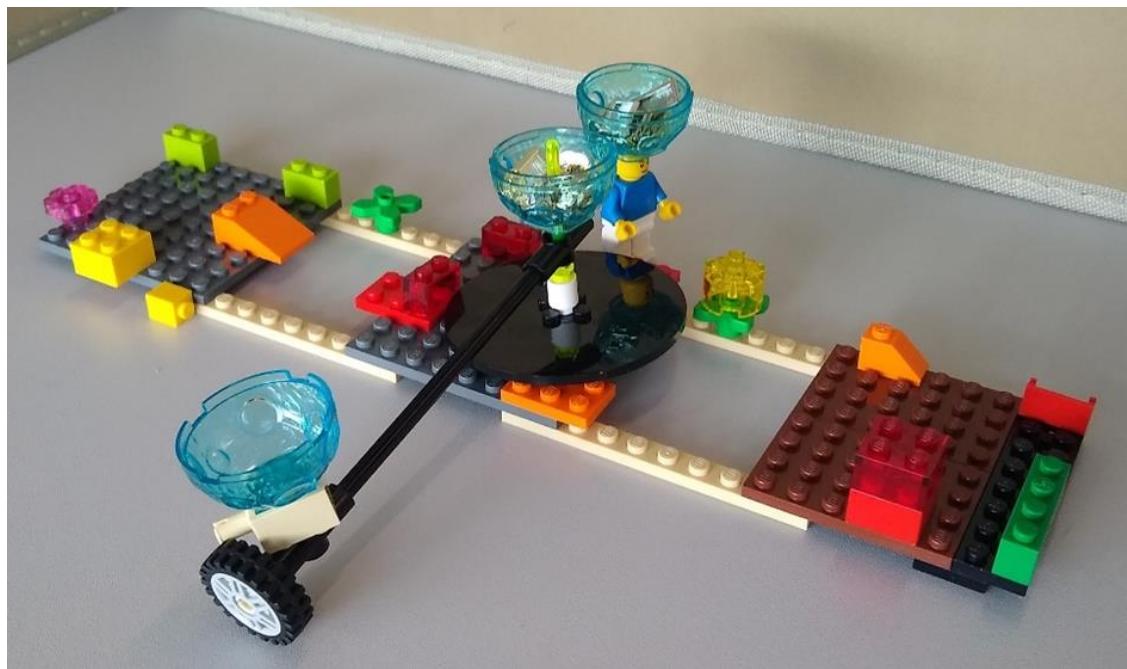
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holidays), again irrecoverable when used up; certain demands (yellow/orange blocks) as OK-stress (positive?) because they are within the person's capacity; a thought-provoking point about person 'giving parts of yourself over' when stress is excessive

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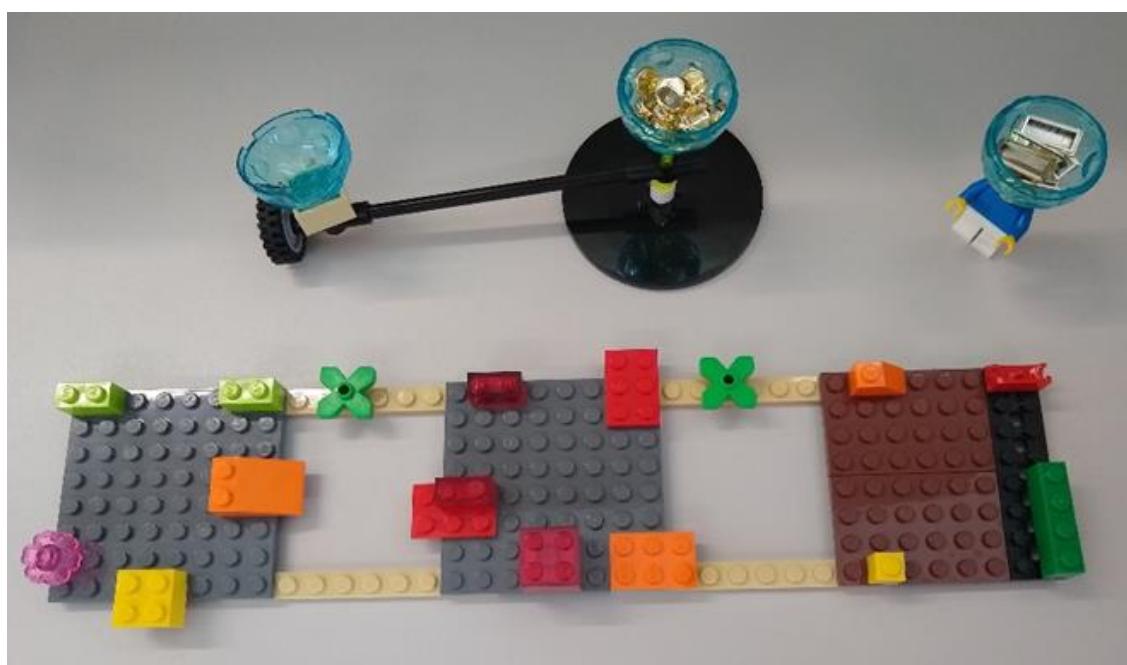
**Photo 18.19**

*Model W2P4 "Accumulating stress"*



**Photo 18.20**

*Model W2P4 "Accumulating stress"*



## Appendix 19. Workshop W3 – LEGO® models

**Table 19.24**

*Model W3P1 “Heads everywhere” - notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	an abstract, colourful, rather chaotic structure with heads on different parts and levels
Key features	a flat base with several heads around from which a kind of tower arises also with heads in different locations; different heads (including a skeleton head) with a range of expressions, representing various thoughts, things and people that one needs to think about, as well as (self-)expectations and changing opinions; one head in a helmet to convey the need of protecting one's head from unhealthy thinking (harsh self-judgement); on the top a set of bars creating a crossroad with multiple lanes depicting different opportunities, perspectives and choices (about which a person again needs to think)
Metaphors	STRESS IS CLUTTERED SPACE (head full of thoughts), STRESS IS LACK OF ORDER/CHAOS (in thoughts, no order or pattern, unpredictability creating a sense of being lost and insecurity); STRESS IS ENEMY (or perhaps force) (need to protect one's head); LIFE IS A JOURNEY (crossroads)
Colours/size/shape, special elements, symbols	heads as symbols of thoughts, demands, opinions, helmet as protective gear (protecting against stress/self-judgement)
Other comments	Metaphor of crossroads – an illustration of having to make (possibly important) decisions; while having choice (freedom) is usually seen as positive, choosing/taking a road (making a decision) may, in fact, be regarded as ‘restricting freedom’ i.e. if one has chosen their path they will have to stick to it as there might be no return; they may regret having chosen one thing over another; reference to ‘thinking too much’ (Kaiser et al., 2015)

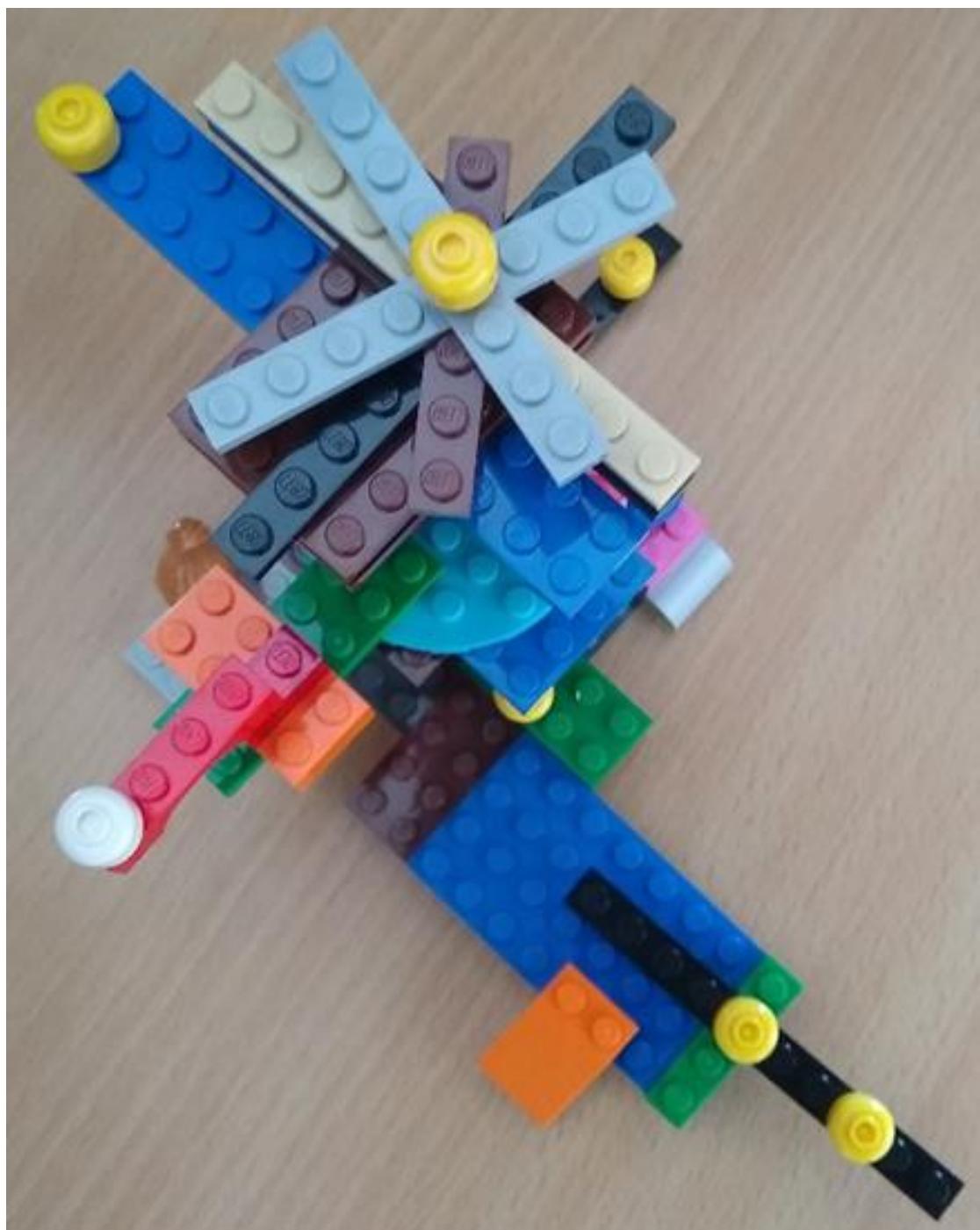
**Photo 19.21**

*Model W3P1 “Heads everywhere”*



**Photo 19.22**

*Model W3P1 "Heads everywhere"*

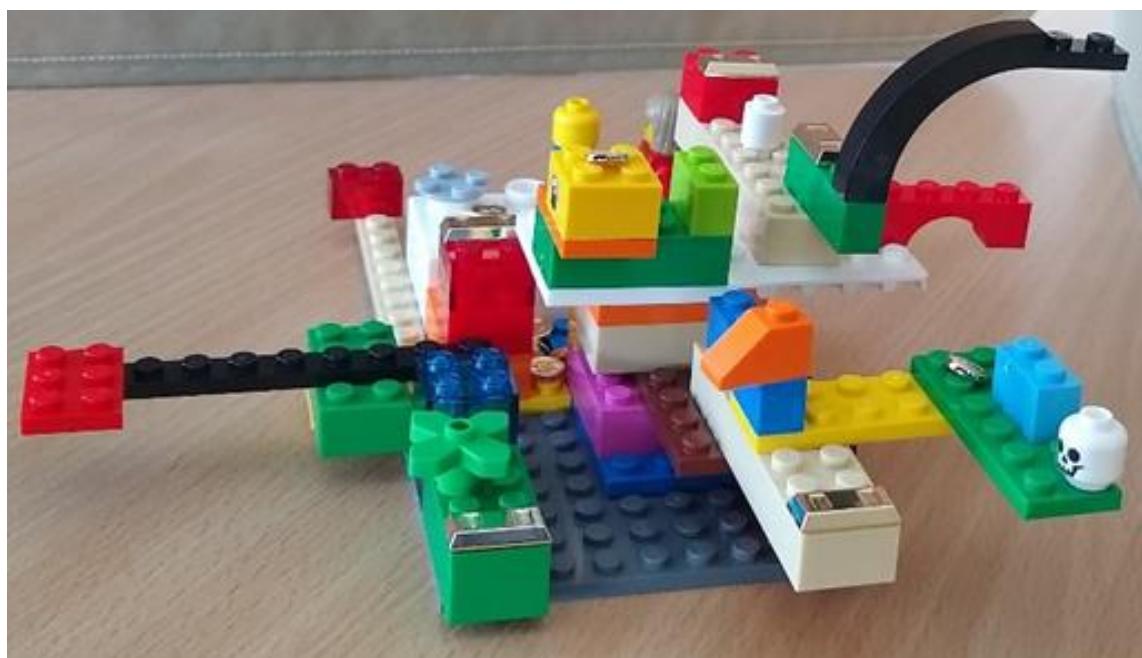


**Table 19.25***Model W3P2 "Visual headache" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	a relatively small, abstract, colourful, chaotic structure with some specific, deliberately chosen blocks
Key features	a flat base with numerous colourful blocks protruding in different directions at different levels - a model of 'visual headache'; specific blocks representing specific demands/stressors (work and finances, relationship, fear of death - what is after death, social expectations) located in various parts of the model
Metaphors	STRESS IS LACK OF ORDER/CHAOS (chaotic structure, jarring colours, being just "mess" and not "hot mess"); STRESS IS CLUTTERED SPACE (blocks/colour representing having lots of different things at once)
Colours/size/shape, special elements, symbols	jarring colours reinforcing the ideas of chaos and headache; gold bars and coins as symbol of financial issues and career change/work-life; figurines as symbol of social relationships, skeleton head as symbol of aging and death, 'eye' block as a symbol of societal pressures and judgement
Other comments	verbal reference to an idea of being attacked and/or overloaded (million colours coming at a person at once); participant admitted that if she had more time she would have used black and red bricks to emphasise the negativity of stress but the chaos of colours worked well

**Photo 19.23**

*Model W3P2 “Visual headache”*



**Photo 19.24**

*Model W3P2 “Visual headache”*



**Table 19.26***Model W3P3 “Travelling through life” - notes*

Aspect	Description
Focus	experience and response (coping)
Short description	a compact model of a vehicle with a person on it
Key features	a platform on wheels with black 'spiky' poles in the front part representing stressors; a single figurine (representing participant) with sticks in their hands that can help attack the stressors or defend oneself; a red brick at rear emphasising stressfulness; a small ladder/steps at one side suggesting that a person get off the vehicle and connect with other people
Metaphors	LIFE IS A JOURNEY (moving through life in the vehicle); STRESS IS FIGHT/WAR (attacking stressors or defending oneself)
Colours/size/shape, special elements, symbols	blackness and spikiness of the poles associated with threat/warning; red to represent stressfulness;
Other comments	no other people present in the model but social support possibly important (wanting to connect with other people) – this probably was not the participant's intention from the start, but she tried to incorporate a new idea into her model (a ladder/steps); this suggests, though, that people are solitary in their dealing with stress, they are responsible for coping and while they have some tools to connect with others, in general they are driving their own vehicle (row their own boats) – links to the idea of individual responsibility

**Photo 19.25**

*Model W3P3 “Travelling through life”*

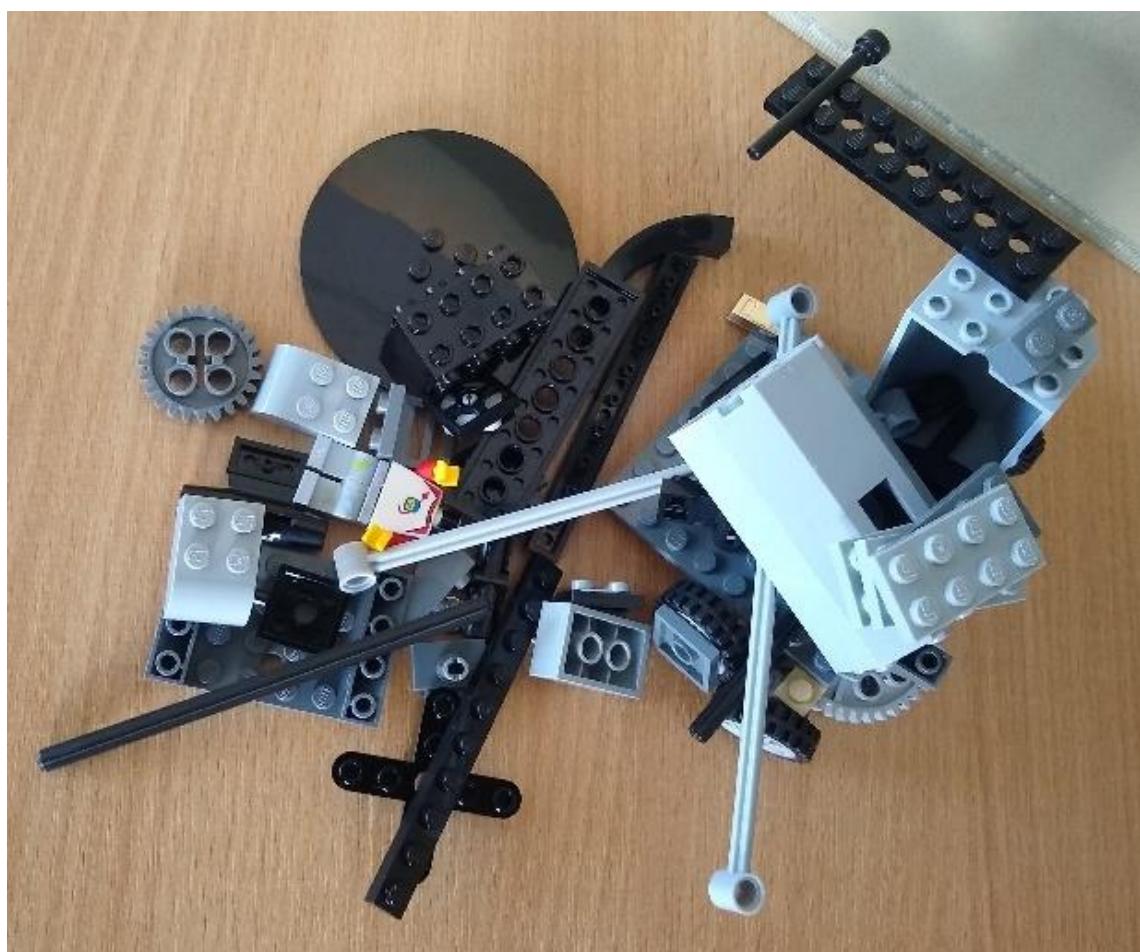


**Table 19.27***Model W3P4 "Headless person in bleakness" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	a heap of black and grey blocks with a headless figurine among them
Key features	a chaotic, unstable pile of grey and black bricks some of which represented specific stressful issues all related to financial security and stability; a figurine without head (representing participant) lying amongst the bricks not trapped but not able to do much apart from trying not to get crushed
Metaphors	STRESS IS LACK OF ORDER/CHAOS and STRESS IS CLUTTERED SPACE (lots of bricks in disarray around the figurine - demands piling up and not sticking together), STRESS IS A LACK OF BALANCE and STRESS IS A PHYSICAL FORCE and (the structure is not secure and the bricks could come toppling down, crushing the person), STRESS IS ENTRAPMENT/RESTRICTED MOTION (a headless, powerless figurine lying among the bricks)
Colours/size/shape, special elements, symbols	a big role of colours - blackness and greyness representing bleakness, dullness and mundanity of a stressful life (darkness - BAD IS DARK metaphor); a headless person as a symbol of inability to think (?), powerlessness and vulnerability; wheels, part of a building and gold bar as symbols of specific, interlinked stressors (car, house, and money respectively)
Other comments	the headless person is - according to the participant - trying to prevent the bricks from tumbling and crushing them but actually looks really helpless and hopeless; also not having a head might mean that the person might not be able to think or be rational

**Photo 19.26**

*Model W3P4 "Headless person in bleakness"*



**Photo 19.27**

*Model W3P4 "Headless person in bleakness"*



**Table 19.28**

*Model W3P5a “Restricted by money” - notes*

Aspect	Description
Focus	stressors/demands
Short description	a small model of a person tied to container of money
Key features	a person wrapped in a cord (chain) and tied to a brick imitating a container with gold bars and coins inside
Metaphors	STRESS IS ENTRAPMENT/RESTRICTED MOTION (being tied/chained, unable to move/detach from the idea of money)
Colours/size/shape, special elements, symbols	gold pieces representing money and thinking about money
Other comments	interestingly, the participant was more focused on the future than present, i.e. he had no financial problems at that time but was worried about spending/wasting money rather and not having them in the future

**Photo 19.28**

*Model W3P5a “Restricted by money”*



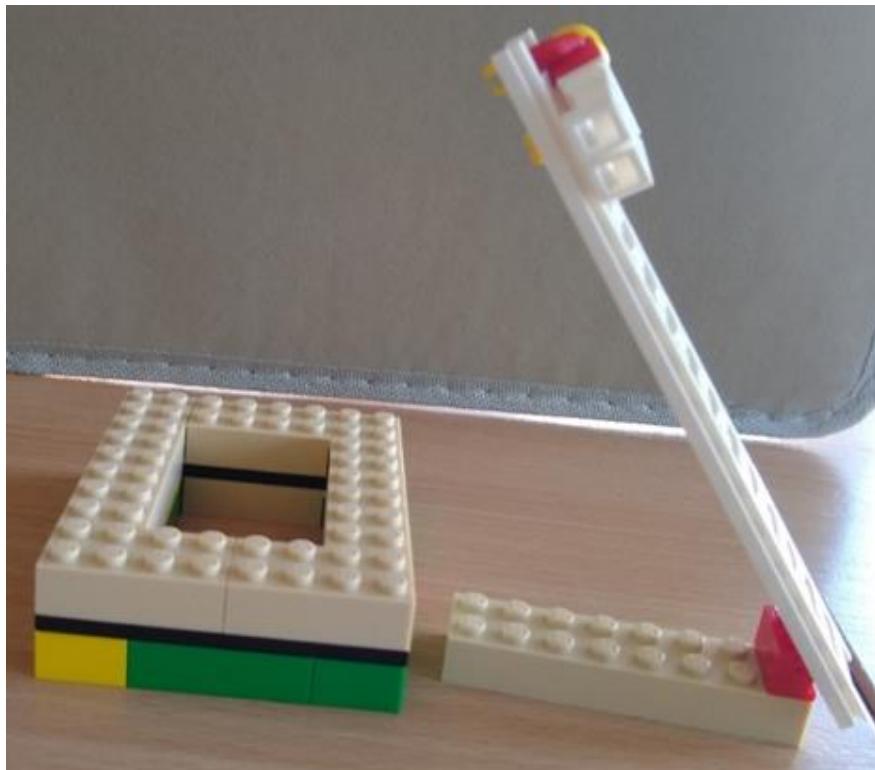
**Table 19.29**

*Model W3P5b "Ladder and hole" - notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	a small model of a person on a ladder over a hole
Key features	a person in a strange position at the top of a ladder located over a hole/well;
Metaphors	LIFE/ACHIEVING GOALS IS A JOURNEY (MOVING UP), STRESS IS ENTRAPMENT/RESTRICTED MOTION (a hole of self-criticism and low self-confidence in which the person stays until someone help them out, in this case - praises their work)
Colours/size/shape, special elements, symbols	ladder representing achievement
Other comments	none

