

# COMP2213 - Interaction Design

## Deliverable 2

### Interviews Analysis and Affinity Diagram

Group 25

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# Interviews Analysis

## Background

As shown in the Literature Review sent as part of the Deliverable 1, **Persuasive Technology** is not successful at changing people's behaviour, as a radical change in the way we live our lives is necessary to achieve such transformation. Consequently, a different approach is to be taken by the HCI community to induce households to adopt more sustainable behaviours.

The approach that has been identified as the most promising is the **Gaming-based design**, which aims to use technology as a social facilitation tool to connect users with peers. However, to succeed in implementing this model, it is vital to gain an understanding of people's psychology, and the **Comprehensive Action Determination Model (CADM)** provides crucial help in this regard. Therefore, this project intends to help people achieve sustainable behaviours by leveraging people's psychology and the natural need for socialisation that is shared by everyone.

## Interviews Analysis Process

For the abovementioned reasons, our semi-structured interviews have been conducted as a way to gain insights into people's current social life and attitudes towards environmental problems. The project initially aimed to devise a product which could be addressed to the whole population, so that to have a significant impact on society. However, due to a lack of sufficient resources and the current challenging times, only six students from the University of Southampton have been interviewed, reducing the scope of the project just to the student population.

All the interviews have been video recorded, and their content has been fully transcribed into text. Both *qualitative* and *quantitative* interpretation of data has been carried out to gain a thorough understanding of the interviews' content but, as requested by the Deliverable Specifications, we will just explore the Qualitative Analysis. For clarity, we will leave all quantitative representations of data in the Appendix (see page 87).

## Qualitative Analysis

The Qualitative Analysis of the interviews has been performed using **MAXQDA 2020 Plus**, a software designed for Computer-Assisted Qualitative Data Analysis, with **Grounded Theory** as the supporting theoretical framework.

1. The first step of the Interview Analysis has consisted of familiarising with the data to gain an overview of the main recurrent themes.
2. Secondly, *open coding* has been carried out by highlighting sentences or sub-sentences and succinctly describing their content. The unit of reference for the open coding phase has not been opted to be the whole participants' answers as they contained several different themes.

3. Subsequently, similar codes have been sorted into themes (axial coding).
4. The fourth step of the Interviews Analysis has consisted of reviewing the themes. This step has led to many iterations of *open coding* and *axial coding*.
5. In the fifth step, the themes have been definitively named and defined through concise memos descriptions. As a result, the **Code Book of Themes** was produced.
6. The sixth and last step has consisted of interrelating themes with each other through the creation of an **Affinity Diagram** (*selective coding*), which has proved essential to draw a theory based on the discovered themes.

The theory resulting from the Affinity Diagram captures the attitudes of the participants towards environmental problems and the factors that hinder their sustainable behaviours in their day-to-day lives.

It is important to stress that the previous steps have been carried out so to limit possible unintentional bias by referring to the principles of *objectivity* and *sensitivity*.

We are aware that findings from six university students can hardly hold for the whole student population. Nevertheless, we are going to assume by statistical inference that this sample's findings contain common properties of the wider population.

It is important to notice that this theory explains the reasons why students do not behave sustainably, so the themes concerning the aspects of student's social lives and household activities have not been included. They will be useful in the subsequent phases of the project, particularly when implementing the gaming-based design model for devising the interactive prototypes.

In the following section, the theory resulting from the interview's analysis will be exhaustively explained.

# Theory of students' sustainable behaviour

The theory revolves around one central theme, which is the students' willingness to act sustainably. The reasons why the latter is the main theme are essentially two:

1. All participants are willing to act sustainably, so it can be inferred that most students should have the same inclination.
2. It is convenient as it is a good starting point for the later stages of the project, given that students are already keen to behave sustainably.

In what follows, it will be explained why students' have a willingness to act sustainably and why it is not strong enough to induce sustainable behaviours by presenting several obstacles that counterbalance its effects.

## **Self-interests and concerns prompt students to act sustainably**

To understand why self-interests and concerns urge students to act sustainably it is necessary to list the typical sustainable activities that students try to carry out: (1) *Recycling*, (2) *Walking* and (3) *Reducing consumption*.