**Photo 19.29**

*Model W3P5b "Ladder and hole"*



## Appendix 20. Workshop W4 – LEGO® models

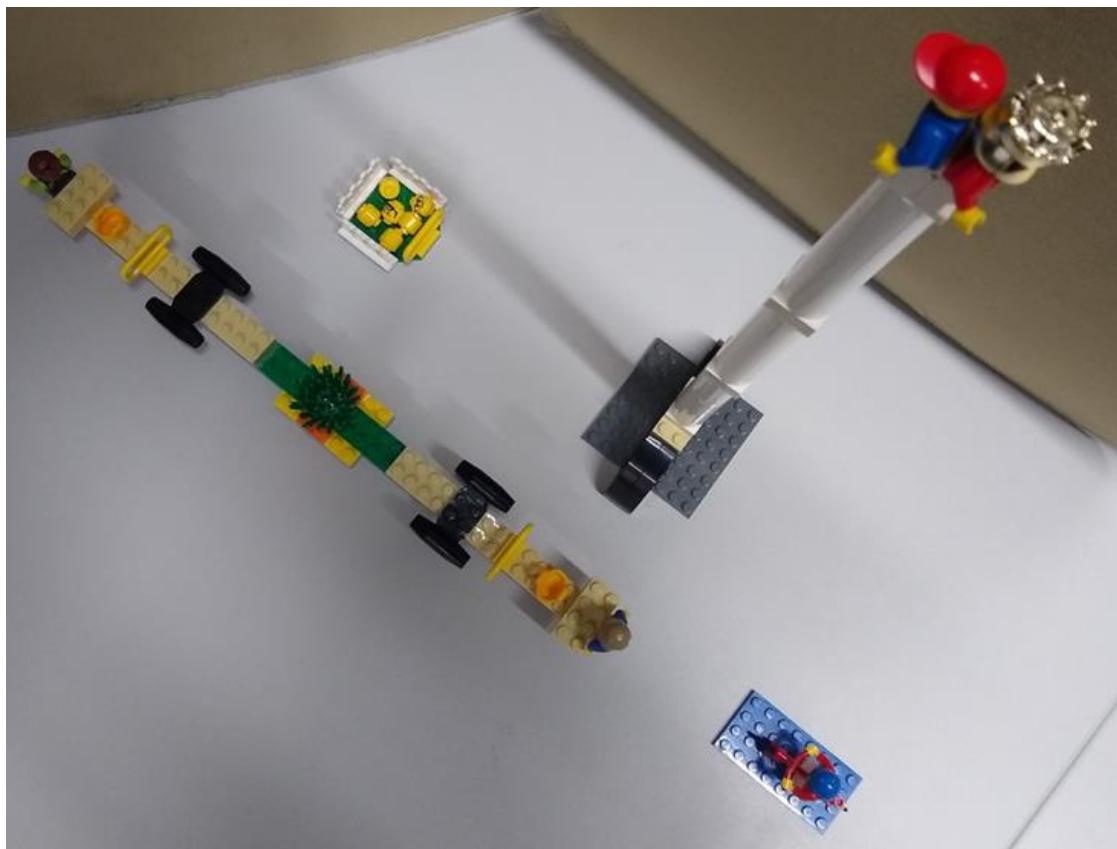
**Table 20.30**

*Model W5P1a “High column” – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	Big, although relatively simple model representing stress through insecure position on a top of a high, unstable column where it is easy to fall down and hurt oneself.
Key features	a very tall column/tower with two figurines on the top barely having enough space to stand, seems to be precarious due to height, even though the base is quite sound; a figurine with skeleton head on a bike representing an external influence which can hit the tower and disrupt its balance leading to collapse; a small pen with several heads inside but not explained in detail by the participant representing “ever-present” negative outcomes of stress possibly up to “taking head off”
Metaphors	STRESS IS A LACK OF BALANCE (precarious structure easy to knock down, people close to the edge can get knocked off balance and fall down), STRESSOR IS A PHYSICAL FORCE (external influence, a cyclist who may hit the tower and destabilise it), either ANTAGONISTIC FORCE or possibly STRESS IS AN ENEMY
Colours/size/shape, special elements, symbols	skeleton head representing threat/danger
Other comments	verticality - high vertical position usually seen as positive in other models (e.g. W1B, W1A) but here it definitely represents precariousness, highlights insecurity - the risk of falling down; high vertical position hard to achieve and easy to lose because of gravity (moving up means going against gravity, is more active and intentional, requires effort while moving down is more passive, natural and easier (and hard to reverse) (Sherman & Clore, 2014); the model can be also seen as a metaphor for homeostasis/allostasis - constantly regaining balance, it can be ‘hit’ by some external force but it does not necessarily mean that the people on top will fall (e.g. get ill) - smaller force might not be enough to shake it so much/ knock it down, however, when it is already ‘rocking’ (?) a minor thing can destroy it (make it collapse)

**Photo 20.30**

*Model W4P1a “High column” and Model W4P1b “Balancing scale”*



**Table 20.31**

*Model W5P1b “Balancing scale” – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	quite large, more elaborated, symmetrical model of a balance relating stress to imbalance and a threat of falling down.
Key features	a symmetrical structure - a scale with figurines on each side with some decorative elements along the
Metaphors	STRESS IS A LACK OF BALANCE (constant trying to maintain balance, being on the edge)
Colours/size/shape, special elements, symbols	decorative elements “just cos it needed to look pretty” (counterbalance for negativity of stress?)
Other comments	the model sparked a short discussion on individual differences (people have different edges); can be also seen as a metaphor for homeostasis/allostasis - constantly regaining balance; interestingly,

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stress seen as positive because it motivates to keep balance, without it people will not be on the balance but somewhere else (oblivion?), they will not do anything (no pain no gain/ no risk no fun?)

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**Photo 20.31**

*Model W4P1a "High column" and Model W4P1b "Balancing scale"*

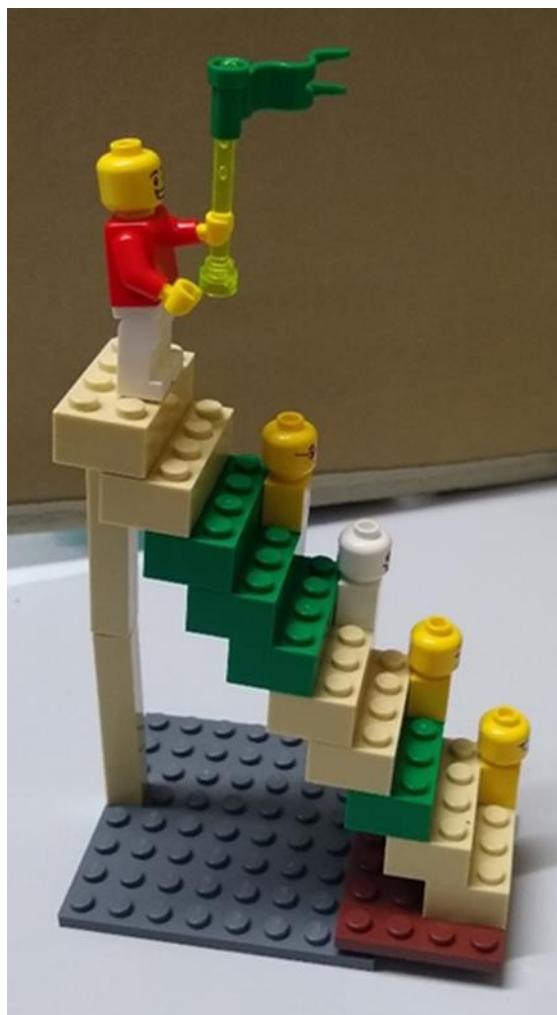


**Table 20.32***Model W4P2 “Steps in life” – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings, coping)
Short description	a small, compact model of stairs with different heads on steps and a person going up
Key features	a set of steps green and cream in turns, with heads every second step representing different psychological states; a smiling figurine with a red torso holding a green flag on the top step
Metaphors	LIFE/ACHIEVING GOALS IS A JOURNEY (moving up the steps) → COPING IS MOTION, STRESS IS RESTRICTED MOTION (moving up, against gravity is difficult), EMOTIONAL FACIAL EXPRESSION STANDS FOR EMOTION metonymy
Colours/size/shape, special elements, symbols	LEGO heads with different expressions representing various emotions/psychological condition with a skeleton head as a symbol of negative state, feeling like “metaphorically... just commit suicide”; a flag as a symbol of victory (achievement/reward, not necessarily material); colours used on purpose to make the model organised/structured (avoid chaos which is possibly stressful); red element as symbol of positivity
Other comments	stress equalled with negative emotions; verbal reference to STRESS IS A PHYSICAL FORCE - (over)load when a person “cannot take any more”, STRESS/UNMANAGEABILITY IS DEATH (feeling like committing suicide because of overload/unmanageability); also a reference to RESTRICTED VISION as one need to look for help to “see more clearly”, and RESTRICTED MOTION (“work my way through”), LACK OF ORDER/CHAOS (“help you rationalise things and put things, uhm, back into a logical sequence”), NO STRESS (GOOD) IS LIGHT (“you can start seeing the light again”);

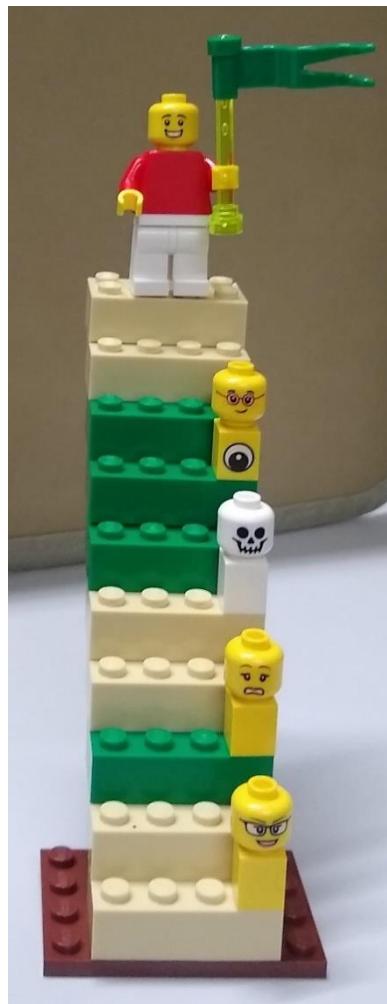
**Photo 20.30**

*Model W5P2 “Steps in life”*



**Photo 20.31**

*Model W5P2 “Steps in life”*



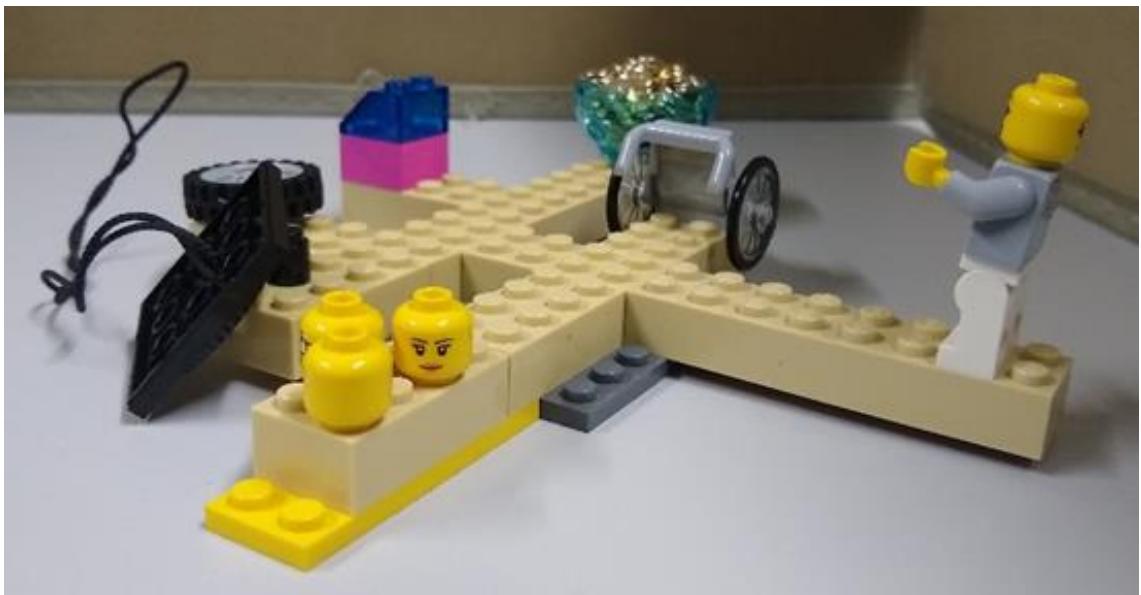
**Table 20.33**

*Model W4P3 "Sources of stress" – notes*

Aspect	Description
Focus	stressors/demands
Short description	a relatively small model illustrating different demands/stressors
Key features	set of blocks looking like a labyrinth but in fact a complex balance with several beams (?), with pieces representing different demands or concerns (family, house, finances, university, health/aging) which need to be balanced; a figurine with unhappy face on one of the beams
Metaphors	STRESS IS A LACK OF BALANCE (need to balance all the demands)
Colours/size/shape, special elements, symbols	unhappy face as symbol of stress; heads as family, 'graduation cap' as university demands, 'pot of gold' as financial issues, wheelchair as symbol of things out of control such as family members getting older
Other comments	interestingly the 'balancing' person is not in the middle but at the end of one of the beams which makes sense if the person represents resources that help balance the demands (otherwise it all get destabilised if any demand/concern have been dealt with and removed from the scale)

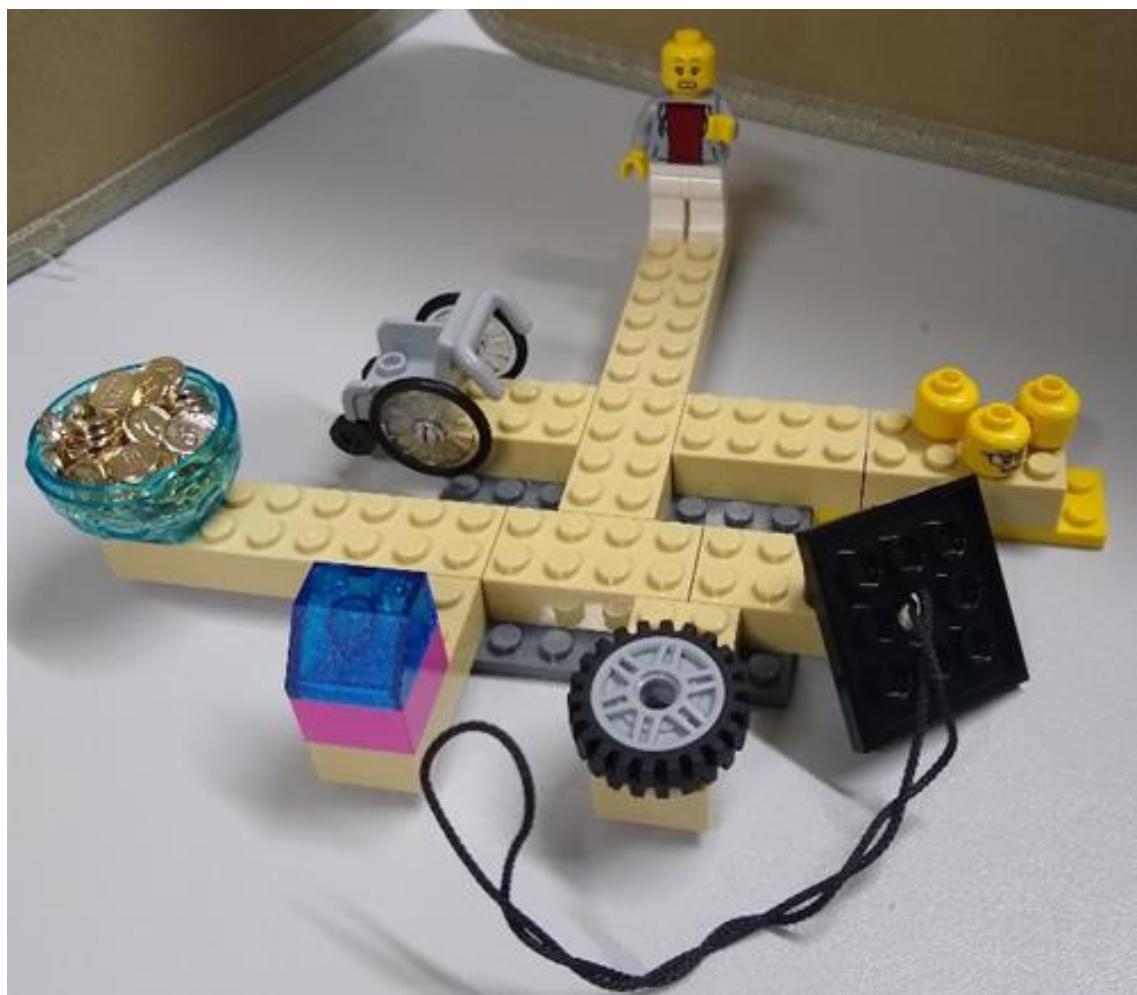
**Photo 20.32**

*Model W4P3 "Sources of stress"*



**Photo 20.33**

*Model W4P3 “Sources of stress”*

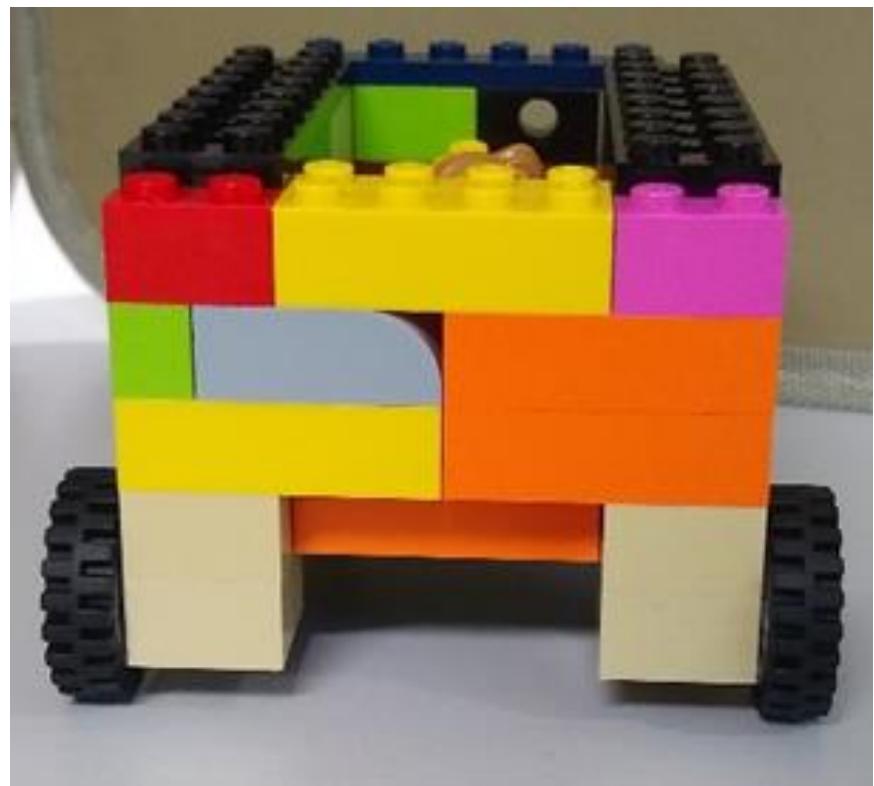


**Table 20.34***Model W4P4 "Blind trip" – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings)
Short description	a small/compact model of a vehicle with only a small eyehole and three people inside
Key features	a cuboid vehicle with a small hole to look through - severely restricting driver's vision, three figurines inside, one representing the participant (?), the others are people who rely on the participant to get them where they need
Metaphors	STRESS IS RESTRICTED VISION (going blind), COPING IS MOTION (driving the vehicle)
Colours/size/shape, special elements, n/a symbols	
Other comments	not only the vision is restricted but (although the participant did not talk about it) the vehicle is quite crowded and has no door or another exit (unless jumping out as there is no roof) – the model creates a sense of entrapment (not necessarily intended)

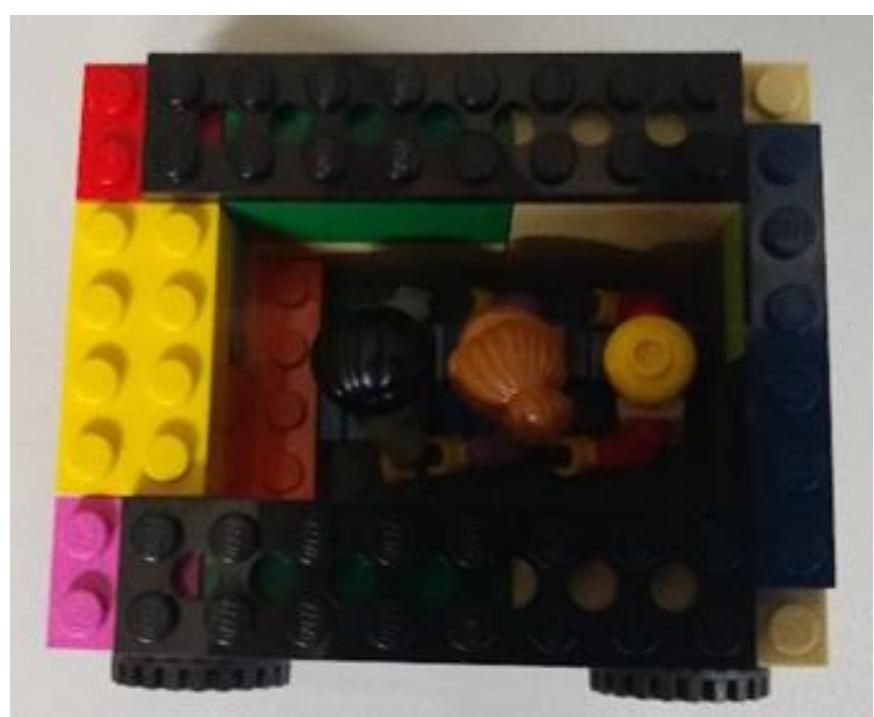
**Photo 20.34**

*Model W4P4 "Blind trip"*



**Photo 20.35**

*Model W4P4 "Blind trip"*



**Table 20.35**

*Model W4P5 “Hierarchy of stressors and resources” – notes*

Aspect	Description
Focus	stressors/demands, resources
Short description	a triangular model referring to the Maslow's hierarchy of needs
Key features	a pyramid with five levels, bottom one representing money, then work, social relationships, hobbies, and happiness at the top; the person moves up and down trying to reach happiness but each level can be negative (stressful) and positive
Metaphors	LIFE IS A JOURNEY (moving up and down through the pyramid), HAPPY/GOOD IS UP, STRESS/BAD IS DOWN
Colours/size/shape, special elements, symbols	gold bars as symbols of finances, suitcase as job, heads as people, ball as sport/hobby; dogs (favourite animals) as symbols of happiness; a few nice/pretty pieces with no meaning, just decorative (as counterbalance for negativity of stress?); also colours used because they are nice (although with no specific meaning)
Other comments	happiness as the opposite of stress; verbal reference to RESTRICTED MOTION and CLUTTERED SPACE (working one's way up or through things), also going against gravity suggests some difficulty

**Photo 20.36**

*Model W4P5 “Hierarchy of stressors and resources”*



**Table 20.36***Model W4P6 “Uphill struggle” – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings, coping)
Short description	a relatively complex, elaborated model of stairs and a person moving upward
Key features	a set of steps with some barriers on them and a flag on the final landing, two figurines, one at the bottom trying to go up, the other - smiling, wearing a crown - at the top, who already achieved their goal; blocks imitating water around the steps reinforcing the idea of difficulty and effort necessary to achieve ones goal
Metaphors	LIFE/ACHIEVING GOALS IS A JOURNEY (swimming, moving up), STRESS IS A CLUTTERED SPACE and RESTRICTED MOTION (moving up, against gravity and having objects/barriers in one's way),
Colours/size/shape, special elements, symbols	flag as a symbol of reward/victory; bushes and trees as elements of positivity (participant likes flowers and green), water, although could be seen as additional impediment, it may also represent positivity
Other comments	achieving goals is difficult - requires going up (against gravity) and overcoming barriers, difficulty also depends on the starting point (water or landing at the bottom of the steps); high vertical position associated with positivity and power but also seen as precarious i.e. hard to achieve and easy to lose because of gravity (moving up means going against gravity, is more active and intentional, requires effort while moving down is more passive, natural and easier) (Sherman & Clore, 2014); interesting point about individual differences - not everyone may want to get to the top, life can be good at the bottom as well and some people may choose to stay there; however, getting to the top is usually difficult and requires effort → no pain no gain; also, the top is achievable because someone has already got there, however, there could be more tops one upon another; verbal references to WAR/FIGHT (struggle, challenge, another person/enemy wanting to beat you, push off), LACK OF BALANCE (being knocked off/pushed off the perch, get the ground);

**Photo 20.37**

*Model W4P6 “Uphill struggle”*



**Photo 20.38**

*Model W4P6 "Uphill struggle"*



## Appendix 21. Workshop W5 – LEGO® models

**Table 21.37**

*Model W5P1a “Two bridges” – notes*

Aspect	Description
Focus	stressors/demands, experience and response (feelings, coping)
Short description	a big model of two bridges representing stressful and non-stressful situation
Key features	two bridges separate from each other; one clearly botched, uneven, bumpy, weak, with some barriers and obstacles on the surface, black, spiky elements underneath, a headless figurine at the beginning of the bridge, the reward represented with suitcases (possibly more work?); the other one well-organised, harmonious, symmetrical, strong and secure, levelled and without any obstruction, figurine close to the final point and the reward represented with a ball full of gold
Metaphors	LIFE/ACHIEVING GOALS IS A JOURNEY (going across the bridge); STRESS IS CLUTTERED SPACE (traps and barriers on the bridge) and FORCED, QUICK MOTION (a person may fall down if they do not go quickly through), STRESS IS LACK OF ORDER/CHAOS (botched bridge - everything everywhere, good bridge well-structured, thought over); NO STRESS IS QUICK, UNIMPEDED MOTION, STRESS IS LACK OF BALANCE (haphazard, precarious construction)
Colours/size/shape, special elements, symbols	black spiky pieces underneath the bad bridge as a symbol of harm/punishment (not intended as physical harm by the participant, but could be seen this way – perhaps as ill health resulting of stress?); headless person as a symbol of not thinking deeply; gold as a symbol of reward, suitcases also as symbol of reward (but not necessarily, may suggest more work because what has been done is unsatisfactory)
Other comments	a nice way of representing stress related to social expectations and comparison; an interesting point about that a bridge might be only superficially structured and organised, other people do not see what is behind and do not know other's stresses (similar to W2P3 – “Behind the façade”); the good bridge is predictable (one can see it from start to end), the other one is cluttered with pieces and one cannot see what is there; stress resulting from procrastination and bad choices - the model places

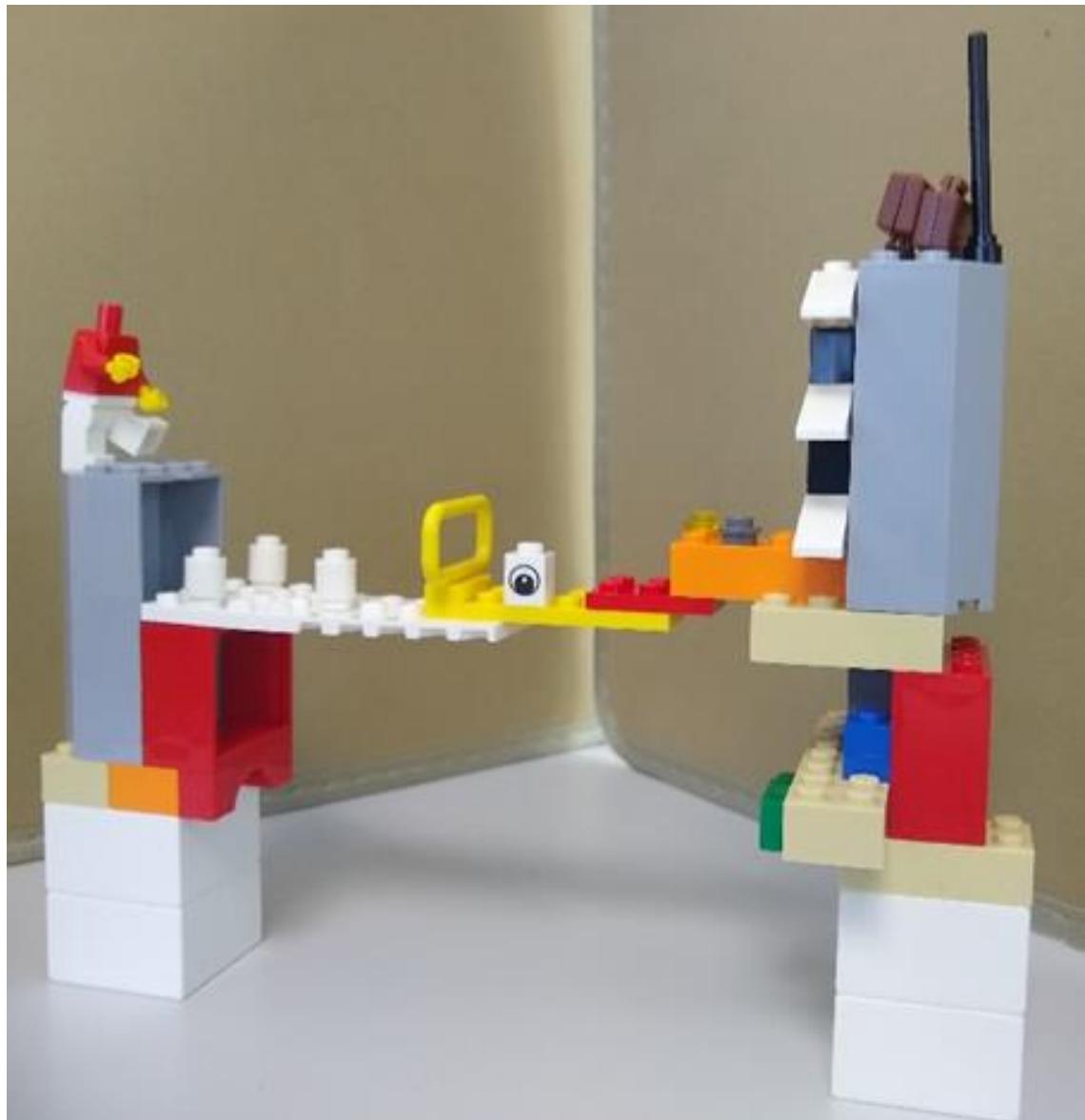
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responsibility on the individual for getting stress (the person could have planned their work, start earlier, put more effort etc. to avoid stress)

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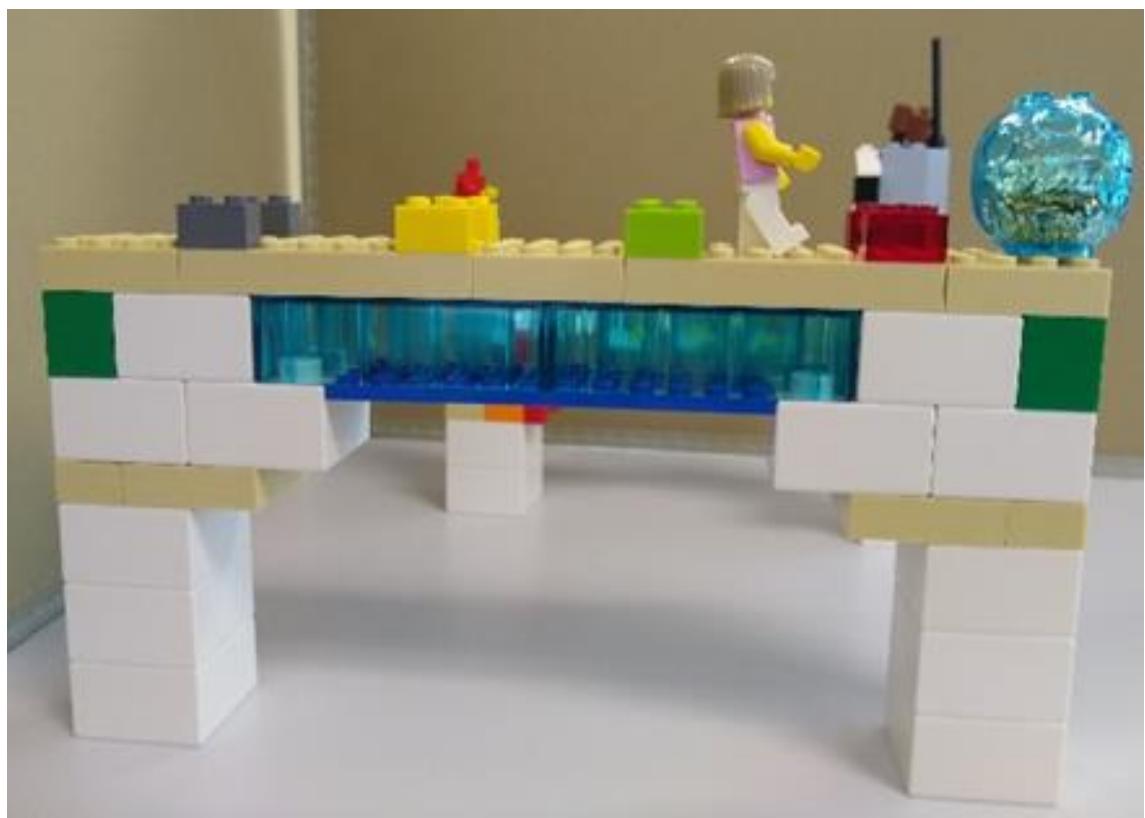
**Photo 21.39**

*Model W5P1a "Two bridges" (bad bridge)*



**Photo 21.40**

*Model W5P1a "Two bridges" (good bridge)*



**Photo 21.41**

*Model W5P1a "Two bridges"*



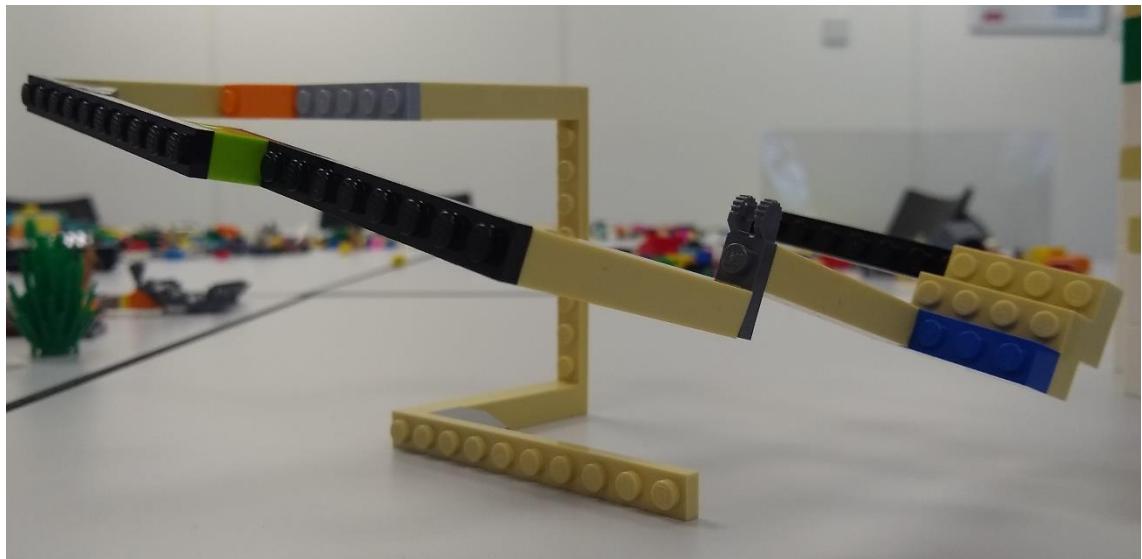
**Table 21.38**

*Model W5P1b “Confusing line” – notes*

Aspect	Description
Focus	experience and response (feelings, coping)
Short description	an abstract construction of long, thin pieces linked one to another
Key features	unstable, thin, flimsy construction representing a state of confusion and going in circles instead of walking straight and getting more and more stressed (kind of a spiral of stress?)
Metaphors	STRESS IS A LACK OF BALANCE (insecure, unstable, precarious construction easy to collapse), STRESS IS RESTRICTED MOTION/ENTRAPMENT (going in circles, along the path, no other place to walk but the line), ACHIEVING GOALS IS A JOURNEY
Colours/size/shape, special elements, n/a symbols	
Other comments	quickly built model at the end of the workshop (not presented to the group, not a part of discussion) but representing stress well

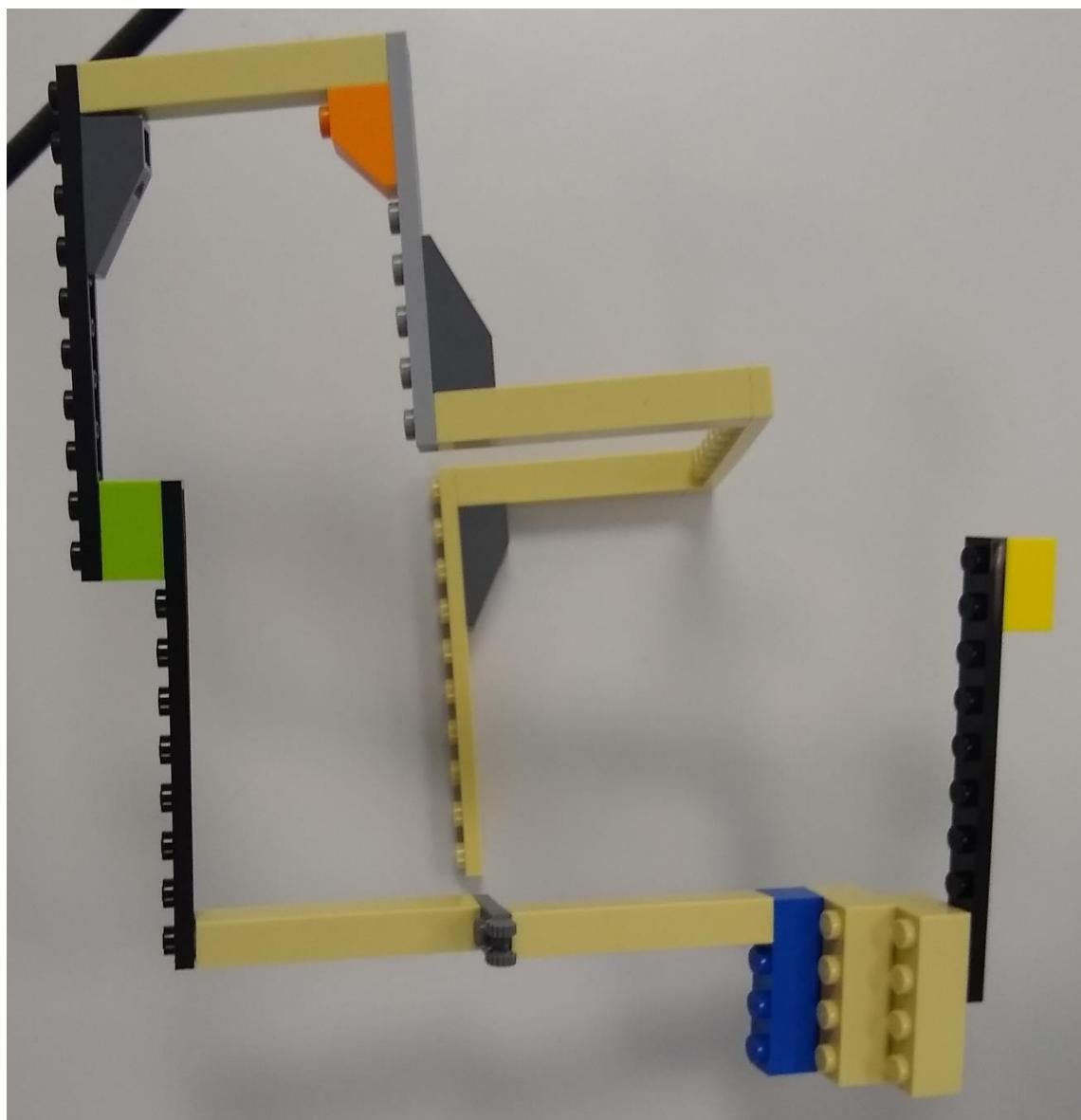
**Photo 21.42**

*Model W5P1a “Confusing line”*



**Photo 21.43**

*Model W5P1b “Confusing line”*



**Table 21.39**

*Model W5P2 “Money and social life” – notes*

Aspect	Description
Focus	stressors/demands
Short description	a relatively small model illustrating different demands/stressors
Key features	a female figurine representing the participant who is looking and trying to get money closed in a blue ball; two more figurines representing social relationships which are a source of expectations and pressures
Metaphors	STRESS IS RESTRICTED MOTION/ENTRAPMENT (not being able to get the money)
Colours/size/shape, special elements, symbols	a blue ball full of gold as symbol of insufficient money; a tree as a symbol of life with all the demands (work, school)
Other comments	verbal reference to PHYSICAL FORCE (pressure)

**Photo 21.44**

*Model W5P2 “Money and social life”*



**Photo 21.45**

*Model W5P2 "Money and social life"*



**Table 21.40***Model W5P3 “Ways of coping”*

Aspect	Description
Focus	experience and response (coping), effects
Short description	a relatively complex model representing different ways of coping with stress
Key features	a big platform with compartments representing various ineffective/maladaptive responses to stress, gold in the middle representing a goal which any of the figurines could achieve but they do not because they use ineffective strategies; a figurine tied up and unable to do anything; one shut away from everything and everyone in a small space; one enclosed in their own bubble from where they can see everything but cannot do anything, one hiding among bushes and pretending the problem will disappear; one relaxing and comforting themselves (but also not doing anything to achieve the goal); and an imprisoned skeleton which represents the end-result of ineffective coping
Metaphors	STRESS IS RESTRICTED MOTION/ENTRAPMENT (most of the figurines unable or unwilling to move toward the goal, they can see the goal and others but it is out of reach); INEFFECTIVE COPING IS DEATH
Colours/size/shape, special elements, symbols	skeleton as a symbol of demise due to ineffective coping; gold as a symbol of a goal
Other comments	most examples of coping here involved avoidance/withdrawal; interesting discussion about normalising stress (re-assurance vs no change) and watching other people coping with stress, and acquiring ineffective coping strategies through modelling;

**Photo 21.46**

*Model W5P3 “Ways of coping”*



**Photo 21.47**

*Model W5P3 “Ways of coping”*



**Photo 21.48**

*Model W5P3 "Ways of coping"*



**Photo 21.49**

*Model W5P3 "Ways of coping"*



## Appendix 22. Study 2. Theme table

Table 22.41

*Study 2 theme table (based on the discussion of mind maps and general discussion after building the models)*

Theme	Description	Quotes
Demands and concerns	Participants discussed a range of factors and situations – mostly at an individual level. Particularly high or complex demands that may require lots of resources were described as stressful. By extension, having low/insufficient resources (lack of money, time) also causes stress. Social interactions can also be stressful: relationships at work, relationships breaking down, trust issues, arguing, and bullying. Participants also talked about goals and expectations being stressful if	<p>So, when you're trying to balance both, it's really hard to get the perfect balance. Because they both need their own, sort of, needs. And it's hard to co-align them. That's become stressful if you're like neglecting one, or focus on one more and then the other starts to fall apart. So, it's good to try and get the one, the balance between them both perfect even if that's very hard. [W2P3]</p> <p>So just trying to not overwork yourself but then not neglect your work, and not see your friends too much, well, no problem there, but don't neglect them entirely. [W2P3]</p> <p>So, if I'm, if I've got all these demands like balancing work, life, and social balance I've got to get the balance perfect and it's not really like... it's not that I can achieve that for the rest of my life within 30 minutes. It's a constant process. [W2P2]</p> <p>I think it kind of comes in... it's like, kind of phase really, about the different demands, and having potential children, or partner, schools... It's almost like another part that is your, it's just your own life as well, like doing laundry, doing the dishes or that kind of small tasks that you have to do on a fairly daily basis, and then also you wanna do the exercise, then you also</p>

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unrealistic and there is a risk of failure.

wanna see your friends, or your family, and then you also have to go to work. So, it's balancing all these different parts...[W2P4]

For me, I work... uhm 45, 40-45 hrs a week, uh, and I've got 2 children. [...]No, you can't be full-time and not work evenings. So I've got a choice, I can drop it down to like a 0.6 or 0.8 but then I can, I couldn't teach any of the evenings that I do. I wouldn't have the salary that I get. But I know that I pay, you know, I don't get money, so it's difficult to juggle it. [W3P1]

I'm just cutting rounds that come, I'm just starting to, uhm, applying to, uhm, [inaudible 1:01:43] because I was full-time, well I am full-time, but my daughter's just been diagnosed with autism and she's started her options at school and I'm like, I want to help her through her exams, it's gonna be important for her. [W3P4]

I'm thinking why am I working full-time, I'm a single mum, I need to be there for my daughter, I need a better life, uhm, work balance, and, to, you know, she's only got one life, I'm here to get her [inaudible 1:02:25] her exams and she'll need me at home [W3P4]

But I've had issues too, I had a major, a major operation 3 years ago. You know, my daughter's autistic, why am I working full-time? You know, it's, it's ridiculous, I, I need to say stop. [W3P4]

I think there's different types of work, so, uh, so my job versus my uni work, it has been quite classic struggle [laugh] for the last couple of years. Uhm, and yeah, I think it with deadlines, and, uhm, again, like staff expectations', things like that. [W4P3]