1. Recycling is considered a social expectation by students as they refer to it as a "good practice" behaviour. In the light of the fact that being judged by society and being compared to others prompt students behaviour (these were recurrent themes in the interviews), then students try to recycle merely due to personal interests.
2. Students tend to walk rather than using their cars (for short-medium distances) when moving around because they regard it as an excellent opportunity to work out and because it is free of cost. This reflects the identified theme that students' behaviours are driven by health and monetary concerns.
3. Regarding the reduction of consumption, students have responded that they try to achieve it purely because of economic reasons.

Additionally, feelings of moral obligations push students to adopt sustainable behaviours as the lack of eco-friendly acting diminishes their self-esteem, given that they feel the internal urge to do the right things.

From the participants' interviews, it is evident that students feel these moral obligations because they are aware of the relevance of environmental problems. Specifically, they are aware of the negative impact of individuals on the environment and the negative consequences that this will spark off in the upcoming decades. They have gained knowledge of these themes through self experiences (negatively affected environments) and the spread of information, especially in the school context.

As a result, it is inferable that acting sustainable requires knowledge of environmental problems, as otherwise, it would not be possible to have feelings of moral obligations. The latter point also explains why the participants have referred that youngsters and educated people are the most influenceable social categories regarding environmental thematic.

In summary, the **Thematic Analysis** of the interviews has shown that the students' willingness to act sustainably is prompt by *monetary, health and social concerns*, plus *moral obligations*.

## Reasons why students do not effectively act sustainably

Even though students have a willingness to behave sustainably, they are not eco-friendly in their day-to-day life. The Interviews Analysis confirms this finding as all participants declare that they could achieve more than they currently do. Several motivations explain why there is a divergence between student's environmental sustainability willingness and their effective behaviour, and while some of them are to be traced back to external obstacles, others are students-related.

### External obstacles

An external difficulty that negatively impacts sustainable behaviours is the presence of several barriers. As it turns out, the most relevant one is the **prohibitive cost of sustainable products** (food and eco-feedback devices), and this is congruous with the previous affirmation that monetary concerns influence students' behaviour.

Another external difficulty that students encounter is the **lack of support for achieving sustainability** and, even though eco-feedback devices could bridge such a lack, not only are they high-priced but also unpopular in the student community.

### Internal obstacles

To gain an understanding of the students' main internal obstacles, it is necessary to list their current negative habits: (1) *Forgetting to recycle*, (2) *Leaving appliances on unnecessary* and (3) *Letting food perish*.

The common theme for all the above unsustainable behaviours is to be traced back to students' **laziness**. Here "laziness" is not used as a pejorative but as a way to define students' inaction. This is a recurrent theme on the interviews' analysis as all participants tend to agree that they could commit more efforts and gain a deeper understanding of the future environmental problems consequences. Taking into account that acting sustainable requires **knowledge of current environmental problems**, as it is a way of raising moral obligations, then laziness diminishes the strength of students' feelings of moral obligations. Consequently, students' laziness is a component that mitigates the effects of students' willingness to accomplish eco-friendly behaviour.

It is a well-established fact that acting sustainable requires knowledge of current environmental problems. Similarly, the **wrong knowledge about current environmental problems** leads to unsustainable behaviour. Indeed, while in the Literature Review it has been demonstrated that household behaviour is the largest contributor to environmental issues, students believe that

larger corporations have a more considerable impact on environmental problems than their respective individual behaviours. This belief hinders students' sustainable behaviour as they do not feel personally responsible for the current state of affairs (moral obligations drive student behaviour).

Moreover, although concerns about own health drive students' behaviours, **students do not feel personally affected by the consequences of current environmental issues**, and consequently, they are not prone to act sustainably.

The Interviews Analysis suggests that a "*live and let live*" philosophy is intrinsic to the current society as people prefer to be concerned about their lives rather than others' and do not want to be told what to do. This diminishes the effects of students' willingness to act sustainably, as they may not feel judged by society.

From the Thematic Analysis, it turns out that students prefer **instant gratification** (short-term rewards) rather than future fulfillments. Considering that students believe that they will be personally affected by environmental problems only in the upcoming decades, then they do not feel the urgent need to act.

Lastly, **students are not willing to change their current habits**.

## Conclusions

In conclusion, this theory shows how self-interests and concerns directly influence students' willingness to act sustainably, but the effects of this willingness are counterbalanced by external and student-related obstacles.

In the next phases of the project, we aim to use the pillars of this theory and the data collected about students' social life and household coordination to design an interactive device that tries to remove the barriers to sustainable behaviour through the gamification-based model.