Um, yeah so, when I live singular lives, where there is only one source of stress in our life, we have lots of things applying stress or pressure at, all at the same time. And it's, it's juggling

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all of those things. [W4P1]

Yeah, you have your private life where you can have things going on whilst trying to deal with work, whilst trying to deal with, uhm, poor relationships at work but, which you can have. You can have co-workers [that] are manipulative, upset you, you know. [W0P2]

[...] if you have to work and you have to study or you have to work a lot of hours coz you don't have money and then you've got children. [W0P2]

[...] if there's a lot of things going on, like, something that's already [inaudible 20:08] a lot of demands that are going on, and you're stressed because you're not meeting the demands or you don't feel there's enough time [...] [W2P4]

Why, I mean there's many sources of stress, yeah, relationship problems, work, too much to do, this kind of things.[W2P4]

Uhm, so I have to be careful not to become too stressed but doing a PhD, carrying 3 children, and [inaudible 45:07] house [laugh] means that I feel like I'm constantly teetering on the brink. [W2P1]

Yeah, I mean, it's the pressure, right? Like if you, if you need to live and you need money, like if you're not doing that, that's very stressful. [W2P4]

But I don't see my children enough and I see my daughter with self-esteem issues, my son having his night terrors and I'm not at home, lalala, husband not getting any sex, and then no thing, not being able to cook lovely, fresh meals because you've got to make something really quickly, doing instructions for someone else. [W3P1]

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But it means that I don't have the luxury of first year easing myself in, I had to do it straight away. And I've got one of the worst schedules, uhm... in, uhm, and then I have a job, uhm... and then... [W3P2]

I have to have a freelancer career, uhm, and in order for me to do that, I'd have to do the uni work, to learn it, to do, do work, like earn money elsewhere, and then trying to start a freelancer career as well. [W3P2]

Yeah, it's interesting, the, one of the things about work-life balance, uhm... is the, the career change. Uhm, you just said, you dropped down to different, different level, so it's not just the financial side. I feel that, I'm 44, I think sh\*t, I've got to... either change my career now... Or never. [W3P1]

It's, it's just because I haven't, I have this one assignment and I just really don't know how to start it. I just really didn't know how to start it. [W3P5]

And I had a lot of, uhm, personal stress at the moment, I had a, uhm, big relationship change, and, which impacted on my... where I live, and financial stuff, so... [W3P4]

[...] it linked to the career thing, pressure of being mid-40, thinking sh\*t, it's now or never, as far as making something of myself goes, or making it different, so being able to change as well. Uhm, yeah, also, like... things are changing, when you're filling forms, you realise that your age is getting lower down... [W3P1]

I mean, thinking about how old I am, you know I've got to [move], I've got my plans to go here and there now because otherwise by the time that happens I'll be nearly 50 and, you know,

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then no one will employ me, or... you know, would I have the energy that I've got now, or maybe my health might deteriorate, or, you know, so there's that, that pressure. [W3P1]

Yeah, so I think a big source of stress for me is trying to manage all the different like aspects of life you've got going on [...] So, like... uni, life, working to trying get money, and then home life, not living in a hovel, uhm, and like doing things like going, like buying food and cooking. [W4P3]

[...] there's fear of failure there's actual failure, and there's fear of failure, you know. I'm, am I gonna fail at this, do I take those risks, do I, like you said, getting your dream job - do I do that? Do I have, and you've... there's, there's the fear of failure as well as actual failure. [W3P4]

Some things you're going to fail at and the stress is going to increase, some things you're gonna succeed at and the stress is gonna reduce. [W4P1]

Or it could even be someone brings stress on you to do something you could be anxious about the fact whether or not you could do, I think. [W4P4]

Uhm... so if you fall, you know, you don't really study that much, or even fall behind on your work, on what you need to do which means that you'll have a slightly worse, uhm... outlook. By either your peers, you teachers, your... boss. And it could just disadvantage you enough, so then you basically don't get the promotion, don't get the grade that you want, and basically... fail. [W5P1]

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it's a by-product of some of these things up here, for example, you know if you have to work and you have to study or you have to work a lot of hours coz you don't have money and then you've got children. [W0P2]

Or if you work a lot and you still don't get enough money. [W0P1]

So you're stressed because you're living pay-check to pay-check to pay-check. [W0P2]

Options, freedom. Money is freedom, freedom of choice. [W0P2]

Because... like I said if I had the money I could go, do you know what? I'd take him to court and take him to the cleaners with the lawyers. Uhm, I could have, I, I didn't have the money previously to carry on with the lawyers, to put a restraint order on him and get him convicted of criminal, uhm, things that, that he did. So, he went quiet for 10 years and then he'd start it all up again. So I had to go away and start reading up on law to counteract what he's doing to me because I cannot spend any more money on the property and lawyers. [W0P2]

I've got money but the thing is, I feel like it's wasting money if use it on myself to go out and I have a night out or something. So I'm just trying do, I, cos I, basically what I do is do whatever it is as cheap as possible. Food, everything else. But, you may think, oh that's, and I think oh, that's great cos if I save up money I've got money to do stuff but then I don't use it, I'd just sit on that. [W3P5]

But there's also that guilt of like sometimes I see friends that have a lot more money and you think 'I don't want to be jealous at them, I'm not materialistic but, you know, there's something nagging, like, oh that, like, they're so comfortable, they don't ever stress about money. [W3P4]

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Because I know that there is a bit in it that, you know, my daughter's 13 and I'd have enough money to make her feel safe, I see her say 'oh, it's alright, we don't need to do, do that'. You know, I'll take her out for coffee – 'oh, I won't have a cake' – you can have a cake, darling, you know, it's a weekend – no, no, no. And I can see her thinking, you know, I've saved mum's money. And I think, I want you to enjoy yourself, you know. But then I, part of me might think one day 'oh, I don't want her to have a cake cos we're a bit short of money'. [W3P4]

That kind of thing, uhm, right, we, thing with my family was, we weren't struggling but it was like, we just, uhm, we've had enough to cover the basics essentially, but then a couple, you know, a couple of weeks would be, it'd be, it'd be bad like, uhm, when my mum, uhm, my mum actually had paid my deposit with my uni accommodation [...] [W3P5]

You know, it's really sad that kid, children, you know, you know, as a parent I see it, you don't want your children to be feeling guilty because you did that cos you wanted to help...But as a parent, you want to give your child everything. [W3P4]

W3P4: Do you feel you can't, your income as a student, it doesn't cover what you need?

W3P2: It doesn't even cover my room rent...

So, uhm, yeah, luckily, uhm, I managed to apply to the, the higher level of maintenance loan that, you know, the nine grand option so at that... I'll be fine but it does me, it's gonna be a bit stress later in life when I've got to pay back. [W3P5]

What, I don't know if I'd be able to keep doing my job but I don't think I'd be in a high enough paid job to manage when my daughter leaves, and I mean, you think, housing costs are so

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high. You said housing costs for you as a student are so high, it's all those stresses of does your money go fair enough. [W3P4]

I guess it's also a feeling that you have when you're stressed. So you're stressed because you don't have enough time to finish everything. But when you're stressed, you're also, uhm... it propagates itself, just [inaudible 0:15:58] so you... you feel... feeling of having not enough time gets worse and worse. [W1P1]

I think it's really about the, the source of the stress. If the source of stress is to do with, to do with not having enough time, then you can be really stressed cos you've got all the stuff. [...] It's always about time. [...] Uhm, enough to it. It's time, right, you don't put enough to it because you've got other stuff to do, and then the person feels neglected, uhm, for an example. [W2P4]

It is stressful [inaudible 29:23]. I'm an owner of a property which is separated into 2 flats as a house. The guy that lives above me is the freeholder. If I was to say to you "he's extremely unpleasant" I'm [inaudible 29:35], I am... I am playing down...And he has caused me so much hassle you cannot believe it. [W0P2]

He's a psychopathic narcissists, there you go, so... I couldn't park my car outside, the vehicle outside of the property because I would come out and find it keyed or the tires slashed. [W0P2]

So, I mean, you... stress if your relationship is breaking down, stress if you've got too much work to do, stress if... [W2P4]

People that turn [to substances] Come out of the school with no educational qualifications can't get a job, uhm and end up in a circle of maybe crime. They're gonna be maybe in that category because they can't get job, they can't get a house, the can't... Afford to eat that

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might go to steal and that's a constant source of stress for them which just goes round and round. [W4P6]

[...] like worldly politics such as [inaudible 35:54] dying, deforestation...Mainly what the news basically covers. [W5P1]

[Brexit] You don't know, you don't know where you, where you will land... [W5P2]

Again, link with, link with politics and everything else, I don't know what is gonna be like for my kids, my nieces... my nieces are Indian girls in America [inaudible 38:43] and they've come from having all kind of races [inaudible 28:46] so it's... worrying about them, what is gonna happen. [W5P3]

If I'd tried to change it I'd feel guilty because I'd be then letting my students down. You've just started teaching and dadada, I don't want to do that... [W3P1]

Yeah, personally I find other people's expectations far more stressful. I'd be more stressed by letting someone else down than by letting myself down. [W4P4]

My self-expectations are lot higher than other people's expectations of me. So, it's, so for me it's the other way round. [W4P2]

Because, uhm, if you... peer, you know, like it's peer pressure or even if loved people expect something from you, you feel kind of obligated to do something, especially like homework, when everybody else is doing it, uhm... or... stuff like that. [W5P1]

I get stressed 'I didn't do it' and the teachers expect something from you, rather than nothing, so... [W5P1]

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[...] you know, [when] you're working two jobs where's your quality of life? [W0P2]

Because, I don't know, sometimes it's like if you... it's like 'Oh, I need, I need to do this, I need to do that' it is not necessarily the amount of time you have to do it, it's whether or not you would actually do it. [W2P2]

But the job's more stressful than any other job I've ever had before, and it, there's more juggling, and it's more likely staying about. [W3P4]

Um, because I often take on a lot more than I am physically able to do because I want the money. So then I have too much to deal with. But... yeah, I'll, I'll have five days in a week and I will have six days of work. [W4P3]

Yeah if you've got too much work you haven't got enough staff and it'll just keep piling it up. [W4P4]

It can happen at home too. You know, the boiler breaks and something else goes wrong at the same time, and you can't do it, you can't do it all at once. You know, and so, you know, you, you can become overwhelmed. [W4P1]

So if the work piles up piles up and you haven't got enough staff, and you never get any more staff and... you just get to the point where you're not going to be able to deal with it anymore. [W4P4]

Sometimes you don't always know what the expectations are or what is it...what you have to achieve, or you know what you have to achieve but don't quite know how to do it. Just someone else is involved in it... it makes it more stress[ful] [W1P2]

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Unpleasant state	<p>Stress was associated with negative emotions and feelings such as anxiety, worry, upset, hopelessness, lack of control, inability to manage. It was linked to tiredness and mental exhaustion as well as to cognitive disorganisation (problems with concentration, memory). Participants mentioned headaches and other physical ailments. They also discussed self-blame and self-criticism as a source and result of stress.</p>	<p>[...] you can have co-workers [that] are manipulative, upset you, you know. [W0P2]</p> <p>[...] then you feel exhausted. [...] So that's when you're feeling so exhausted from stress. [W0P2]</p> <p>What you have is you have options. You don't feel helpless or hopeless. [W0P2]</p> <p>Yes, you're absolutely, that's where the helplessness comes in. [W0P2]</p> <p>So, so I'm looking at different ways. Because of the helplessness and hopelessness so I'm engaging strategies to help lower the stress. [W0P2]</p> <p>Uhm, yeah, just, I'd just say you're not coping with things. Yeah. Being anxious that you of you just sort of you can't cope, it's just too much. [W1P3]</p> <p>Cos you're anxious cos you're not coping and that makes you anxious and then you're anxious about that... [W1P2]</p> <p>When you're stressed you feel like lack of organisation, you can't quite get everything out, sort of how you wanna do it [...] You're not thinking sort of in a calm... how do I approach this, it's sort of like bits and pieces all over the [place]. [W1P3]</p> <p>I'm thinking 'will I get up in the morning?', that's gonna make me more anxious, and that's kind of like meeting demands but if I'm tired 'm not able to meet these demands. [W2P3]</p> <p>I think, yeah, is just a bit more about self-care like, you know, I'm tired, I've been doing this for 6 hours, my head hurts [...] [W2P4]</p> <p>But at that moment in time, that's a very, like, maybe I'm confusing stress with like upset or anger, or something but it's just kind of, you know, worry that you... [W2P4]</p>
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And social media which I'm really worried [W3P1]

And before you know it, I, I just feel... just... overwhelmed, you know? [W3P1]

I'm worrying, my daughter is 13... [W3P4]

And I feel guilty then. [W3P4]

[...] sometimes it's things that are totally out of your control. [W3P4]

I'm going to sleep, thinking 'I'm not gonna get 8 hours, I'm gonna be tired tomorrow' [laugh] and, you know, you might get 7.5 and that's enough for you but I'm worried about that even before I go to bed. [W3P4]

[...] something as simple as, because you're tired and you're stressed, not paying attention, then you like fall over. [W3P2]

[...] built-up, pent-up emotions, or stress, or worries [...] [W3P1]

I'll get home after three days of work... tututu, didn't see my children and they start saying 'mum, we need £20' lalalala, but they're fighting and I just think I can't, well, I can't take this... [...] then you'll drink too much, one might drink too much, and then you feel super anxious and stressed. [W3P1]

Uhm... it's sort of a thing of while you're stressed about something your brain gets unwell, because your brain has to think about so many things it starts selecting it thinks it's useful. And starts dropping the others. Even though they should, they might be useful but you've not made the connection. [W3P2]

I think, I think, yeah, all these things that you say, I think stress does affect memory. [W3P4]

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Uhm, why am I making myself so wrought up about this [laugh], you know. [W3P4]

And she is one of the most stressed out people I know. She's always worrying about her health. [W3P1]

We sat... sometimes, you're worrying about building things up to being more than they are, you know. [W3P4]

I guess from own experiences of stress... then I can become, I'd become quite chaotic in my, in my thinking and my lifestyle. [W4P2]

Yeah, you'll get to the point where you physically, your mind says you literally cannot, you're overwhelmed, you cannot do the amount of work that's coming in. [W4P1]

It's kind of a, it's a thin line between stress and anxiety and I think that anxiety is normally a negative, you're rarely anxious for a positive reason. [W4P4]

[...] they're depressed about their weight or stressed about their weight so they eat more. [W4P2]

[...] someone brings stress on you to do something you could be anxious about the fact whether or not you could do, I think. [W4P3]

You're not concentrating cos your mind's focused on something that's so stressful to you, that sort of thing. [W4P6]

Yeah ,so you, you're struggling at work and then you can't cope anymore [...] [W4P6]

Uhm, other people, though, will just be overwhelmed by it, will need a lot of help from other people, would find it a negative stress. [W4P6]

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Because I, I've started to plan my future basically, uhm, and it removes a lot of the worry. [W5P1]

And you think back, after you had a good day, oh wait, I had a doctor appointment, in the morning, and then you just feel stressed you have to catch up with yourself for not remembering. [W5P1]

But it's also grump future-type worries, well, like...[W5P3]

Crying. [W5P2]

Sadness. [W5P3]

When you're stressed and panic, sometimes you make terrible choices. [W5P2]

Yeah, lying awake worrying. Just thinking about everything. [W5P3]

in job interviews and stuff I'm normally like keep my hands below the table [actually doing that; laugh] because it makes me little, like I'm more anxious than I... I mean I am very anxious but it's, I don't like behaving in an anxious way. [W0P3]

I don't know, like a worry, I've got a lot to do, I'm not progressing very well then, I worry about that and don't sleep well [...] [W2P4]

Like, take on things that you know it's gonna be stressful, and then you're doing it, and it's stressful and you feel like crap. [W2P4]

Ways of coping	Participants reported different ways of coping both problem (active solving problems) and	[drinking, nail biting, and caffeine craving on a mind-map] Ways people, ways of coping with stress... dealing with stress? Or things you might do to relieve stress. [W1P2]
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emotion-focused (comforting, cheering up). Drinking was commonly mentioned as a (maladaptive) way of coping. Interviewees discussed the importance of self-care, however, they often said they had no time for self-care.

These are just things people do, I think like on a Friday night sometimes I'm really stressed, and I think, oh, I'll have a glass of wine. And one is fine but...it's not necessarily the best way of, you know, you could do that for a week and it's not necessarily best way of coping with it. But it does feel... good. It's a short-term gratification. [W1P2]

Uhm... those could be... various things, uhm... I mean you put drinking but I was looking to, uhm, to extreme examples taking substances or self-harming, this kind of things. [W1P2]

Oh! Yeah, I guess, again, it's just short-term gratification to make the feelings go away. [W1P1]

[self-harming] I think it's controlling as well. Taking back control... So you can maybe control the situation, if you're not in control of anything else? [W1P3]

W1P2: Make the feelings go away. Yeah, it's not about a resolution.

W1P1: No. That's a good way of saying it. Or replace them.

Uhm... I was... if I'm stressed those [*exercise and fresh air*] are the things that generally make me... yeah, make me feel better. [W1P2]

For me, I don't know, for me... perhaps I've just rationalised it in my head... like the drinking goes round much hand in hand with social... to me, most of the time if I see, when I spend time with my friends, we do something about drinking. Most of the time. And so that kind of comes hand in hand... But I think, like you mentioned earlier, like, you know, if you have like an evening off or something, and kind of just comes with a whole lot of drink, tonight. Like, for me sometimes you, I just get home and I just, just wanna a drink, you know, just have a drink and sit down, and... [W2P4]

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I don't do this but if you're really stressed, I can see why you would go and have like a lot to drink. Cos, you definitely wouldn't feel stress anymore, after that. [W2P2]

I'd be like... just have kind of, you know, quite a lot to drink maybe, you go to the pub – that'll take you mind off, if you allow a few drinks or so, with some of your friends. And then it's like a little reset almost, kind of indulging that you do, you know, you know that drink is bad for you, you know, it's not the best reaction, you just spend a lot of money, whatever it is, but it's kind of like a little reset. And the next day... or the day after the next day [laugh] you'd be a little bit more like 'OK, I've done that, now let's, let's, [it's] out of my system, I've done that, now let's actually focus on what I need to do. [W2P4]

Uhm... but taking your mind off, it might be what gives you comfort. [W2P2]

[social media] you can use it in a constructive way, you can use it to educate yourself, and, and even just to relax. You know, my daughter, said 'I'm relaxing, mum', one minute she'd be watching a really good campaign and stuff, in a minute she'd be watching a dog fooling, you know, doing something silly. [W3P4]

It's even like relaxing at telly. You know, she would, she laughs and she's made happy through it, so...[W3P4]

I don't know some people find it easy to switch off, I think. My husband just watches TV, and I absolutely, I always, I'd divorce him because of it [laugh].[W3P1]

I think the only thing that I can really switch off to is music, probably.[...] Like last night, literally. Must've been about, must, just at my house, must've been dancing about three hours non-stop. [W3P5]

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When I need some calming, I'm just driving around... [W3P3]

[listening to radio] The one I've got, really, haven't, you know, that, it's been, it's really quite calming when driving... [W3P3]

But people have said to me, oh, you know, your daughter's autistic, and you know, she's disabled And you probably can get some top up benefits and I'm right I'm going, well, I'm not, I'm not going get that, yeah I'm not gonna get that. Because we can manage with what we've got no I'm not gonna play the system because that's the guilty me... you know [laugh] [W3P4]

I, I used to get DSA, uhm, it wasn't... DL, it was disability [inaudible 1:04:44] It went to my mum and we basically used it for the house sort of thing... [W3P5]

So, uhm, yeah, luckily, uhm, I managed to apply to the, the higher level of maintenance loan that, you know, the nine grand option so at that... [W3P5]

There's, there's people at uni to help you, like tutors, you need to ask. [W3P1]

Yeah. I asked my academic advisor yesterday and I understand it now. [W3P5]

Definitely ask those people because you better off doing that than just sit, that's what they are there for. [W3P1]

But you don't, don't always like to ask, do you, it's something like, you just sometimes think, my daughter says I'm terrible, I never ask for help, you know. It's been big thing for me to go and say I wanna cut my hours back and you know, and you do feel like a failure if you can't cope with doing everything. [W3P4]

Me, when I get stressed, I think, I'm gonna have a drink. [...] I just think I can't, well, I can't take this... and then [gesturing like opening a bottle and drinking, mimicking the sound of

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drinking]. And then, for whatever it is, that trick, it says to me, I'm relaxing now. Even though it's rubbish cos then you'll drink too much, one might drink too much [...] [W3P1]

The next thing is the cigarette, perhaps, you know, I'm trying not to...[W3P1]

I always smoked, and not now, but there's always that, like, oh I could really have one, it really would relax me [...] [W3P4]

But, you know, substances, some, this, this, I bet this, you could switch off, for me, I'd be have to be very careful with lolling and [inaudible 1:22:42] things because... I, I think that I can just go to a different mindset or different place where I'm not gonna feel pressure, and other issues, whatever it is... just takes it away momentarily. [W3P1]

[...] you know, people do say, it's so easy to change about alcohol, but I do have one glass every night and just to have that one glass is nice. When it's slightly more it can bring acid on but I still do it because it's... alcohol is nice, isn't it. [W3P4]

It depends, it depends where the stress is at the time. But a change can relieve the stress. [W4P1]

Even a different source of stress, if you have a sustained source and then your source changes, even that's kind of a relief. [W4P3]

W4P1: Well it's time to... I mean...

W4P6: Prioritise.

W4P1: Prioritising...

W4P3: Prioritising which things...

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W4P1: You know, choosing what's more important.

And it's sort of exercise, going for a walk, clearing your head, going for a run, playing football, whatever you wanna do, it's because, it goes back to the work-life balance. If you've got the time outside of work particularly, if, if you are working, then if you do, if you're doing those things that counteract, you know, they say you release endorphins when you play sports. That's a positive stress. It can reduce the amount of stress you've got.[W4P6]

So if you've got a stressful day at work, it can be anything, it can be listening to music, it just, it just takes that stress away, from work, takes your mind off the stress from work. I, I don't know if it's a positive stress but it makes you feel positive cos music makes you feel good. It does to me, anyway. [W4P6]

But equally some people, if they're feeling stressed they won't, they don't eat whereas other people might, may turn to food as a coping mechanism to deal with stress. [W4P2]

Coping, yeah. Drinking alcohol and drugs. [W4P6]

W4P4: Alcohol can always take that mind off things.

W4P2: Yeah, people seize on it.

W4P6: Yeah, it takes you away from it.

[about drinking] it's the chemical reaction that makes you feel good. [W4P1]

Not necessarily, uh, if you can't really fix it as such in a more reasoned manner, you have, you can only really try to take a step back from it, essentially, try to comfort yourself. Rather than do anything else. [W5P1]

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Because I, I've started to plan my future basically, uhm, and it removes a lot of the worry.  
[W5P1]

W5P1: Yeah, like comfort food...

W5P2: Comfort foods.

W5P3: Comfort foods and unhealthy food.

Uhm, venting.[...] Talking to friends. [...] Yes. It helps sometimes.[...] Uh, there's a saying, uhm... two people can solve the problem. So you might have some answers, and your friend may have some answers, so talking can solve stress. Sometimes. [W5P2]

And it [talking to friends] can help sort of organise things better in your head, it just sort of swirling about but if you get it out, then... [W5P3]

What I do is I tend to try to solve the source of stress. Cos of my, most of my stress comes from generally academic stuff, so I try to, try to do it, plan ahead, do it before the deadline, as quick as I can, so then I don't have to feel that stress. Or at that point if I do push to the deadline, I'd try to make it as quick as possible. And basically, rush it [laugh] [W5P1]

I think for those that are more artsy, writing down [...] Cos you feel like another, uhm, it's another avenue of letting it out. [W5P2]

Uhm, again it's [driving] something that... I can think without any other distractions, obviously apart from like the other cars and things but... [inaudible 54:39] but yeah, it means that I've got, there's nothing else around that I could try and focus on. [W5P3]

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So, there's like a more of, uhm, so you're concentrating on something else, focusing on something else. So... your mind is somewhat preoccupied but not enough to... especially like white noise behind...[W5P1]

W5P2: I think another thing people do is to go out, go to a party, or to friends.

W5P3: It's distraction.

W5P2: Yeah, distraction. Just keeping your mind off.

Oh, I just think when you're stressed then maybe you just don't plan a little bit of downtime to just sort of counteract it? And sometimes it's just lack of, you haven't organised it, you realised you'd been on all the time, and then maybe you just haven't taken time out, just to do something you'd like to do. [W1P3]

[...] not having enough time, then you can be really stressed cos you've got all the stuff and then you think like, oh, you know that you just go and do some exercise and took a bit of care you would feel better but you don't have the time to do that. [W2P4]

I mean, I'll write self-neglect there cos I think, I may, I know, if there's a lot of stress particularly if it's work-related or if it's time-related, so that's... and you'd kind of say, I think, I have to, you know, some things I have to not do at the moment, it's often those things, you know, you let the dishes pile up, you, maybe you haven't washed your, haven't done your laundry in, in a while, you don't see your friends, you stop exercising. You kind of sacrifice those things that are actually kind of about you first, before you start sacrificing the, the, the other demands. The same with the diet. Like, the diet, when it's really rather than going out and buying good, healthy food, and, and, and making nice meals for yourself, planning balanced diet, you just pick something up from Subway or something on the way home, and then... cos it's quick,

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it's easy and again it's your diet, it's your... [inaudible 28:02] to you that you, you neglect first. Or, at least, I do. [W2P4]

Yeah. I'm terrible for that. Like I know that I should have breaks but I all, I cannot take a 10-minute break without feeling I'm somehow letting myself down, when I'm in that sort of stress cycle. I have to justify that I need to take 10 minutes but, you know, you really should be working, but I need to take time off [sad laugh]. [W2P1]

It's a waste, it's like 'I'm wasting my time', you know, like taking a 10-minute break – 'oh, I'm wasting that [time]' [W2P2]

And maybe at the end of the day you're thinking, 'Oh, I've still got all the stuff that I need to get done, that I haven't done yet, it's like if I haven't taken that break earlier, or I did that stuff along with it, that kind of thoughts. And you punish yourself for taking that break. [W2P4]

But then the source of stress, it probably isn't going to go away if you just take a break. So, it's not as if taking a break reduces overall stress cos as soon as you get back to it, I'd say, OK, I'm gonna... Whatever it's gonna be, you'd, the stress is, the same stress is still there. Taking a break, I think, yeah, is just a bit more about self-care like, you know, I'm tired, I've been doing this for 6 hours, my head hurts, so I'm just going to take half an hour to go and have a walk or something. Like there's just... a little bit of recovery rather than the reduction in stress, if that makes sense. [W2P4]

If you're not up in the morning time, you don't have enough time to eat and then you don't have breakfast, and then you don't feel hungry, cos you're travelling, cos you're stressed and you're worked up, and it's the last thing on your mind to take care of yourself. Like when

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you're travelling, you're like OK, I've got this to do when I get in, and then you just don't think to eat. And it comes to the end of the day and I haven't done anything... [W2P3]

So, the actual time that you, it's about time, you know, it's not that I wanted to skip breakfast for example. It's just that, you do because there's other, other, other things. So, you kind of, you prioritise those things over eating, for example. [W2P4]

Um, I think you're talking about like if you're not gonna have time you're gonna go to, uhm... what's readily available, so you're gonna go to... uhm, what, there's Subway, stuff like that... [W2P2]

But this is just... even like for dinner, it's easier, it's easier, it's less hassle just to throw up a microwave meal in or a frozen pizza in microwave. Or something like this, it is not the best for your diet but... You just, yeah, you don't have to take any of the energy to actually prepare or cook food, which... I'm not saying it's particularly taxing but it, it's more taxing than say, right... now, you don't have to have dishes, you don't have to think about it, whatever like. Only you have to go to the shop for a minute to buy it, rather than, you know... it'll take a bit longer to, to do a proper shop, so... I think, yeah. Whether it's fast-food or buying just quick food to even cook at home. [W2P4]

Sort of take the stress and then... accept that it's there but find a way of tackling it, or managing it so it's not so overwhelming. Yeah, instead of ignoring it, or sort of doing something else that's negative like, I don't know, drinking or something, it's to, like, tackle it and maybe avoiding it is worse than if you're just sort of going head on and sort of just try and work it out. Get a bit of a system. [W1P3]

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I think often... often with me, I'm struggling to break it down and someone, so I sometimes need someone outside of me to say "OK let's move this brick, that's how we're gonna do it". So if I'm in my heap of rubble, let's, let's move this brick, this is how we can do it, let's move this brick and then we can work on that one, and we can do that that way. So I mean, so as you're saying it's sort of about... so when you're seeing the whole mass you feel it's out of control, it's too much to manage whereas if you can try to see the individual elements then it's easier to figure out a plan, whether or not you can do that by yourself or with someone else's help. [W1P1]

I'm trying to see it like, uhm, like a problem that can be solved in stages. And sometimes that works for me. So I'll write lists, put it in priority order, and then worry about the top stuff first, and then, hopefully, as I go through the list the level of stress I feel decreases. [W2P1]

As I've got older I'm better at knowing what makes me really stressed and just not doing it. So, I know that certain situations I will be in that will, that I don't enjoy, I don't want to be in it. Before I would have just done them because either I had to... but I'm much better at now saying "Actually, no, don't need to do it", so... so just, you know, you can't avoid everything but... sometimes you can, you don't have to be in that situation and just having better way of [1:02:29] dealing. So just for me confronting it, if I, if I don't deal with stuff it builds up and it just makes it much worse. But as I've got older get better at dealing with it or talking to the person who is involved or talking to people to try and find ways to deal with it. Or sharing experiences so that you have other people's ways of... [W1P2]

Do nice things, things that do make you feel good, and, you know, so... that specifically is an hour of my week but that hour where I go and sing, it... I don't [inaudible 1:03:26] isn't it, it restores me, it makes me feel happy for that hour but that carries on. So, and then that makes

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me better able to cope with other things. It doesn't solve anything, but it puts me in a better place. Social interaction [inaudible 1:03:40] makes me feel good. And that's something else I'm actually doing, as I got older as well, I actually really need to do something for me. [W1P2]

I think, uhm, also self-evaluations of sometimes is good because sometimes you might not realise, you're actually quite stressed until you compare [inaudible 1:04:01] some of these, I realised that bits of my life I'm actually quite stressed about when I'm stressed and other parts I'm not. And you, sort of, when you're talking about this you realise, you suddenly realise that oh, yeah maybe I do need to take a step back, or maybe I need to think of myself a bit more. I think sometimes you can be so stressed that you don't realise how much you are coz there's no comparative. Just, you know, until we start talking or making a list of... you realise 'Oh my goodness, just how much is overwhelming or how many things you've got to think about. Then you can suddenly see it and think 'well, what should I do about it?' [W1P3]

You can reflect on it, and... it, it's easier. I think it's, short-term can, can get better ways to deal with it, maybe next time you might handle it differently... [W1P2]

I think it would help a lot if people... cos lot of people consider everything they have to do as everything they have to do rather than just focusing on one thing. Cos if we only focus on one thing, it's fine, like, no matter what it is, it's not gonna be insurmountable. But then people like, you see if I'm talking to my mum, she does this a lot, and when she's getting stressed she's like 'oh, oh, I have had a really busy day at work', and that's fine, but sometimes it is 'and I've got to pick up T., I've got to do shopping, and I've got to do that', and like, kind of, your list of [inaudible 1:59:53] like everything. But if you focus on one thing, it's fine. [W2P2]

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I think people are just, uhm, thinking about, like, in the moment, like, one at a time, like. Forget, forget about all the other ones, I'm just gonna do this one right now. Like, you know what I mean, and it's, that's done. And then you can move on. To the next one. [W2P2]

I think like you do have to give yourself some redlines and say, you know, this is the time at which I will stop working every day. Don't work until 1 o'clock in the morning, like make sure, you know, by 9 o'clock at night, no matter what happens, you make sure you stop. And, you know, make sure you, you know, and the same for Sundays, I'll always, Sundays I always have to myself, no matter what. Because, you know, working 7 days a week is just stupid, and, and stuff, so... yeah. I think, like, realising and giving yourself some redlines of things, you know. If you're somebody who tends not to eat when you're stressed, then, you know, make sure that you have dinner, make sure that you give yourself some redlines. So you just absolutely don't cross. Cos once you start crossing them, or kind of treat them variable, then you you'd just do it all the time, and then you'll start feel guilty if you don't cross that line. As you were saying over there. So, but if you have something that you just always make sure that you stick to – that, that helps. [W2P4]

Yeah, it makes it a lot easier as well because of that if you get into like a routine with your eating habit or your sleeping patterns or whatever, if you get, if you're in the routine with it, then you're not really managing that any more, you, you already, that's already done for you to start the day. Like, you don't even, that doesn't have to be a thing, like it's not something I have to do, cos it's in your routine, you're already doing it, and then you can just focus on the new things that, like, working or whatever it is that you're trying to do. [W2P2]

I think will suit to accept that there are some things that you just can't, there are some things you, like, that would be stressful, and you can't actually do anything about. And that you can't

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just put those down because if you [inaudible 2:03:37] them, there's nothing you can actually do to improve that particular piece of stress. Uhm, to choose your battles, as well. It's what you can, you engage in. [W2P1]

It's being bigger picture, like it seems crappy now but actually if you step back and say 'when I look back on it in two years, is it gonna be important?' Any way it turns out, is it gonna be important in two years? [W2P4]

And it's, it's not gonna have, you need to know when to draw a line and say: that's happened, I can't get that time back, or I can't get that, whatever it is, back. And I need to go on as normal from here. Not trying to compensate for the past. Because then you'll never catch up, when yourself, you give yourself those stressing terms. That will, you know, ultimately lead to whatever it leads to, it's not gonna, not gonna lead you getting that time back, it's not gonna lead you getting, you know, you're unlikely to be able to run twice as far, and then continue your exercise, you know, using this scenario, you have to just draw a line, so I've missed that one, I'm gonna run tomorrow as normal, and, you know, all the time I'll be OK. [W2P4]

So, sometimes you have to take a little step back and think 'OK, what, what should this be achieving? Why, why my, why is this making me feel stressed?' Well. it's making me feel stressed because blah blah blah. OK, so how can I re, uhm... see, re-see it sort of like, as in 'OK, so how can I look at it differently to, to get something positive from it?' Or see it as a positive stress. So, sometimes we just have to take a, a step back from the negatives... to see... actually, is that necessarily negative stress? [W4P2]

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Is it something, actually, is this worth getting stressed about? In the grand scheme of things from top to bottom, if it's at the bottom – just let it go. Do you actually need... to be stressed about it? [W4P6]

So then it's about separating it all out... [W4P2]

Talking to somebody. Like you say, and then they can put a different perspective on it, then you think 'oh, actually, I didn't think about it' [W4P6]

Uhm, but what you do need to do is... come away from the things that are really causing you the stress, like my job, basically. [...] And then went back in to that role, and went to do something else which was horrendous, and that was the end of my... front-line career. Because your brain, my brain could not cope with the unpredictability of going to something so horrendous again. And I've seen a lot of horrendous things. Uhm, what I do now is... right for my brain. So, you have to make those decisions, uhm, based on your experience, what you can and what you can't do, you have to be really strict about it. [...] Because you've only got one you, don't you? And if you've got family, and you've got mortgage to pay, whatever, whatever your personal circumstances are, you've got to make sure that you're OK. [W4P6]

W4P3: I was thinking that it was a really good point to say that only you know what you can and can't do. And that's important to know. Once you know that, it's a lot easier. But I think that actually figuring that out that is one of the most difficult things in terms of managing.

W4P6: Or having, having somebody close to you that can see it and can you help through it.

W4P3: I think, nobody ever really figures that out on their own. Someone has to, like, say... do you know... you've got to stop.

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		It's just the extreme, isn't it, I think, you know... Where you, you've got nowhere else to go and then you need, you need help, basically. Whereas, it can be something so small that, like W6P2 was saying that if you get the right help, somebody can see you through it, you can just proportion, put it in proportion, and actually, well, actually that's not really that much of an issue. So it can be from here to here, can't it? [W4P6]
Negative effects	<p>Stress was associated with various negative effects. Many ways of coping participants reported were potentially contributing to ill-health (drinking, smoking, substance abuse). Interviewees (particularly those who had some first-hand experience of stress-related health problems or known someone who had) mentioned some physical health issues. They also talked about negative influence of stress on social relationships and performance.</p>	<p>I'd put the link there to the kind of mental illness node because that... it's not a good way to feel about yourself. It can be quite destabilising to feel that way about yourself. [W2P4]</p> <p>Uhm, stress can give you panic attacks. As well. Which is not as long-term, and not enjoyable. [W2P2]</p> <p>Similar to that, that can be, stress can cause eating disorders so anorexia obesity [inaudible 51:35] like that. [W4P5]</p> <p>Because of the stress that you're under, you're not maybe yourself? you start arguments or... stuff like that cause you're under that stress. I'm not sure how that relates to health actually but it's gonna affect your mental health potentially. [W4P6]</p> <p>I think it kind of fits in to disorganisation, it's, as you kind of getting more stressed and more disorganised you have less time to do all the things that you need to and that in itself is stressful. Because you're not doing the stuff you need to and then you're taking time out of things you need to do to do other things. [W4P4]</p> <p>It could lead to depression because it depends on how... well, how strong you are as a character. [W5P1]</p>

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It can lead to, you're not motivated to do anything again. So you don't, actually it links back to bath, you don't want to take a bath, you don't eat, you don't want to do anything. [W5P2]

W5P3: the less you do, the more stressed you get because you don't do anything you're meant to do.

W5P2: Yeah. Or you just can't do it.

W5P1: Yeah. And you get more depressed.

I have Behcet's disease which is an incurable autoimmune condition. Uhm, when I flair, it increases the amount of inflammatory proteins in my blood. Unfortunately, stress is one of the causes of that [...] because it encourages my body to, uhm, my body's immune system to attack my healthy tissue. [W2P1]

Recently something happened that pushed me right into a flair, I'm flaring now, and I'm in a lot of pain but... [W2P1]

And he, when you saw him, he was always like really friendly, happy, smiley guy, he really loved what he did, and he felt like he was making a difference. But, he ended up going for like a health check at work when he was 50, and while he was in the health check he had heart attack. And luckily they managed to bring him round but they found that the amounts of stress of all those dealing with bereaved families over and over again had actually destroyed his, you know, some of his arteries, and he had to have all these bypasses and stuff. [W2P1]

Uhm, it pushes up your, your blood pressure, uhm, if you combine that with unhealthy diet, then maybe you've got more risk of narrowed arteries. Uhm... less sleep, that's not meant to

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be good for you, is it? Physically it's meant to be quite damaging, and then... It creates all the perfect storm with... hormones. [W2P1]

[...]the impression of the link between stress and particularly cardiovascular issues. Generally, stress is the negative to health. [W2P4]

And digestive health is key to so many other areas of, of health. And I think that it's um the relationship between stress digestive, uhm, digestive health on stress [inaudible 1:15:47] It's reciprocal because if you don't digest properly then you get quite stressed, and if you are stressed then you don't digest properly. Um, it's a massive thing for me, this is like, like... zone... [W3P1]

IBS symptoms, IBS totally, but it's just my zone of, just discomfort. And I've noticed that when I get stressed, I don't digest things properly, eating quickly or whatever, it's just...

I think if you have cancer [fear?], they say stress is a contributor to cancer [W3P4]

Yeah, lack of sleep, cos you're probably so stressed about like... deadline, whatever, something in your life, uhm, you get so... stressed about it that you barely sleep. [inaudible 1:17:22] at all cos I'm like 'oh, I'm, I'm too busy to even eat', uhm... and then you don't [inaudible 1:17:30] so it's very easy for you to get the cold, the flu, any other illness. Uhm, all up even, something as simple as, because you're tired and you're stressed, not paying attention, then you like fall over. [W3P2]

I know from my personal experience that, uhm, when I'm stressed about something, I won't help myself sleep, I won't even think about trying to drink any water, or if I do eat, I'll eat the most unhealthy thing [inaudible 1:18:56] Uhm, and then... because of that... I'm, I don't

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remember like take vitamins, it's just... yeah. Just generally letting yourself getting run down.  
[W3P2]

People say, sorry, people say that, uhm, all physical symptoms are caused by, uhm, imbalanced emotions, or mental, uhm, physical problems are caused by... built-up, pent-up emotions, or stress, or worries, all the, you know, if you're holding something back emotionally, then it presents itself with the physical symptoms. And, uhm, you know, if you get a nail, a nail bed infection, all that means that you need to change something in your life...  
[W3P1]

[...] if you don't get enough sleep, you're not having a balanced diet, you're not eating, you're getting what is not excellent nutrition, then of course, uhm, the immune system is not going able to fight off this kind of... [W3P1]

Uhm, we're not giving ourselves that, that time. And then that causes us to feel stressed, and affects our health, I guess. [W3P1]

[suicide] I must say that's the consequence of, you know, somebody's right at the edge, uhm, of their stress levels, uhm... And lack of sleep, you know, crush your car, that sort of stuff.  
[W4P6]

You know, if you're really stressed then it's almost like your immune system is down and everything like that and so all these illnesses and viruses will attack you, so it's... [W4P2]

If you've got a long-term immune disease then it's likely that that stress will make you ill. And stop you doing your job. [W4P6]

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While with the long-term stress you can, I think it's long-term stress that can wipe you out. Say, your adrenals stop functioning in the same way. [W4P3]

Uh, yeah, headache. Muscle tension. [W5P3]

W5P1: You could agonise over something that you've done previously, like a bad choice, and then 'I could have done it better, I could have done it... uh, fix this, fix that, fix that, and then basically, when you try to go to sleep, that's all you can think about.

W5P2: Sleep is very important for the body. The body needs to rest to function. If you don't get rest, you can fall ill.

W5P1: Yeah. You could die from the lack of sleep.

I think, I know what those things can lead to but not what stress can lead to directly. Like headache can lead to more serious problems, muscle tension can lead to more serious problems but I don't see any directly linked... right now. [W5P2]

Oh, no, I have heard, uhm, that has made someone's heart weaker because when they got a phone call from like a business, uhm, someone prankering them saying, you have a report due in tomorrow, or like in a few days' time, they suddenly felt their heart constrict or something like that, of the adrenaline. It's not really a heart attack, it's just raising blood pressure or... [W5P1]

Snacks and chocolates, and... then put on weight, that causes stress again. [W5P2]

Well, you can, a lot of people are off work now with stress disorders which has passed as a notice as you can take sick leave for. [W4P3]

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I'm just seeing the stress, arguing, crying... [W5P2]

Yeah, I think it relates also to your earlier point that when stress gets to a certain point, you just kind of stop doing anything. And you use breaks as an excuse. I, I definitely do that. I don't really think, I've got to go round, and round, and round, I'm really stressed and need to take a break, and then I don't do anything for a few hours. And it's not really that I actually physically need a break, it's just I'm using it as an excuse to not face my issues. So, like I think, something that I can't even care for [thinking] of, of, I don't think 'oh, let me take a break'. Actually, I think of 'do I actually need a break or am I just procrastinating?', 'Am I just putting off dealing with what I have to deal with?' [W2P4]

I think it goes back to not, not having the right balance... it affects your ability to cope with stress. So not eating or eating too much and you can't, you're not prepared nutritionally to cope with stress. [W4P1]

If you're stressed, your immune system goes down, isn't it? So you can get a cold, or... I mean stress can lead to all sorts of things, cancer, physically, cancer, all sorts of things, heart attacks, do you [know what I] mean, from stress. [W0P2]

I absolutely destroy my fingers when I'm stressed. I have a thing like I pick up on smooth bits of skin, uhm, which I normally just do anyway but it's like I don't realise I'm doing it. But when I'm stressed it's like way worse. So... I can normally tell if I'm stressed because suddenly, they'll like, they'll bleed a lot more when normally I don't get them to bleed. But then suddenly they're bleeding a lot, and like, yeah, and I'm doing that to my lips at the moment and stuff like that. So that's kind of like more physical manifestation, I guess. That it's not like, uh, a horrible one, right? [W0P3]

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Yeah, well, the other things might be like it might not let you sleep as well as you normally would. Yeah. Which again might get into the immune system and things, uhm.... Or yeah, maybe a little comfort food but maybe that's not as direct. So you don't eat that well or you don't get the right things. [W0P1]

Yeah, stress, blood pressure gets, gets higher. Ulcer, stomach ulcer from stress [W0P2]

I worry about that and don't sleep well, and then I'm tired which makes it harder to do tasks in kind of comparison... but it's not, not just about time. Yeah, and I think, like, people gain weight which is like a direct physical effect, because, yeah, you either don't eat or eat too much, you snack, you [eat] comfort food or whatever. [W2P4]

When my husband gets stressed, he gets like a really bad stomach, he gets like irritable bowel kind of symptoms and pain and that kind of thing. I can always tell when he's stressed, that he says his stomach hurts. And my, my daughter gets like that as well, actually. She'll complain of stomach ache, when I know she's building up to something at school or... [W2P1]

I think with my daughter yes, the tension, she gets tense, physically tense, and [inaudible 1:51:29] she has a headache which is probably caused from her being tense. But with my husband it's more like pain and that kind of... rather than tense, the actual discomfort. [W2P1]

Then like chronic stress... you see in, like, politicians or prime ministers, or presidents, like hair loss, and aging and skin wrinkles. [W2P4]

W2P4: And sometimes, I think, certainly from my perspective, kind of deep, chronic, long-term stress, over a period of years, then certainly, you know, physical kind of, physical toll on it... It's, I come, I come from a military family, you see, like soldiers and stuff, and young

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people that look so much older than they are cos they have had like such stressful jobs, or they go, have gone through so much.

Interviewer: Uhm. Any idea how stress actually does this to you, or to other people?

W2P4: No, I don't have any idea.

W2:P1: It... cortisol is at least a part of it, I think.