# **Code Book of Themes**

## Code Book of Themes

Code System	Description	Frequency
<b>1</b> Willingness to adopt sustainable behaviours	"Willingness to adopt sustainable behaviours" is a recurrent theme which communicates the participants' willingness to behave more sustainably in their lives. The codes inside this theme represent some sustainable behaviours that the participants are trying to achieve.	33
<b>1.1</b> Reducing consumption		9
<b>1.1.1</b> Reducing water consumption		4
<b>1.1.2</b> Reducing electricity consumption		5
<b>1.2</b> Recycling		2
<b>1.3</b> Being vegan for the environment		1
<b>1.4</b> Donating to environmental charities		1
<b>1.5</b> Using public transport / Walking		3
<b>2</b> Awareness	"Awareness" is a recurrent theme which comprises several sub-themes that make it evident that participants are aware of certain aspects linked to environmental problems.	143
<b>2.1</b> Awareness of the personal impact on environment	"Awareness of the personal impact on environment" is a sub-theme which comprises two codes that communicate the degree of participants' awareness of their impact on environmental problems. The two codes are "Awareness small changes do not have a big impact" and "Awareness small changes can have a big impact". Therefore, the two codes communicate a contrasting level of awareness as, while some participants believe small changes in their behaviour does not help combat environmental issues, others reckon that small changes in behaviour have a positive impact. However, the former is the predominant one (4 participants VS 2 participants).	16
<b>2.1.1</b> Awareness small changes do not have a big impact		10
<b>2.1.2</b> Awareness small changes can have a big impact		6

<b>2.2 Awareness of the relevance of environmental problems</b>	"Awareness of the relevance of environmental problems" is a recurrent sub-theme which represents the participants' awareness of the fact that environmental problems are significative. Specifically, as it is possible to notice in its only sub-code "Awareness of future environmental problems consequences", all participants are aware that the consequences of future environmental problems have a meaningful impact on our future.	34
<b>2.2.1 Awareness of future env. problems consequences</b>		23
<b>2.3 Awareness of lacking deep understanding of env. prob</b>	"Awareness of lacking a deep understanding of environmental problems" is a sub-theme which represents the participants' awareness of being capable of gaining a more in-depth knowledge of current environmental problems. Specifically, all participants believe that they have a basic understanding of current environmental issues, but they could learn a lot more about them.	5
<b>2.4 Awareness humans are major cause of environmental problems</b>	"Awareness humans are a major cause of environmental problems" is a recurrent sub-theme which represents the participants' awareness that intensive and unscrupulous human activities are the principal cause of current environmental problems.	9
<b>2.5 Awareness of not making enough efforts</b>	"Awareness of not making enough efforts" is a recurrent sub-theme which represents the participants' awareness of being able to conduct a more sustainable life.	19
<b>2.6 Awareness of the big impact of corporations and government</b>	"Awareness of the big impact of corporations and government" is a recurrent sub-theme which comprise two codes that represent the participants' awareness that large corporations adopt unsustainable choices and that governments cannot have a direct impact on the reduction of environmental issues. Furthermore, all participants tend to agree that the impact of the entities above is more significant than individuals'.	18
<b>2.6.1 Governments have a larger impact on env. problems</b>		5
<b>2.6.2 Large corporations have a larger impact on env. problems</b>		13
<b>2.7 Awareness of societal expectations about sustainability</b>	"Awareness of societal expectations about sustainability" is a sub-theme which represents the participants' awareness that society has some basic sustainability expectations about the behaviour of their co-citizens. This sub-theme comprises a code "People that make environmental efforts tend to incite others", which communicates that environmental-	15

	friendly people are more prone to invite others to adopt a sustainable behaviour.	
<b>2.7.1</b> People that make environmental efforts tend to incite others		3
<b>2.8</b> Awareness env. problems affect environment more than health	"Awareness environmental problems affect the environment more than health" is a recurrent sub-theme which represents the participants' awareness that their health is not as affected by environmental problems as their surrounding environment. Naturally, this is a wrong awareness of the participants. The participants tend to believe this because they cannot currently see the effects of environmental issues on their health. This sub-theme contains two contrasting codes " <i>Environment is not clearly affected by environmental problems</i> " and " <i>Environment is clearly affected by environmental problems</i> ". However, the latter is more predominant of the former (4 participants VS 2 participants).	27
<b>2.8.1</b> Environment is not clearly affected by environmental problems		3
<b>2.8.2</b> Environment is clearly affected by environmental problems		6
<b>2.8.3</b> Health is not clearly affected by environmental problems		18
<b>3</b> Household	"Household" is a recurrent theme which comprises three sub-themes that outline the current participants' activities with their housemates, their house chores and their achieved level of household coordination.	58
<b>3.1</b> Household activities	"Household activities" is a sub-theme which contains several codes that represent the activities that the participants currently perform with their housemates.	5
<b>3.1.1</b> Socialising with housemates		2
<b>3.1.2</b> Sharing home deliveries		1
<b>3.1.3</b> Cooking with housemates		1
<b>3.1.4</b> Watching movies with housemates		1

<b>3.2 Household chores</b>	" <i>Household chores</i> " is a sub-theme which contains several codes that represent the household chores that the participant currently perform. It contains a sub-theme " <i>Household chores interdependence</i> " which includes two contrasting sub-codes " <i>Household chores do not influence each other</i> " and " <i>Household chores influence each other</i> " that communicate the degree of interdependence of participants' chores. However, the latter is the predominant code (3 participants VS 2 participants). Furthermore, this theme contains two contrasting codes: " <i>Household chores can be shifted in time</i> " and " <i>Household chores (CLEANING) cannot be shifted in time</i> ". Even though they are contrasting, it is essential to specify that in the latter code participants mainly refer to cleaning of shared ambient spaces as a household chore that is not flexible as it is a group decision rather than a personal one.	34
<b>3.2.1 Cooking</b>		5
<b>3.2.2 Cleaning</b>		10
<b>3.2.3 Taking the bins out</b>		3
<b>3.2.4 Household chores interdependence</b>		5
<b>3.2.4.1 Household chores do not influence each other</b>		3
<b>3.2.4.2 Household chores influence each other</b>		2
<b>3.2.5 Household chores can be shifted in time</b>		6
<b>3.2.6 Household chores (CLEANING) cannot be shifted in time</b>		5
<b>3.3 Household coordination</b>	" <i>Household coordination</i> " is a sub-theme which communicates information regarding the current level of coordination in the households. It contains a code " <i>Housemates are prone to sharing and collaborating</i> " which expresses the participants' inclination to share ideas and support other members of the household in case of need. Additionally, this theme contains a sub-theme " <i>Housemates coordination can be improved</i> " which includes several codes that describe the difficulties that the participants complain to have regarding the coordination of the household activities.	19

<b>3.3.1</b> Housemates are prone to sharing and collaborating		12
<b>3.3.2</b> Housemates coordination can be improved		7
<b>3.3.2.1</b> Housemates do not see each other		1
<b>3.3.2.2</b> Incapability of controlling other housemates' actions		1
<b>3.3.2.3</b> Hardness to establish a cleaning schedule		2
<b>3.3.2.4</b> Some people are more willing to coordinate than others		1
<b>4</b> Behaviour is driven by self-interests and personal values	"Behaviour is driven by self-interests and personal values" is a recurrent theme that communicates that participants' behaviour is determined by self-centred choices and feelings of moral obligations. This theme includes two sub-themes "Behaviour is driven by self-interests and concerns" and "Behaviour is driven by moral obligations".	59
<b>4.1</b> Behaviour is driven by self-interests and concerns	"Behaviour is driven by self-interests and concerns" is a sub-theme which communicates that participants' behaviour is determined by self-centred choices and personal concerns. This theme contains several codes that represent which self-interests and concerns drive participants behaviours.	39
<b>4.1.1</b> Behaviour is driven by short-term factors rather than long term		6
<b>4.1.2</b> Behaviour is driven by concerns of being judged by the society		5
<b>4.1.3</b> Behaviour is driven by a comparison with others		7
<b>4.1.4</b> Behaviour is driven by concerns about own health		11
<b>4.1.5</b> Behaviour is driven by monetary concerns		7