I've known heads there's people getting stressed and then, you know, picking up more colds and flus, and for them their immune system maybe it's been depleted by stress. But with me, it makes mine go inside, mine's already inside and it just gets more inside. Yeah, people are more prone to picking up bugs. [W2P1]

Like you hear after you had, you, I've had this happened to me. You get, you are going through such a busy, stressful period, maybe you work hundred hours, at your job, or maybe, you know, some... you're moving house, or some of the, something, that's stress, and you kind of, you fight and you get through it, and the once that period is finished, then you get sick. [W2P4]

Like physical illness, like actually getting physically ill after that period [of high stress]. Like I've got no idea, honestly, I don't know anything about how the actual physical interaction, how it happens but like, I'm sure that's the thing. [W2P4]

[...] when they animated Snow-white and the seven dwarfs at Disney, they did it for 4 years which at the time it was like, like ground-breaking. And all the animators were checked into like hospitals after four years because it was like so intense. And it was only afterwards obviously because they'd got on and then they all went to hospitals. [W2P2]

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Some stress is OK

Participants saw stress as common or even inevitable. In general some stress was normal in everyday life but excessive/long-term stress was

Uhm... and if you, like I said before, you've got an auto-immune disease, for instance, if you've got something that's causing a lot of stress, that can make you unwell... make people quite unwell. [W4P6]

I would say that previously stress has had a really bad impact on my health. Uhm, and more recently it's had, it's... my, a lot of time and energy has gone into reducing stress for the sake of my health. [W4P3]

Because for the first two years of my degree I worked almost full time, uhm, as well as studying. Uhm, which was manageable, but I was really stressed, and over 2 years it did have a big impact on my health like mentally and physically. [W4P3]

Your brain is working, isn't it? And then you can't sleep cos your brain... Won't switch off, wakes you up, uhm... [W4P6]

Another thing – lack of sleep, being tired, means you can't manage stress that would normally be managed but it becomes unmanageable if you can't, you haven't slept. [W4P3]

Just, I'd, then stress produce things in your body that physically, uh, uh, disable your ability to sleep properly. So, it's a chemical reaction. [W4P1]

You have to, you have to just suppress that to sort situation out, then afterwards you can go and... like rant at your colleague and swear a lot, or... do whatever is you need to do. [W2P1]

[...] anything, that's all in your life that could contribute to, to giving you stress. [W2P4]

We're probably, uhm, [inaudible 45:21] cos 'oh stress! I can relate to that!'.[W3P4]

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described as harmful. Participants talked about some positive aspects of stress, such as motivation and acknowledged that some people may thrive under stress/pressure.

I think everyone's stressed. I don't, I don't know anyone who's not stressed but I think it's degree of stress. [W0P3]

That was a nice thing, actually, that... although there are different types of stress, we all experience it. [W1P2]

I think I also shows you that if you're like, say, it's job, a relationship, a friendship or something, it can... everything is potentially, can stress you out, if it's stress that you know you can deal with, the that's fine. [W3P2]

If I get overly stressed then, then I'll just shut down just like... uhm, with the self-worth and like, you just kind of like you, you can't do anything when you get to that level. [W2P2]

W4P6: Yeah, they say, don't they, if you've got a bit of nerves, you'd do better.

W4P3: I think that's short-term stress. While with the long-term stress you can, I think it's long-term stress that can wipe you out.

Yeah, the intensity, how long for did, you know, it... no one can have that 'get up and go' feeling for a long time. Even me, you know [laugh] You know, it wears off. [W4P1]

Uhm, I think the same thing, like they are types of stress where if you've got nothing to do and that can be just as bad as if you've got too much to do. [W1P3]

Well, I think boredom can be stressful for people too. And that's what motivates them to be creative and do something. And that... and, and the overthinking part, I totally agree with. When people get, some people, they get bored, I'm a bit like that, is, you start to feel like I have to do something, I need to do something, this is not right, I don't feel good. [W4P1]

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Well, I was thinking it just can be a positive thing. So it can drive you to achieve things and do things and it can be exciting. It isn't necessarily [bad] [W1P2]

W1P3: Uhm, I think the same thing, like they are types of stress where if you've got nothing to do and that can be just as bad as if you've got too much to do. So I think there's sometimes like a nice balance, and I think sometimes a little bit of stress can sort of what you said, create the excitement or... you know, sort of make you think 'I've something got to do, something got to plan...

W1P2: Push you to do something better...

Makes you have sort of more of positive feelings, positive chemicals where... [W1P3]

Especially afterwards when you're not feeling so stressed you have that sort of pride for achievement. [W1P3]

Well, for me when I get stressed, I get very, uhm, motivated, to a point. [W2P2]

Uhm... could be quite positive, maybe. Because, uhm, if... if you had no stress, then you'd be bored... uh... you wouldn't be doing anything, like, like to an extent, maybe, I don't know, or you can get into like very much routine, like you're very accustomed to... I don't, I don't know, most people... some might like it but I wouldn't wanna do that, if it, if there was like zero, uhm, just cos it would be... dull. And I think that could be worse for your health in longer term if there's no variation. In what you're doing. [W2P2]

if you have no stress because you have no job, no... no anything, that's all in your life that could contribute to, to giving you stress. Like that situation is, could be unhealthy. [...] People who might sit, you know, still live with their parents who provide everything for them, they kind

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of just sit in the bedroom all day and play video games or that kind of stuff. That's certainly not healthy. Whereas kind of the pressures of oh, you've got to get a job because you need some money and stuff, it forces you to be active, or, I'd assume, to develop and grow and stuff. So, in a way, at least stress from those pressures like you need to earn some money so you can pay some rent and buy some food... You know, that forces you to get a job. [W2P4]

It just keeps the tasks in your head. Like they know... if you're stressed, you know what you need to do, like I've got this, this, this, this to do. So it's like kind of a reminder. [W2P3]

No, because it could be like that little low level down there. If you'd be around here – that's fine. [W2P2]

I used to, when I was younger, I used to love stress, I'd put myself in stressful situations because I would love challenges. And if people told me I couldn't do something, I'd be the person that would get and do it, uhm... No physical challenges but like, I went for a job, cos my sister said, oh you wouldn't be able to do that, they'd eat you alive and blabla... I was like 'right! I'm gonna do that and I did it and I made a success of it, and I, I took on challenges, and now...[W3P4]

I enjoyed the stress. Yeah, I'd work in, uhm, sales jobs, I enjoyed that. [...] But I think that's what drew me to it, I used to enjoy stress and being busy. [W3P4]

I've recently not applied for a job because I thought it would be boring. Even though, when I saw it, it was my dream job, and I'd like to see myself doing that job. [...] Uhm, but yeah, because I thought 'hold on'... I quite like being under pressure...and having to get things done, and... managing it well, not too lazy [W3P1]

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I feel like, if, if you're stressed about something and then you beat it and get it done, it's kind of 'wow', you know. Look at me, I can actually do it. [W3P5]

So sometimes we do pat ourselves on the back for having dealt with a stressful situation. [W3P1]

If you're in a situation and the stress is too much, it shows you that some, something needs changes [inaudible 1:35:25] instinct, stress has come from somewhere and you've got the fight or flight response, which shows you what path to take. [W3P2]

So sometimes we take on stress because if you haven't got stuff that is busy and stressing you then god, life would be so boring, and I, definitely bored, boredom is one of the worst things to have, you're wasting your time. [W3P4]

I think the opposite. I think stress can motivate you to... and focus you on what you need to do. [W4P1]

Oh, I can only, I work better when I'm really stressed, uhm. So, I'd procrastinate, procrastinate, procrastinate, and it's only the stress of a deadline that will actually make me to take, to actually do some work. [W4P3]

I don't think stress is necessarily a negative. [W4P1]

Some people work better under stress and that's what you [S] were saying, so they work better under stress, they perform better under stress and they... you know part of the saying is 'if you want something done ask a busy person' because they are more likely to, to get it done. But positive stress can be like in sports, in some sports you need that almost stress to be able to perform so that's how I see positive stress. [W4P2]

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I mean stress isn't just a mindset. It's, you go and do exercise, you're physically stressing your body. You're going for a run - you physically stress your body. And that's positive. Can be. [W4P1]

In the situation that is particularly stressful at work or something, and you to get positive and you do, do what you need to do, it can be very rewarding to have got past that stressful situation. And motivate you to be able to do something that you didn't think you could do previously. [W4P4]

You get, you get endorphins from, from stress as well. It's why we bungee jump, jump out of aeroplanes, ride on rollercoasters, watch scary movies... [W4P1]

I can feel very, very stressed but equally I, I can feel positive because it's all about, well, if I'm feeling stressed I'm doing something right. I know that sounds a little bit... like that but it's sort of like, yeah. [W4P2]

Yeah, you're organising your wedding. That's going to be very stressful but it's a like you said, it's a positive thing that you're doing. [W4P6]

But if you have got, everything's free, you've got no pressure, that kind of stress, then you feel great, you create your own pressure to be creative and do something. [W4P1]

I think some stress will though enhance people's performance, like a top-level athlete...Under a lot of pressure to perform will do better than if they were just doing it in an empty room. [W4P1]

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if you're in a play or you're just about to go on stage, you're going to be under some stress but that is generally a positive stress cos you've got butterflies, you're ready to go on stage and perform. You can have the stress but that's, like you say it's a positive stress. [W4P1]

Well, and you do, you actually do a better job. Because of that stress.[W4P1]

Yeah, they say, don't they, if you've got a bit of nerves, you'd do better. [W4P6]

Oh, uhm, that's if... cos stress for me that's sometimes when in high school, college, that's normally when I, I get more motivated with... cos when I, [inaudible 34:37] near the deadline, so like the day before, I get stressed 'I didn't do it' and the teachers expect something from you, rather than nothing, so... [W5P1]

Yeah, you've got, you've got positive stress, haven't you? So say for example, uhm, you're getting married and you really love your partner. That's really positive but... it's a positive stress cos you're rational and trying to get everything done But it's, it's a good, it's, it's a good situation, isn't it? [W0P2]

It can make me more proactive... with certain things. [W0P3]

Yeah, yeah. So, I don't know if that's what you mean by like positive stress but it can make you more proactive in, not just motivation-wise but it was just like, oh, I need to like... sort this out. [W0P3]

I mean... can, can we use an example of like our vivas. That's really stressful preparing for it but, by God! When we've done it and we've passed it's like it was worth it. [W0P2]

I think you've got to be building up for something worthwhile that is... that you're gaining from it. So, for example when we're stressed coz we're living pay check to pay check... you just

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think well I get paid but it's not gonna be much. I pay everything and then here we go again for the next month, here we go for the next month. Whereas when you're stressed because of your deadlines, you're building towards your PhD so at the end of it it's a great outcome because you've got your PhD. So I think, maybe... again it's how our minds are built. We have to have some sort of reasoning behind what we're doing and when we get stressed about the PhD we go 'oh, it's so overwhelming, I don't think I can do this anymore!' But at the back of your mind you have it, I'll just push myself, look what I get, look at the reward! I'd become a doctor and open doors - I can go on to do more things. [W0P2]

So, chaos theory is that, uhm, an organism when it's under stress or under pressure, it, it either adapts within the stress and comes out more dynamic. Like, stronger for it. Or if the organism can't cope with it and it dies, and they call it... So, it is thrown into chaos, it deals with it, it grows to be something more evolved. If it can't cope with it, it dies. So, it's like survival of the fittest. [W0P2]

Uhm, yes, it's stressful having to go and open your letters but the challenge is positive because once you've done it you feel better and so as a reinforcement, just starting something, just starting one thing, and maybe you don't start with the letters, maybe you just start small you start, you start with clearing the coffee table. And so your CBT practitioner works with you, one step at a time to build up to the thing that you thought would be less stressful to deal with. [W0P1]

I was gonna say I thought of a point when I was waiting that for me personally stress that I put on myself, it's better than stress that people put on me. So if I'm like "oh I want to go to...", for example, "oh, I want to go out", where I want to do this, I want to organise a birthday party or something. And that's like excitable stress and I put that on myself to achieve. But when

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someone goes “oh, you have to organise this party by this deadline”, you have to do it this way, not your way - that's sort of like negative. [W1P3]

I think, you know, I don't know, of doing exam, or audition, or something where the worst thing is you don't get a part but the stress pushes you to do better. To work harder or to practice, or... something [laugh] [W1P2]

I think it's, I don't know, stress affects everybody very differently but I don't [think], personally, stress is that awful for me. It can be but not often. Mostly it's motivator, I think, to deal with it. [W2P2]

Actually, I'm a firm believer in positive stress as well as the negative because sometimes we have to look positively at... the negatives. [W4P2]

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## Appendix 23. Understanding stress – survey items

### **Instruction:**

On the following pages you will see short statements. Please indicate to what extent you agree with them.

### **Response scale:**

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Somewhat disagree
- 4 – Neither agree nor disagree
- 5 – Somewhat agree
- 6 – Agree
- 7 – Strongly agree

### **Statements:**

1. Even in a stressful situation a person can experience positive emotions. (POS)
2. Stress should be avoided at all costs. (POS)
3. Stress can be enjoyable. (POS)
4. Stress can affect a person's health because it makes them smoke, drink, or eat unhealthily. (BH)
5. Stress can affect a person's health because it makes them tired. (BH)
6. Stress can affect a person's health because if they are stressed they have no time to eat properly or exercise. (BH)
7. Stress can affect a person's health because it makes them care less about their health. (BH)
8. Stress can affect a person's health because it makes different bodily systems work ineffectively which may lead to physical illness. (PH)
9. Stress can affect a person's health because it makes people more likely to catch a cold or a flu. (PH)
10. Stress can make a person more likely to experience depression or anxiety. (MH)
11. Stress does not cause serious physical health issues. (BH)
12. Stress can make people physically ill even if they have a healthy lifestyle. (BH)
13. If a person is stressed, it is because they worry too much.\* (IR, originally IR-S)

14. It is the person's own fault if they get stressed.\* (IR, originally IR-S)
15. If someone gets too stressed it means they are weak.\* (IR, originally IR-S)
16. If a person gets too stressed it is usually because they live in a poor area with difficult social conditions. (SOC, originally IR-S)
17. When someone is stressed, they should do more to deal with the situation.\* (IR, originally IR-C)
18. If someone gets stressed it is usually because they have not developed appropriate coping skills.\* (IR, originally IR-C)
19. Employers and politicians should strive to improve living and working conditions to help people cope with stress. (SOC, originally IR-C)
20. It is much more difficult to cope with stress if a person lives in a poorer area or has difficult social circumstances. (SOC, originally IR-C)
21. If a person gets stressed, they should just put in more effort and carry on. (SC)
22. It is absolutely fine to slow down and take time for oneself in times of stress. (SC)
23. When having a stressful time, a person should just keep on working hard. (SC)

\* reversely-scored items (inconsistent with scientific perspective)

**Categories of statements (abbreviations):**

Positivity of stress (POS)

Health Behaviour (BH)

Physical health – direct pathway (PH)

Mental health (MH)

Individual responsibility for getting stressed (IR-S)

Individual responsibility for coping (IR-C)

Individual responsibility (IR)

Social determinants (SOC)

Self-care (SC)

## Appendix 24. Metaphorical description “Ship”



A person dealing with life's stressors is like a sailing ship. The ship has to react to and withstand different weather conditions and may need to go through dire straits. If the sea is completely calm or there is just a mild breeze, it is nice and easy. But without wind, it is not possible to sail, and if the calm lasts for too long the ship will fail to arrive at the port. Strong winds might be dangerous and require 'all hands on deck' but they help the ship to get to the destination quickly. Just as sailing fast can be exhilarating, even though it requires a lot of effort from the whole crew, people can enjoy working hard to deal with difficulties on the way to achieving their goals; this gives meaning to their life and helps them develop new skills.

Just as the captain sends the crew to reef or hoist the sails and adjust the course when needed, such as in a narrow passage or when a storm is gathering, the human brain and body mount a stress response and use stress hormones such as adrenaline and cortisol to cope with stressful situations. However, long-lasting or frequent storms at sea can fray the ship's ropes and sails, damage the rudder and destroy the navigation instruments. Eventually, the weakened construction will start leaking and the ship may get irreversibly damaged or even capsize. Similarly, if the brain and body systems have to respond to too many demands they may get dysregulated and damaged which may lead to a variety of physical illnesses and chronic conditions. For example, just as gales may overstrain the ship and its crew, leaving it more likely to break down, stress may make the immune system work less well, leaving the person more vulnerable to bacteria and viruses or even make a person age more quickly.

Sometimes, the ship may be showing signs of wear and tear. It may not have been repaired when damaged or low-cost materials might have been used to fix the damages. Just like the ship, a person might be in a disadvantaged situation from the start. Living in poverty, having no access to health care or education, or experiencing neglect or abuse may make people more fragile and not well equipped to deal with everyday stressors and navigate through their life. Just like a

harbourmaster can aim to provide the best harbour facilities and experienced engineers to make sure the ship is seaworthy, government and businesses should work towards improving people's living and working conditions to help them sail smoothly through life.

Navigating through the ocean is more difficult if the ship has already been battered by gale-force winds. In the case of poor weather conditions, no one should blame the ship or its crew if it takes them longer to get to their final port. Just as the crew would understand that the ship will need more time to get to the harbour safe and sound, people should be kinder and more forgiving toward themselves in times of stress.

When it is safely anchored at the quay either along the way or when they arrive at their final port, both the ship and its crew need a well-deserved rest. The run-down ship has to be taken care of and the weary crew have to recover before they set sail again. Similarly, people need to get rest and take care of themselves, especially during and after stressful times, to be ready to continue to ride the waves of their life.

## Appendix 25. Metaphorical description “Train”



A person dealing with life's stressors is like a steam train going through a hilly terrain. It might put some strain on the engine but at the same time, it offers pleasant views across the countryside. Just like the beautiful scenery can make even a long-haul, strenuous journey feel pleasant, people may enjoy working hard and dealing with difficulties on the way to achieving their goals; this gives meaning to their life and helps them develop new skills.

The stokers work hard to shovel coal into the furnace to heat water in the boiler in order to produce steam; this pushes pistons in the engine to enable the steam train to go along the tracks up the hill. Similarly, the human brain and body mount a stress response and use stress hormones, such as adrenaline and cortisol, to cope with stressful situations. Sometimes the train is forced to go faster than it should, which requires even more steam. However, adding more coal and water may lead to overheating and dysregulation of the gauges and the boiler may explode. Similarly, if the brain and bodily systems have to respond to too many demands they may get dysregulated and damaged, which may lead to a variety of physical illnesses and chronic conditions. For example, just like constant high pressure may overstrain steam pipes making them more likely to crack, stress can make the immune system work less well leaving a person more vulnerable to bacteria and viruses or may even make a person age more quickly.

In some parts of the countryside, train routes are not well maintained: the tracks are rusty and warped, signals are not working, and the train cannot restore water and coal supplies because there are no appropriate facilities. As a result, the train may not be able to move fast enough and may get delayed, break down or derail. Similarly, a person who lives in poverty, has limited access to health care or education, experiences neglect or abuse, may be more fragile and not sufficiently well equipped to deal with everyday issues and progress through their life. However, just like the railway company or the organisation in charge of the tracks can get engineers to mend the tracks, fix the signals and make sure that water and coal are available along the way, government and businesses should work towards improving people's living and working conditions to help them stay on track and move smoothly through their life.

Crossing the mountains is more difficult if the engine is worn out or if there have been storms for several days and there are mudslides or fallen trees. In such a case no one should blame the train if it gets stuck between the stations and cannot reach its final destination on time. Similarly, people should be kinder and more forgiving toward themselves in times of stress.

The train needs to go to a siding or a depot from time to time to get cleaned and checked. This provide an opportunity to identify and repair all the possible faults and damages and replenish all the resources. Just as the train has to be attended to and get serviced before the next departure, people need to get rest and take care of themselves, especially during and after stressful times to recover before they go full steam ahead through life's mountains.

## Appendix 26. Metaphorical description “House”



Dealing with life's stressors is like building a house. When people are dealing with numerous demands, they can feel as if they are 'under a tonne of bricks'. Yet, these same bricks could be used to build a house; this would require time and effort but it is pleasing to see a useful structure emerging from the chaotic mass of rubble. Similarly, people may be happy to work hard to deal with challenges which give their life structure and meaning.

Just as the construction manager assigns bricklayers, plumbers, or electricians to complete their specific tasks, the human brain and body mount a stress response and use hormones, such as adrenaline, and cortisol, to deal with a stressful situation. However, building a house may become really difficult. Heavy rain may make the construction site dangerously muddy and slippery. Some equipment, such as lifts, may not be working properly and so the workers have to carry heavy loads. Or the site manager may be away talking to suppliers and there is no one to oversee the works. Then, the construction site may become disorganised and chaotic which may lead to mistakes and injuries. Similarly, if the brain and body systems have to respond to lots of demands all at once, they can get dysregulated and damaged which may lead to a variety of physical illnesses and chronic conditions. For example, just like the overworked building team is at risk of serious accidents, stress can make the immune system work less well, leaving the person more vulnerable to bacteria and viruses or may even make a person age more quickly.

Construction skills are crucial when building a house. But it might be that the high-quality equipment and materials needed are not available. Or if the house is being built on unsuitable land e.g. wetland, flood plain, or eroding rocks, it will have a feeble foundation and may collapse. These issues are not necessarily the fault of the building team, but it puts them in a disadvantaged position and their safety as well as the integrity of the house might be compromised. Similarly, a person who lives in poverty, has limited access to health care or education, experiences neglect or abuse may be more fragile and less able to deal with life's challenges. However, just as the engineers can be brought in to dry the land out and build special supports for the walls to help the team build a safe and comfortable house, government and businesses should work towards improving people's living and working conditions to support people in building their coping skills and help them deal with life's challenges.

Sometimes, strong winds on the construction site can make it impossible to continue with laying the bricks. Or a storm might damage the electrical grid, causing a power outage at the construction site and so the works have to be put on hold. Just like the team would not blame themselves for the delay and would understand that more time is necessary to finish the job, people should be kinder and more forgiving toward themselves, especially if they are having a hard time in life.

To work smoothly and effectively, the building team has to get sufficient rest and the tools and machines they use on the construction site need to be cleaned and serviced regularly. Similarly, it is crucial that people get rest and take care of themselves during and after stressful times in order to recover and be able to build the life they want.

## Appendix 27. Metaphorical description “Orchestra”



A person dealing with life's stressors is like a symphony orchestra. A lot of preparation has to be done before going on stage and giving a good concert. It can be really demanding for the orchestra to master each part and first rehearsals can be really messy and chaotic. However, just as it is really pleasant and rewarding to hear how the chaotic noise made by different instruments becomes beautiful, harmonious music, people may enjoy working hard to deal with challenges and create harmony out of chaos in their life.

Just as the conductor directs each section of the orchestra to ensure the right tempo and balance of the sound, the human brain and body mount a stress response and uses hormones, such as adrenaline and cortisol, to cope with a stressful situation. However, if the orchestra is on a long tour and have to play very complex pieces of music every day, the musicians may become unwell and different sections of the orchestra may not work well together. The performance may then become an incoherent cacophony of sounds rather than beautiful music. Similarly, if a person's brain and body systems have to respond to too many demands, they may get dysregulated and damaged, leading to a variety of physical illnesses and chronic conditions. The overused instruments of the orchestra may also easily go out of tune and so the orchestra is more likely to give a poor performance. Similarly, stress may make the immune system work less well, leaving the person more vulnerable to bacteria and viruses or even may make a person age more quickly.