<b>4.2</b> Behaviour is driven by moral obligations	"Behaviour is driven by moral obligations" is a sub-theme which expresses that participants' behaviour is influenced by feelings of moral obligations. As an example, feelings of responsibility towards the environment turn out to determine participants' behaviour. This theme contains the code " <i>Moral obligations are assimilated through the life process</i> " which outlines that participants assimilate feelings of moral obligations through their life experiences.	20
<b>4.2.1</b> Moral obligations are assimilated through the life process		2
<b>5</b> Difficulties in achieving sustainable behaviour	"Difficulties in achieving sustainable behaviour" is a theme which comprises several codes that outline what difficulties the participants encounter in their lives that prevent them from adopting more sustainable behaviours. This theme includes the sub-theme " <i>Acting sustainable requires economic resources</i> " through which it is possible to gain an understanding of how the cost of sustainable food and devices is prohibitive and thus discourage people from buying.	35
<b>5.1</b> Acting sustainable requires enough economic resources		3
<b>5.1.1</b> Cost of sustainable devices is prohibitive		3
<b>5.1.2</b> Cost of sustainable food is prohibitive		3
<b>5.2</b> Unpopularity of eco-feedback devices		10
<b>5.3</b> Lack of support for achieving sustainable behaviour		4
<b>5.4</b> Warming the house is indispensable		3
<b>5.5</b> Availability of sustainable products is limited		2
<b>5.6</b> Sustainable behaviour is not practical		2
<b>5.7</b> Appliances are left on unnecessarily		1
<b>5.8</b> Large production of waste		1
<b>5.9</b> Forgetting to recycle		1
<b>5.10</b> Letting food perish		1

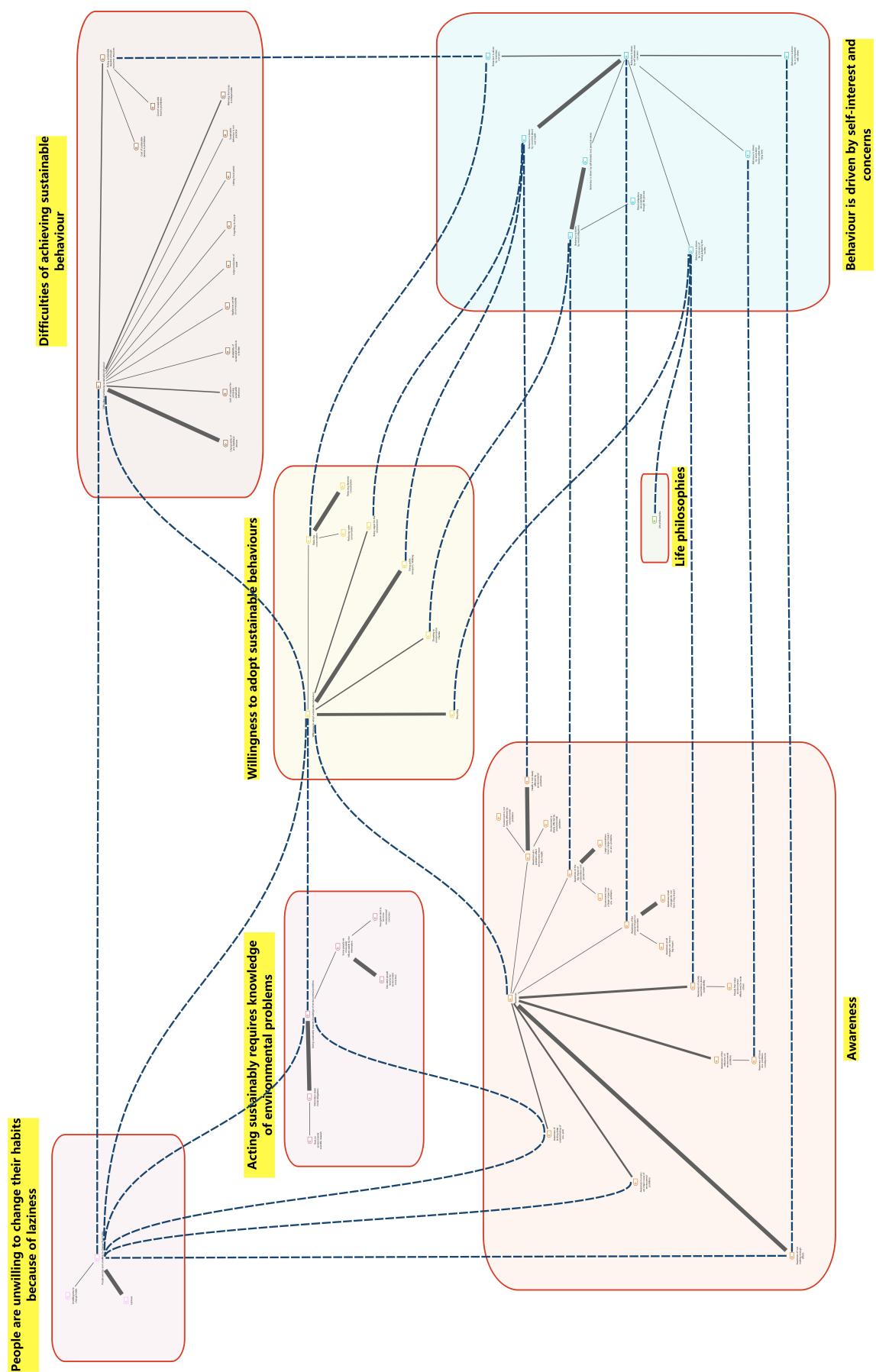
<b>6</b> Acting sustainable requires knowledge of environmental problems	<p>"Acting sustainable requires knowledge of environmental problems" is a theme that communicates the importance of environmental problems knowledge as a factor that urge eco-friendly habits. It comprises two sub-themes: "<i>Information raises moral obligations</i>" and "<i>Some people are more easily influenceable by the information</i>". The former makes it clear that a way of raising moral obligations is the assimilation of information, and its subcode "<i>Trust on environmental scientific research</i>" illustrates that the most reliable information resource for the participants is scientific research. The latter communicates through its subcodes "<i>Educated people tend to be environmentally conscious</i>" and "<i>Youngsters tend to be more environmentally conscious</i>" that the most influenceable people are the educated or young ones because they feel the problem nearer to them.</p>	15
<b>6.1</b> Information raises moral obligations		6
<b>6.1.1</b> Trust on environmental scientific research		2
<b>6.2</b> Some people are more easily influenceable by the information		1
<b>6.2.1</b> Educated people tend to be environmentally conscious		4
<b>6.2.2</b> Youngsters tend to be more environmentally conscious		2
<b>7</b> Life philosophies	<p>"Life philosophies" is a theme which comprises two codes that represent two distinct life philosophies that can be inferred from the answers of the participants. The first code "<i>Rewarding is better than punishing</i>" communicates the participants' belief that the best way to induce sustainable behaviours is to reward eco-friendly actions rather than punishing unsustainable ones. The second code "<i>Live and let live</i>" communicates the participants' way of living based on the ideology that individuals should be concerned about their own lives rather than others'.</p>	11
<b>7.1</b> Rewarding is better than punishing		4
<b>7.2</b> Live and let live		7