Having a musical ear and being competent at playing an instrument can help contribute to a brilliant performance. But, just as even the best orchestra cannot play a perfect concert if the instruments are not of the best quality or the concert hall does not have good acoustics, a person who lives in poverty, has limited access to health care or education, experiences neglect or abuse, may not be well-equipped to deal with everyday issues in life. However, sound engineers can be brought in to set up sound systems, the concert hall manager can provide the best quality sound equipment, supply high quality instruments and maintain them in good working order. Similarly, government and businesses should work towards improving people's living and working conditions to support people's coping skills and help them to perform as best as they can, even in front of the most demanding audience.

An orchestra of accomplished musicians can quite easily give a good concert. Yet, even the most talented instrumentalists need lots of practice and rehearsals, and still they may make

mistakes. Just like the musicians would not feel ashamed or guilty if they needed a break or had to spend a few more days on mastering a difficult piece of music, people should be kinder and more forgiving toward themselves in times of stress.

Rehearsals and concerts can be exhausting, and so the orchestra need to get proper rest and recover. The instruments need to be cleaned and tuned, broken strings replaced, loose keys fixed, the winds wiped and oiled. Just as the weary orchestra musicians have to get refreshed, and the instruments be serviced before the next concert, people need to get rest and take care of themselves, especially during and after times of stress, to get ready to perform at the next event on the stage of life.

## Appendix 28. Non-metaphorical (technical) description of stress



When dealing with life's stressors, an individual can have both positive and negative responses. They might feel distress and experience feelings of anxiety, hostility, and negative mood; or they may have positive feelings such as exhilaration, satisfaction, happiness, and positive mood in response to stress, particularly when they are trying to meet challenges which give meaning to their life and help them develop new skills.

In response to stress, physiological changes also happen because the nervous and endocrine systems in our body get activated and stress hormones such as adrenaline and cortisol, are released. These chemicals may have an effect on different tissues, organs and systems of the body including the heart and blood vessels and the immune system. These responses enable the body to adapt to the environment. But when stress is constant, the nervous system keeps on setting off physiological reactions which causes wear and tear on the body. If stress happens too often or for too long, the high levels of hormones can cause damage to the physical systems of the body, such as disrupting the healthy immune response. In the end these changes can leave the person vulnerable to viruses and bacteria, lead to a variety of chronic diseases and may even make a person age more quickly.

Individual characteristics and coping skills play an important part in helping the person appraise situations as stressful or not and dealing with them. But sometimes people are in a disadvantaged position through no fault of their own. Many stressful experiences are linked to an individual's social position and their relationships with others. This includes an individual's place in society, such as their social class, race and ethnicity, employment, gender, and age. Having a low status within society may itself be a source of stressful life conditions. It may also make a person ill-equipped to deal with everyday issues. Thus, social issues relating to education, housing, taxation, minimum wage, access to health care, occupational health and safety and environmental pollution regulations are all linked to health through stress mechanisms. For these reasons, actions at the community, organisational, and national level are necessary to reduce socio-economic and environmental stress.

The degree to which people cope well with stressful life events is an important factor influencing their well-being. Self-compassion may be a valuable coping resource when people experience negative life events. People who are self-compassionate are less likely to become overwhelmed in negative situations, they may experience less anxiety following a stressor, and are less likely to avoid challenging situations for fear of failure. Therefore, people should be kinder and more forgiving toward themselves in times of stress.

People may also recover better after difficult situations if they have more chance for rest. Getting rest and taking care of oneself in and after stressful times allows the person to deal with acute reactions to stressful situations and protects their health in the long run. Recovery can be seen as a process opposite to stress and strain, in which short-term reactions are alleviated and longer-term impairment of well-being is prevented. Recovery can be enhanced by taking a break when necessary, mentally disengaging from a stressful situation, taking part in leisure-time activities, and getting a good night's sleep.

## Appendix 29. Non-metaphorical text – control condition



Weather forecasts provide information about the weather expected over the next few days. While it is generally not possible to predict these day-to-day changes in detail beyond about a week ahead, it is possible to say something about likely conditions averaged over the next few months. Seasonal forecasts provide information about these long-term averages.

So far March has followed on from our extremely wet February, with plenty of rain and some wintry weather in places. However, this is expected to change as we head deeper into the month and meteorological spring. High pressure should become the main feature by mid-month, bringing more settled and drier weather to most. This will come with an increase in pollen later in the month, though. Next week should start dry with most areas seeing a spell of fine weather with light winds. Sleet or snow showers could persist in the far northeast for much of the day, before further cloud, wind and rain pushes into western areas later. Through much of next week there should be a change to more settled, drier and often brighter conditions than of late, particularly across southern and central areas. More changeable, windier conditions may persist across the northwest, whilst later in the period, these more changeable conditions may extend further south again. After a rather cold start, temperatures will probably recover to near normal or mild next week, with some pleasantly warm days possible despite some widespread overnight frosts.

Generally, more widely settled conditions than of late are likely to continue. There will, however, be some interludes of more changeable, windier weather, especially across the north, bringing spells of rain interspersed with sunshine and showers. Temperatures will be generally near or somewhat above average. However, as is usual when we go into spring, there will be large ranges of temperature at times, giving some frosty nights followed by pleasantly warm days as well as some marked day to day changes in temperature. Things will start to feel decidedly spring-like. Keep an eye on pollen levels for those with allergies, as weather will be favourable

for pollen during the second half of the month. There is also the possibility of spells of east or northeast winds bringing rather cold, cloudy conditions to eastern parts.

In the following month, rather unsettled and some chilly periods are expected. Showers or more persistent spells of rain probably affect all regions. It may be cold enough at times for showers to turn wintry, especially in northern areas where sleet or snow remains possible. Night-time frosts are possible. Unsettled conditions and close to average temperatures may continue for the next few weeks. Therefore, a mix of sunshine and showers, as well as days with more persistent rain is likely. Showers could be heavy and thundery with hail at times. Later on, the chances of warmer and drier spells increase, particularly in the south.

Closer to summer, warmer than average conditions are expected for much of the period, with a good deal of dry and increasingly sunny weather. Northern areas may well be less settled and cooler at times with showers or longer spells of rain. Temperatures continue above average for much of the period. The trend is expected to be towards less settled conditions with showers or longer outbreaks of rain returning at times.

## Appendix 30. Descriptive statistics and normality tests results of the outcome variables across conditions

**Table 30.42**

*Descriptive statistics and normality tests results of the outcome variables across conditions*

Condition		Section (Group of items)	Mean	Standard	Range	Median	Interquartile	Skewness	Kurtosis	Kolmogorow-
				Deviation	(min-max)		Range	(Standard Error)	(Standard Error)	Smirnov test
Comparison	Time 1	Positivity	14.38	2.82	5 - 20	15.00	4	-0.037 (00.24)	-0.02 (0.47)	.10*
		Health Behaviour	22.37	3.93	7 - 28	23.00	5	-0.95 (0.24)	1.36 (0.47)	.18**
		Physical Health	22.01	3.60	12 - 28	22.00	6	-0.41 (0.24)	-0.39 (0.47)	.12*
		Mental Health	6.08	0.92	2-7	6.00	1	-10.675 (0.24)	4.54 (0.47)	.30**
		Individual Responsibility	25.05	4.49	9 - 35	26.00	6	-0.78 (0.24)	1.01 (0.47)	.11*
	Time 2	Social Determinants	13.61	2.77	7 - 21	14.00	3	0.05 (0.24)	-0.11 (0.47)	.08
		Self-care	15.69	2.92	10 - 21	16.00	5	0.12 (0.24)	-0.69 (0.47)	.11*
		Positivity	15.62	3.11	6 - 21	16.00	4	-0.98 (0.24)	0.83 (0.47)	.15**
		Health Behaviour	22.33	3.05	13 - 28	23.00	4	-0.58 (0.24)	-0.01 (0.47)	.17**
		Physical Health	23.63	3.44	8 - 28	24.00	4	-10.34 (0.24)	3.24 (0.47)	.18**
Ship	Time 1	Mental Health	6.06	0.83	2-7	6.00	1	-10.54 (0.24)	4.98 (0.47)	.32**
		Individual Responsibility	25.29	5.07	6 - 35	26.00	7	-0.65 (0.24)	1.05 (0.47)	.09*
		Social Determinants	16.16	2.79	9 - 21	16.50	4	-0.53 (0.24)	-0.39 (0.47)	.14**
		Self-care	15.99	3.23	8 - 21	16.00	4	-0.18 (0.24)	-0.71 (0.47)	.10*
		Positivity	14.50	3.29	7 - 21	15.00	5	-0.29 (0.24)	-0.65 (0.47)	.12*
	Time 2	Health Behaviour	22.32	3.50	13 - 28	23.00	5	-0.44 (0.24)	-0.32 (0.47)	.10*
		Physical Health	22.32	3.06	13 - 28	22.00	5	-0.25 (0.24)	-0.31 (0.47)	.12*
		Mental Health	6.14	0.89	3-7	6.00	1	-10.05 (0.24)	4.54 (0.47)	.23**
		Individual Responsibility	25.32	4.09	10 - 34	26.00	10	-0.95 (0.24)	1.61 (0.47)	.14**

		Social Determinants	13.18	2.59	7 - 19	13.00	3	0.06 (0.24)	-0.02 (0.47)	.10*
		Self-care	16.16	2.64	7 - 21	16.00	4	-0.73 (0.24)	0.82 (0.47)	.17**
	Time 2	Positivity	15.58	3.18	7 - 21	17.00	4	-0.80 (0.24)	0.29 (0.47)	.20**
		Health Behaviour	22.41	3.28	12 - 28	23.00	4	-0.85 (0.24)	0.84 (0.47)	.15**
		Physical Health	22.85	3.09	16 - 28	24.00	5	-0.38 (0.24)	-0.53 (0.47)	.15**
		Mental Health	6.13	0.76	4-7	6.00	1	-0.62 (0.24)	-0.14 (0.47)	.26**
		Individual Responsibility	26.12	5.14	10 - 35	26.00	8	-0.57 (0.24)	0.35 (0.47)	.10*
		Social Determinants	14.79	2.76	6 - 20	15.00	4	-0.40 (0.24)	0.27 (0.47)	.13**
		Self-care	15.64	3.07	7 - 21	16.00	5	-0.30 (0.24)	-0.50 (0.47)	.13**
Train	Time 1	Positivity	14.75	3.30	6 - 20	16.00	5	-0.62 (0.24)	-0.55 (0.47)	.16**
		Health Behaviour	21.83	4.54	8 - 28	23.00	5	-0.88 (0.24)	0.28 (0.47)	.15**
		Physical Health	22.15	3.36	12 - 28	22.00	4	-0.40 (0.24)	0.07 (0.47)	.09
		Mental Health	5.99	0.88	3-7	6.00	2	-0.69 (0.24)	0.74 (.47)	.21**
		Individual Responsibility	24.77	4.38	13 - 33	25.00	6	-0.44 (0.24)	-0.08 (0.47)	.08
		Social Determinants	13.12	2.62	4 - 19	13.00	4	-0.59 (0.24)	0.94 (0.47)	.14**
		Self-care	16.26	2.75	9 - 21	17.00	4	-0.32 (0.24)	-0.45 (0.47)	.11*
	Time 2	Positivity	15.99	3.14	6 - 21	17.00	4	-0.88 (0.24)	0.73 (0.47)	.15**
		Health Behaviour	22.02	4.14	12 - 28	23.00	5	-0.52 (0.24)	-0.46 (0.47)	.12*
		Physical Health	22.97	3.09	13 - 28	23.00	4	-0.62 (0.24)	0.50 (0.47)	.13**
		Mental Health	6.03	0.88	3-7	6.00	1	-0.94 (0.24)	1.32 (0.47)	.26**
		Individual Responsibility	26.11	4.93	15 - 35	26.00	7	-0.18 (0.24)	-0.60 (0.47)	.10*
		Social Determinants	15.47	2.87	5 - 21	16.00	3	-0.79 (0.24)	1.40 (0.47)	.12**
		Self-care	16.75	3.08	9 - 21	17.00	4	-0.53 (0.24)	-0.52 (0.47)	.13**
Orchestra	Time 1	Positivity	14.69	3.25	6 - 20	15.00	4	-0.68 (0.25)	-0.11 (0.49)	.13*
		Health Behaviour	21.28	3.79	12 - 28	22.00	5	-0.45 (0.25)	-0.27 (0.49)	.12*
		Physical Health	21.43	3.32	10 - 28	22.00	5	-0.75 (0.25)	1.16 (0.49)	.13**
		Mental Health	5.86	0.99	3-7	6.00	2	-10.05 (0.25)	1.20 (0.49)	.28**
		Individual Responsibility	24.61	4.70	10 - 35	25.00	7	-0.36 (0.25)	0.25 (0.49)	.08
		Social Determinants	12.96	3.22	4 - 21	13.00	4	-0.06 (0.25)	0.06 (0.49)	.14**

		Self-care	15.98	2.81	10 - 21	16.00	4	-0.20 (0.25)	-0.49 (0.49)	.09
House	Time 2	Positivity	15.09	2.91	7 - 20	16.00	3	-0.82 (0.25)	0.24 (0.49)	.14**
		Health Behaviour	21.74	3.63	10 - 28	23.00	4	-0.91 (0.25)	1.01 (0.49)	.16**
		Physical Health	22.74	3.02	16 - 28	23.00	5	-0.27 (0.25)	-0.55 (0.49)	.13**
		Mental Health	5.88	0.99	2-7	6.00	0	-10.42 (0.25)	2.98 (0.49)	.31**
		Individual Responsibility	25.32	5.65	7 - 35	26.00	7	-0.73 (0.25)	0.46 (0.49)	.13**
		Social Determinants	15.13	3.34	3 - 21	15.00	4	-0.64 (0.25)	1.09 (0.49)	.13**
		Self-care	15.99	3.31	8 - 21	16.00	6	-0.41 (0.25)	-0.75 (0.49)	.12*
		Positivity	15.11	3.09	8 - 21	16.00	4	-0.41 (0.24)	-0.24 (0.48)	.13**
Control	Time 1	Health Behaviour	21.19	3.95	9 - 28	22.00	4	-0.67 (0.24)	0.49 (0.48)	.14**
		Physical Health	21.28	3.89	10 - 28	22.00	4	-0.70 (0.24)	0.61 (0.48)	.13**
		Mental Health	5.92	1.11	2-7	6.00	2	-10.25 (0.24)	2.08 (0.48)	.22**
		Individual Responsibility	25.37	4.00	16 - 35	26.00	6	-0.13 (0.24)	-0.06 (0.48)	.08
		Social Determinants	13.17	2.80	6 - 19	13.00	4	-0.04 (0.24)	0.06 (0.48)	.12*
		Self-care	16.07	2.64	9 - 21	16.00	4	-0.15 (0.24)	0.00 (0.48)	.10*
		Positivity	15.25	3.23	4 - 20	16.00	5	-0.48 (0.24)	0.01 (0.49)	.13**
		Health Behaviour	21.46	3.54	12 - 28	22.00	5	-0.36 (0.24)	-0.40 (0.49)	.14**
Control	Time 2	Physical Health	22.96	3.66	13 - 28	23.00	6	-0.64 (0.24)	-0.32 (0.49)	.12*
		Mental Health	6.03	0.89	3-7	6.00	2	-0.67 (0.24)	0.15 (0.49)	.22**
		Individual Responsibility	26.31	3.92	15 - 35	27.00	6	-0.17 (0.24)	-0.10 (0.49)	.10*
		Social Determinants	14.74	3.18	6 - 21	15.00	4	-0.59 (0.24)	0.45 (0.49)	.13**
		Self-care	15.77	3.08	10 - 21	16.00	6	0.14 (0.24)	-1.10 (0.49)	.13*
		Positivity	14.25	3.23	7 - 21	14.00	6	-0.09 (0.24)	-0.63 (0.49)	.09*
		Health Behaviour	23.20	3.48	13 - 28	24.00	5	-0.83 (0.24)	0.49 (0.49)	.16**
		Physical Health	22.66	3.26	13 - 28	23.00	4	-0.78 (0.24)	0.49 (0.49)	.13**
House	Time 1	Mental Health	6.30	0.72	4-7	6.00	1	-0.69 (0.24)	-0.16 (0.49)	.28**
		Individual Responsibility	25.66	4.65	5 - 34	26.00	6	-0.89 (0.24)	2.91 (0.49)	.07
		Social Determinants	12.97	2.82	5 - 20	13.00	4	-0.38 (0.24)	0.43 (0.49)	.12*
		Self-care	16.19	3.04	9 - 21	17.00	5	-0.45 (0.24)	-0.72 (0.49)	.14**

Time 2	Positivity	14.00	3.31	4 - 20	14.00	5	-0.48 (0.24)	0.01 (0.49)	.12*
	Health Behaviour	22.88	3.62	12 - 28	23.00	4	-0.77 (0.24)	0.42 (0.49)	.16**
	Physical Health	22.72	3.10	15 - 28	23.00	5	-0.38 (0.24)	-0.56 (0.49)	.13**
	Mental Health	6.22	0.71	4-7	6.00	1	-0.52 (0.24)	-0.21 (.49)	.25**
	Individual Responsibility	26.58	5.12	11 - 35	27.00	7	-0.38 (0.24)	-0.01 (0.49)	.06
	Social Determinants	13.84	3.13	5 - 20	14.00	4	-0.48 (0.24)	0.41 (0.49)	.13**
	Self-care	16.14	3.13	7 - 21	16.00	5	-0.41 (0.24)	-0.36 (0.49)	.09*

Note: \*p < .05 \*\*p < .001

## Appendix 31. Levene's test results

**Table 31.43**

*Levene's test results*

Measurement	Variable	Levene's F (based on mean)	df1	df2	p
Time 1	Positivity	1.05	5	597	.388
	Physical Health	0.97	5	597	.437
	Healthy Behaviour	1.49	5	597	.193
	Mental Health	1.81	5	597	.110
	Individual Responsibility	0.98	5	597	.432
	Social Circumstances	0.76	5	597	.575
	Self-Care	1.48	5	597	.196
Time 2	Positivity	0.36	5	597	.876
	Physical Health	1.04	5	597	.396
	Healthy Behaviour	2.09	5	597	.066
	Mental Health	1.03	5	597	.341
	Individual Responsibility	2.19	5	597	.054
	Social Circumstances	0.70	5	597	.628
	Self-Care	0.14	5	597	.982

## Appendix 32. Positivity – multiple and pairwise comparisons

**Table 32.44**

*Multiple comparisons – Tukey's test results*

(I) Condition	(J) Condition	Mean Difference (I-J)	Standard. Error	p	95% Confidence Interval	
					Lower Bound	Upper Bound
Comparison	Ship	-0.04	0.40	1.000	-1.17	1.09
Ship	Train	-0.37	0.40	.938	-1.50	0.76
	Orchestra	0.11	0.40	1.000	-1.04	1.26
	House	-0.18	0.40	.998	-1.32	0.96
	Control	0.88	0.40	.249	-0.27	2.03
	Comparison	0.04	0.40	1.000	-1.09	1.17
Train	Train	-0.33	0.40	.962	-1.46	0.80
	Orchestra	0.15	0.40	.999	-1.01	1.30
	House	-0.14	0.40	.999	-1.28	1.00
	Control	0.92	0.40	.208	-0.24	2.07
	Comparison	0.37	0.40	.938	-0.76	1.50
Orchestra	Ship	0.33	0.40	.962	-0.80	1.46
	Orchestra	0.48	0.40	.845	-0.68	1.63
	House	0.19	0.40	.997	-0.95	1.33
	Control	1.25	0.40	.025	0.09	2.40
	Comparison	-0.11	0.40	1.000	-1.26	1.04
House	Ship	-0.15	0.40	.999	-1.30	1.01
	Train	-0.48	0.40	.845	-1.63	0.68
	House	-0.29	0.41	.981	-1.45	0.87
	Control	0.77	0.41	.422	-0.41	1.94
	Comparison	0.18	0.40	.998	-0.96	1.32
Control	Ship	0.14	0.40	.999	-1.00	1.28
	Train	-0.19	0.40	.997	-1.33	0.95
	Orchestra	0.29	0.41	.981	-0.87	1.45
	Control	1.06	0.41	.098	-0.10	2.22
	Comparison	-0.88	0.40	.249	-2.03	0.27

**Table 32.45***Pairwise comparisons – changes over time across conditions*

Condition	Mean Difference Time 2 – Time 1	Standard Error	p	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Comparison	1.23	0.27	.000	0.71	1.76
Ship	1.09	0.27	.000	0.56	1.62
Train	1.24	0.27	.000	0.71	1.77
Orchestra	0.41	0.28	.145	-0.14	0.95
House	0.14	0.27	.608	-0.40	0.68
Control	-0.25	0.28	.372	-0.79	0.30

Note: Adjustment for multiple comparisons: Bonferroni

**Table 32.46***Pairwise comparisons – differences between conditions at Time 1 and Time 2*

Time	(I) Condition	(J) Condition	Mean Difference (I-J)	Standard Error	p	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
1	Comparison	Ship	-0.11	0.44	1.000	-1.41	1.19
		Train	-0.36	0.44	1.000	-1.66	0.93
		Orchestra	-0.30	0.45	1.000	-1.62	1.02
		House	-0.73	0.44	1.000	-2.03	0.58
		Control	0.14	0.45	1.000	-1.18	1.45
	Ship	Comparison	0.11	0.44	1.000	-1.19	1.41
		Train	-0.25	0.44	1.000	-1.55	1.05
		Orchestra	-0.19	0.45	1.000	-1.52	1.13
		House	-0.61	0.44	1.000	-1.92	0.69
		Control	0.25	0.45	1.000	-1.07	1.57
	Train	Comparison	0.36	0.44	1.000	-0.93	1.66
		Ship	0.25	0.44	1.000	-1.05	1.55
		Orchestra	0.06	0.45	1.000	-1.26	1.38
		House	-0.36	0.44	1.000	-1.67	0.95
		Control	0.50	0.45	1.000	-0.82	1.82
	Orchestra	Comparison	0.30	0.45	1.000	-1.02	1.62
		Ship	0.19	0.45	1.000	-1.13	1.52
		Train	-0.06	0.45	1.000	-1.38	1.26
		House	-0.42	0.45	1.000	-1.76	0.91
		Control	0.44	0.46	1.000	-0.90	1.78

		House	Comparison	0.73	0.44	1.000	-0.58	2.03
			Ship	0.61	0.44	1.000	-0.69	1.92
			Train	0.36	0.44	1.000	-0.95	1.67
			Orchestra	0.42	0.45	1.000	-0.91	1.76
			Control	0.86	0.45	.845	-0.47	2.19
	Control	Comparison		-0.14	0.45	1.000	-1.45	1.18
			Ship	-0.25	0.45	1.000	-1.57	1.07
			Train	-0.50	0.45	1.000	-1.82	0.82
			Orchestra	-0.44	0.46	1.000	-1.78	0.90
			House	-0.86	0.45	.845	-2.19	0.47
2	Comparison	Ship	Comparison	0.03	0.44	1.000	-1.26	1.32
			Train	-0.37	0.44	1.000	-1.67	0.92
			Orchestra	0.52	0.45	1.000	-0.79	1.84
			House	0.37	0.44	1.000	-0.94	1.67
			Control	1.62	0.44	.005	0.30	2.93
	Ship	Comparison		-0.03	0.44	1.000	-1.32	1.26
			Train	-0.41	0.44	1.000	-1.70	0.89
			Orchestra	0.49	0.45	1.000	-0.83	1.81
			House	0.33	0.44	1.000	-0.97	1.64
			Control	1.58	0.45	.006	0.27	2.90
	Train	Comparison		0.37	0.44	1.000	-0.92	1.67
			Ship	0.41	0.44	1.000	-0.89	1.70
			Orchestra	0.90	0.45	.680	-0.42	2.21
			House	0.74	0.44	1.000	-0.56	2.04
			Control	1.99	0.45	.000	0.68	3.30
	Orchestra	Comparison		-0.52	0.45	1.000	-1.84	0.79
			Ship	-0.49	0.45	1.000	-1.81	0.83
			Train	-0.90	0.45	.680	-2.21	0.42
			House	-0.16	0.45	1.000	-1.48	1.17
			Control	1.09	0.45	.243	-0.24	2.43
	House	Comparison		-0.37	0.44	1.000	-1.67	0.94
			Ship	-0.33	0.44	1.000	-1.64	0.97
			Train	-0.74	0.44	1.000	-2.04	0.56
			Orchestra	0.16	0.45	1.000	-1.17	1.48
			Control	1.25	0.45	.083	-0.07	2.57
	Control	Comparison		-1.62	0.44	.005	-2.93	-0.30
			Ship	-1.58	0.45	.006	-2.90	-0.27
			Train	-1.99	0.45	.000	-3.30	-0.68
			Orchestra	-1.09	0.45	.243	-2.43	0.24
			House	-1.25	0.45	.083	-2.57	0.07

Note: Adjustment for multiple comparisons: Bonferroni

## Appendix 33. Physical Health – pairwise comparisons

**Table 33.47**

*Pairwise comparisons – changes over time across conditions*

Condition	Mean Difference Time 2 – Time 1	Standard Error	p	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Comparison	1.62	0.29	0.000	1.04	2.19
Ship	0.53	0.29	0.071	-0.05	1.11
Train	.83	0.29	0.005	0.25	1.40
Orchestra	1.31	0.31	0.000	0.71	1.91
House	1.68	0.30	0.000	1.09	2.27
Control	0.06	0.30	0.839	-0.53	0.66

Note: Adjustment for multiple comparisons: Bonferroni; adjusted  $\alpha = .017$  (Bonferroni correction)

**Table 33.48**

*Pairwise comparisons – differences between conditions at Time 1 and Time 2*

Time	(I) Condition	(J) Condition	Mean Difference (I-J)	Standard Error	p	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
1	Comparison	Ship	-0.31	0.48	1.000	-1.71	1.09
		Train	-0.14	0.48	1.000	-1.54	1.27
		Orchestra	0.58	0.48	1.000	-0.85	2.01
		House	0.73	0.48	1.000	-0.68	2.14
		Control	-0.65	0.48	1.000	-2.08	0.78
	Ship	Comparison	0.31	0.48	1.000	-1.09	1.71
		Train	0.17	0.48	1.000	-1.23	1.58
		Orchestra	0.89	0.49	0.999	-0.54	2.33
		House	1.04	0.48	0.464	-0.38	2.46
	Train	Control	-0.34	0.48	1.000	-1.77	1.09
		Comparison	0.14	0.48	1.000	-1.27	1.54
		Ship	-0.17	0.48	1.000	-1.58	1.23

		Orchestra	0.72	0.49	1.000	-0.71	2.15
		House	0.87	0.48	1.000	-0.55	2.28
		Control	-0.51	0.48	1.000	-1.94	0.91
	Orchestra	Comparison	-0.58	0.48	1.000	-2.01	0.85
		Ship	-0.89	0.49	.999	-2.33	0.54
		Train	-0.72	0.49	1.000	-2.15	0.71
		House	0.15	0.49	1.000	-1.30	1.59
		Control	-1.23	0.49	.191	-2.69	0.22
	House	Comparison	-0.73	0.48	1.000	-2.14	0.68
		Ship	-1.04	0.48	.464	-2.46	0.38
		Train	-0.87	0.48	1.000	-2.28	0.55
		Orchestra	-0.15	0.49	1.000	-1.59	1.30
		Control	-1.38	0.49	.073	-2.82	0.06
	Control	Comparison	0.65	0.48	1.000	-0.78	2.08
		Ship	0.34	0.48	1.000	-1.09	1.77
		Train	0.51	0.48	1.000	-0.91	1.94
		Orchestra	1.23	0.49	.191	-0.22	2.69
		House	1.38	0.49	.073	-0.06	2.82
2	Comparison	Ship	0.77	0.45	1.000	-0.56	2.10
		Train	0.65	0.45	1.000	-0.67	1.98
		Orchestra	0.89	0.46	.813	-0.47	2.24
		House	0.67	0.45	1.000	-0.67	2.00
		Control	0.90	0.46	.733	-0.45	2.25
	Ship	Comparison	-0.77	0.45	1.000	-2.10	0.56
		Train	-0.12	0.45	1.000	-1.45	1.22
		Orchestra	0.11	0.46	1.000	-1.24	1.47
		House	-0.11	0.46	1.000	-1.45	1.24

		Control	0.13	0.46	1.000	-1.22	1.48
Train	Comparison	-0.65	0.45	1.000	-1.98	0.67	
	Ship	0.12	0.45	1.000	-1.22	1.45	
	Orchestra	0.23	0.46	1.000	-1.12	1.59	
	House	0.01	0.46	1.000	-1.33	1.35	
Orchestra	Control	0.25	0.46	1.000	-1.10	1.60	
	Comparison	-0.89	0.46	.813	-2.24	0.47	
	Ship	-0.11	0.46	1.000	-1.47	1.24	
	Train	-0.23	0.46	1.000	-1.59	1.12	
House	House	-0.22	0.46	1.000	-1.59	1.15	
	Control	0.02	0.47	1.000	-1.36	1.39	
	Comparison	-0.67	0.45	1.000	-2.00	0.67	
	Ship	0.11	0.46	1.000	-1.24	1.45	
Control	Train	-0.01	0.46	1.000	-1.35	1.33	
	Orchestra	0.22	0.46	1.000	-1.15	1.59	
	Control	0.24	0.46	1.000	-1.12	1.60	
	Comparison	-0.90	0.46	.733	-2.25	0.45	
Control	Ship	-0.13	0.46	1.000	-1.48	1.22	
	Train	-0.25	0.46	1.000	-1.60	1.10	
	Orchestra	-0.02	0.47	1.000	-1.39	1.36	
	House	-0.24	0.46	1.000	-1.60	1.12	

Note: Adjustment for multiple comparisons: Bonferroni; adjusted  $\alpha = .017$  (Bonferroni correction)

## Appendix 34. Health Behaviour – multiple comparisons

**Table 34.49**

*Multiple comparisons – Tukey's test results*

(I) Condition	(J) Condition	Mean Difference (I-J)	Standard. Error	p	95% Confidence Interval	
					Lower Bound	Upper Bound
Comparison	Ship	-0.02	0.48	1.000	-1.39	1.35
Ship	Train	0.42	0.48	.950	-0.94	1.79
	Orchestra	0.84	0.49	.522	-0.56	2.23
	House	1.02	0.48	.279	-0.36	2.40
	Control	-0.69	0.49	.715	-2.08	0.70
	Comparison	0.02	0.48	1.000	-1.35	1.39
Train	Train	0.44	0.48	.941	-0.93	1.81
	Orchestra	0.85	0.49	.500	-0.54	2.25
	House	1.04	0.48	.263	-0.34	2.42
	Control	-0.67	0.49	.739	-2.06	0.72
	Comparison	-0.42	0.48	.950	-1.79	0.94
Orchestra	Ship	-0.44	0.48	.941	-1.81	0.93
	Orchestra	0.41	0.49	.959	-0.98	1.81
	House	0.60	0.48	.819	-0.78	1.98
	Control	-1.11	0.49	.201	-2.51	0.28
	Comparison	-0.84	0.49	.522	-2.23	0.56
House	Ship	-0.85	0.49	.500	-2.25	0.54
	Train	-0.41	0.49	.959	-1.81	0.98
	House	0.19	0.49	.999	-1.22	1.59
	Control	-1.53	0.50	.026	-2.94	-0.11
	Comparison	-1.02	0.48	.279	-2.40	0.36
Control	Ship	-1.04	0.48	.263	-2.42	0.34
	Train	-0.60	0.48	.819	-1.98	0.78
	Orchestra	-0.19	0.49	.999	-1.59	1.22
	Control	-1.71	0.49	.007	-3.11	-0.31
	Comparison	0.69	0.49	.715	-0.70	2.08

Note: Adjusted  $\alpha = .017$  (Bonferroni correction)

## Appendix 35. Mental Health – multiple comparisons

**Table 35.50**

*Multiple comparisons – Tukey's test results*

(I) Condition	(J) Condition	Mean Difference (I-J)	Standard. Error	p	95% Confidence Interval	
					Lower Bound	Upper Bound
Comparison	Ship	-0.06	0.11	.991	-0.37	0.24
Ship	Train	0.06	0.11	.995	-0.25	0.36
	Orchestra	0.20	0.11	.457	-0.11	0.51
	House	0.09	0.11	.956	-0.22	0.40
	Control	-0.19	0.11	.497	-0.50	0.12
	Comparison	0.06	0.11	.991	-0.24	0.37
Train	Train	0.12	0.11	.868	-0.19	0.43
	Orchestra	0.26	0.11	.160	-0.05	0.57
	House	0.16	0.11	.699	-0.15	0.46
	Control	-0.13	0.11	.854	-0.44	0.18
	Comparison	-0.06	0.11	.995	-0.36	0.25
Orchestra	Ship	-0.12	0.11	.868	-0.43	0.19
	Orchestra	0.14	0.11	.795	-0.17	0.45
	House	0.03	0.11	1.000	-0.27	0.34
	Control	-0.25	0.11	.204	-0.56	0.06
	Comparison	-0.20	0.11	.457	-0.51	0.11
House	Ship	-0.26	0.11	.160	-0.57	0.05
	Train	-0.14	0.11	.795	-0.45	0.17
	House	-0.11	0.11	.931	-0.42	0.21
	Control	-0.39	0.11	.007	-0.70	-0.07
	Comparison	-0.09	0.11	.956	-0.40	0.22
Control	Ship	-0.16	0.11	.699	-0.46	0.15
	Train	-0.03	0.11	1.000	-0.34	0.27
	Orchestra	0.11	0.11	.931	-0.21	0.42
	Control	-0.28	0.11	.104	-0.60	0.03
	Comparison	0.19	0.11	.497	-0.12	0.50

Note: Adjusted  $\alpha = .017$  (Bonferroni correction)

## Appendix 36. Individual Responsibility – pairwise comparisons

**Table 36.51**

*Pairwise comparisons – changes over time across conditions*

Condition	Mean Difference Time 2 – Time 1	Standard Error	p	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Comparison	0.24	0.34	.480	-0.43	0.91
Ship	.80	0.34	.020	0.13	1.47
Train	1.34	0.34	<.001	0.67	2.01
Orchestra	.71	0.35	.046	0.01	1.40
House	.94	0.35	.007	0.26	1.62
Control	.92	0.35	.009	0.23	1.61

Note: Adjustment for multiple comparisons: Bonferroni; adjusted  $\alpha = .025$  (Bonferroni correction)

## Appendix 37. Social Determinants – multiple and pairwise comparisons

**Table 37.52**

*Multiple comparisons – Tukey's test results*

(I) Condition	(J) Condition	Mean Difference (I-J)	Standard. Error	p	95% Confidence Interval	
					Lower Bound	Upper Bound
Comparison	Ship	0.90	0.37	.140	-0.15	1.95
Ship	Train	0.59	0.37	.587	-0.45	1.64
	Orchestra	0.84	0.37	.213	-0.22	1.91
	House	0.93	0.37	.121	-0.13	1.99
	Control	1.48	0.37	.001	0.42	2.55
	Comparison	-0.90	0.37	.140	-1.95	0.15
Train	Train	-0.31	0.37	.961	-1.36	0.74
	Orchestra	-0.06	0.37	1.000	-1.13	1.01
	House	0.03	0.37	1.000	-1.03	1.09
	Control	0.58	0.37	.623	-0.48	1.65
	Comparison	-0.59	0.37	.587	-1.64	0.45
Orchestra	Ship	0.31	0.37	.961	-0.74	1.36
	Orchestra	0.25	0.37	.985	-0.82	1.32
	House	0.34	0.37	.944	-0.72	1.39
	Control	0.89	0.37	.164	-0.18	1.96
	Comparison	-0.84	0.37	.213	-1.91	0.22
House	Ship	0.06	0.37	1.000	-1.01	1.13
	Train	-0.25	0.37	.985	-1.32	0.82
	House	0.09	0.38	1.000	-0.99	1.16
	Control	0.64	0.38	.542	-0.45	1.73
	Comparison	-0.93	0.37	.121	-1.99	0.13
Control	Ship	-0.03	0.37	1.000	-1.09	1.03
	Train	-0.34	0.37	.944	-1.39	0.72
	Orchestra	-0.09	0.38	1.000	-1.16	0.99
	Control	0.55	0.38	.683	-0.52	1.63
	Comparison	-1.48	0.37	.001	-2.55	-0.42

**Table 37.53***Pairwise comparisons – changes over time across conditions*

Condition	Mean Difference Time 2 – Time 1	Standard Error	p	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Comparison	2.56	0.24	<.001	2.08	3.03
Ship	1.60	0.24	<.001	1.12	2.08
Train	2.35	0.24	<.001	1.87	2.83
Orchestra	2.17	0.25	<.001	1.67	2.66
House	1.57	0.25	<.001	1.08	2.06
Control	0.87	0.25	.001	0.37	1.36

Note: Adjustment for multiple comparisons: Bonferroni

**Table 37.54***Pairwise comparisons – differences between conditions at Time 1 and Time 2*

Time	(I) Condition	(J) Condition	Mean Difference (I-J)	Standard Error	p	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
1	Comparison	Ship	0.42	0.39	1.000	-0.73	1.57
		Train	0.49	0.39	1.000	-0.66	1.64
		Orchestra	0.65	0.40	1.000	-0.52	1.82
		House	0.44	0.39	1.000	-0.72	1.59
		Control	0.64	0.40	1.000	-0.53	1.80
	Ship	Comparison	-0.42	0.39	1.000	-1.57	0.73
		Train	0.07	0.39	1.000	-1.08	1.22
		Orchestra	0.23	0.40	1.000	-0.95	1.40
		House	0.01	0.39	1.000	-1.15	1.18
		Control	0.22	0.40	1.000	-0.95	1.39
	Train	Comparison	-0.49	0.39	1.000	-1.64	0.66
		Ship	-0.07	0.39	1.000	-1.22	1.08
		Orchestra	0.16	0.40	1.000	-1.01	1.33
		House	-0.05	0.39	1.000	-1.21	1.11
		Control	0.15	0.40	1.000	-1.02	1.32
	Orchestra	Comparison	-0.65	0.40	1.000	-1.82	0.52
		Ship	-0.23	0.40	1.000	-1.40	0.95
		Train	-0.16	0.40	1.000	-1.33	1.01
		House	-0.21	0.40	1.000	-1.39	0.97
		Control	-0.01	0.40	1.000	-1.20	1.18

		House	Comparison	-0.44	0.39	1.000	-1.59	0.72
			Ship	-0.01	0.39	1.000	-1.18	1.15
			Train	0.05	0.39	1.000	-1.11	1.21
			Orchestra	0.21	0.40	1.000	-0.97	1.39
			Control	0.20	0.40	1.000	-0.98	1.38
	Control	Comparison		-0.64	0.40	1.000	-1.80	0.53
			Ship	-0.22	0.40	1.000	-1.39	0.95
			Train	-0.15	0.40	1.000	-1.32	1.02
			Orchestra	0.01	0.40	1.000	-1.18	1.20
			House	-0.20	0.40	1.000	-1.38	0.98
2	Comparison	Ship	Comparison	1.378	0.42	.016	0.14	2.61
			Train	0.70	0.42	1.000	-0.54	1.93
			Orchestra	1.04	0.43	.228	-0.22	2.30
			House	1.42	0.42	.012	0.18	2.67
			Control	2.33	0.43	.000	1.07	3.58
	Ship	Comparison		-1.38	0.42	.016	-2.61	-0.14
			Train	-0.68	0.42	1.000	-1.92	0.56
			Orchestra	-0.34	0.43	1.000	-1.60	0.92
			House	0.05	0.42	1.000	-1.20	1.29
			Control	0.95	0.43	.391	-0.31	2.21
	Train	Comparison		-0.70	0.42	1.000	-1.93	0.54
			Ship	0.68	0.42	1.000	-0.56	1.92
			Orchestra	0.34	0.43	1.000	-0.92	1.60
			House	0.73	0.42	1.000	-0.52	1.97
			Control	1.63	0.43	.002	0.37	2.89
	Orchestra	Comparison		-1.04	0.43	.228	-2.30	0.22
			Ship	0.34	0.43	1.000	-0.92	1.60
			Train	-0.34	0.43	1.000	-1.60	0.92
			House	0.39	0.43	1.000	-0.88	1.65
			Control	1.29	0.43	.046	0.01	2.57
	House	Comparison		-1.42	0.42	.012	-2.67	-0.18
			Ship	-0.05	0.42	1.000	-1.29	1.20
			Train	-0.73	0.42	1.000	-1.97	0.52
			Orchestra	-0.39	0.43	1.000	-1.65	0.88
			Control	0.90	0.43	.533	-0.36	2.17
	Control	Comparison		-2.33	0.43	.000	-3.58	-1.07
			Ship	-0.95	0.43	.391	-2.21	0.31
			Train	-1.63	0.43	.002	-2.89	-0.37
			Orchestra	-1.29	0.43	.046	-2.57	-0.01
			House	-0.90	0.43	.533	-2.17	0.36

Note: Adjustment for multiple comparisons: Bonferroni

## Appendix 38. Self-care – pairwise comparisons

**Table 38.55**

*Pairwise comparisons – changes over time across conditions*

Condition	Mean Difference Time 2 – Time 1	Standard Error	p	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Comparison	0.30	0.21	0.154	-0.11	0.71
Ship	-0.52	0.21	0.014	-0.93	-0.10
Train	0.49	0.21	0.021	0.07	0.90
Orchestra	0.01	0.22	0.962	-0.42	0.44
House	-0.30	0.21	0.159	-0.72	0.12
Control	-0.04	0.22	0.849	-0.47	0.38

Note: Adjustment for multiple comparisons: Bonferroni; adjusted  $\alpha = .025$  (Bonferroni correction)

**Table 38.56**

*Pairwise comparisons – differences between conditions at Time 1 and Time 2*

Time	(I) Condition	(J) Condition	Mean Difference (I-J)	Standard Error	p	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
1	Comparison	Ship	-0.46	0.39	1.000	-1.61	0.69
Ship		Train	-0.57	0.39	1.000	-1.72	0.58
		Orchestra	-0.29	0.40	1.000	-1.46	0.88
		House	-0.38	0.39	1.000	-1.54	0.78
		Control	-0.49	0.40	1.000	-1.66	0.67
		Comparison	0.46	0.39	1.000	-0.69	1.61
Train		Train	-0.11	0.39	1.000	-1.26	1.04
		Orchestra	0.18	0.40	1.000	-1.00	1.35
		House	0.09	0.39	1.000	-1.07	1.25
		Control	-0.03	0.40	1.000	-1.20	1.14
		Comparison	0.57	0.39	1.000	-0.58	1.72
Orchestra		Ship	0.11	0.39	1.000	-1.04	1.26
		Orchestra	0.28	0.40	1.000	-0.89	1.46
		House	0.19	0.39	1.000	-0.97	1.35
		Control	0.08	0.40	1.000	-1.09	1.25
		Comparison	0.29	0.40	1.000	-0.88	1.46
		Ship	-0.18	0.40	1.000	-1.35	1.00
		Train	-0.28	0.40	1.000	-1.46	0.89

		House	-0.09	0.40	1.000	-1.27	1.09
		Control	-0.21	0.40	1.000	-1.40	0.98
House		Comparison	0.38	0.39	1.000	-0.78	1.54
		Ship	-0.09	0.39	1.000	-1.25	1.07
		Train	-0.19	0.39	1.000	-1.35	0.97
		Orchestra	0.09	0.40	1.000	-1.09	1.27
		Control	-0.12	0.40	1.000	-1.29	1.06
		Comparison	0.49	0.40	1.000	-0.67	1.66
2	Comparison	Ship	0.03	0.40	1.000	-1.14	1.20
		Train	-0.08	0.40	1.000	-1.25	1.09
		Orchestra	0.21	0.40	1.000	-0.98	1.40
		House	0.12	0.40	1.000	-1.06	1.29
		Ship	0.35	0.44	1.000	-0.94	1.64
		Train	-0.76	0.44	1.000	-2.05	0.53
		Orchestra	0.00	0.45	1.000	-1.31	1.31
		House	0.22	0.44	1.000	-1.08	1.52
		Control	-0.15	0.44	1.000	-1.46	1.16
		Ship	-0.35	0.44	1.000	-1.64	0.94
Train		Train	-1.11	0.44	0.179	-2.40	0.19
		Orchestra	-0.35	0.45	1.000	-1.67	0.97
		House	-0.13	0.44	1.000	-1.43	1.17
		Control	-0.50	0.45	1.000	-1.82	0.81
		Comparison	0.76	0.44	1.000	-0.53	2.05
		Ship	1.11	0.44	0.179	-0.19	2.40
		Orchestra	0.76	0.45	1.000	-0.56	2.08
		House	0.98	0.44	0.412	-0.33	2.28
		Control	0.60	0.45	1.000	-0.71	1.92
		Comparison	0.00	0.45	1.000	-1.31	1.31
Orchestra		Ship	0.35	0.45	1.000	-0.97	1.67
		Train	-0.76	0.45	1.000	-2.08	0.56
		House	0.22	0.45	1.000	-1.11	1.55
		Control	-0.15	0.45	1.000	-1.49	1.18
		Comparison	-0.22	0.44	1.000	-1.52	1.08
		Ship	0.13	0.44	1.000	-1.17	1.43
		Train	-0.98	0.44	0.412	-2.28	0.33
		Orchestra	-0.22	0.45	1.000	-1.55	1.11
		Control	-0.37	0.45	1.000	-1.70	0.95
		Comparison	0.15	0.44	1.000	-1.16	1.46
House		Ship	0.50	0.45	1.000	-0.81	1.82
		Train	-0.60	0.45	1.000	-1.92	0.71

Orchestra	0.15	0.45	1.000	-1.18	1.49
House	0.37	0.45	1.000	-0.95	1.70

Note: Adjustment for multiple comparisons: Bonferroni; adjusted  $\alpha = .025$  (Bonferroni correction)