<b>8 Personal time</b>	"Personal time" is a theme which comprises two sub-themes " <i>Personal busy time</i> " and " <i>Personal free time</i> " which contain a list of codes that represent the current participants' activities in their busy and free time respectively.	25
<b>8.1 Personal busy time</b>		4
<b>8.1.1 Studying</b>		4
<b>8.2 Personal free time</b>		21
<b>8.2.1 Going to indoors venues</b>		1
<b>8.2.2 Walking</b>		1
<b>8.2.3 Going out for photography</b>		1
<b>8.2.4 Doing recreational activities</b>		2
<b>8.2.5 Clubbing</b>		1
<b>8.2.6 Practising a sport</b>		2
<b>8.2.7 Writing poetry</b>		1
<b>8.2.8 Cooking</b>		1
<b>8.2.9 Dancing</b>		1
<b>8.2.10 Listening to music</b>		3
<b>8.2.11 Reading</b>		2
<b>8.2.12 Media entertainment</b>		5
<b>9 Social life</b>	"Social life" is a theme which contains one sub-theme regarding the participants' constraints on their social lives and two codes: "Current social life is satisfying" and " <i>Social media help to interact with other people</i> ". The former code expresses the common satisfaction of all participants regarding their social interactions, while the latter represents the common opinion that social networks are useful tools for social interactions. Precisely, all participants specify that during the current lockdown period, social networks seem to be the only way to be closer to friends.	19
<b>9.1 Current social life is satisfying</b>		8

<b>9.2</b> Social media help to interact with other people		4
<b>9.3</b> Constraints on people's social lives	"Constraints on people's social lives" is a sub-theme which contains several codes that represent the social life's constraints that the participants complain to have. Specifically, it turns out that introversion is a factor that diminishes social interactions, moving around the city involves unnecessary efforts which limit the range of possible friendships and organisation plays a significant role as it is hard to carve out time during the busy university life.	7
<b>9.3.1</b> Organisation influences social life		2
<b>9.3.2</b> Moving around requires efforts		3
<b>9.3.3</b> Introversion diminishes social interactions		2
<b>10</b> Current lifestyle can be improved	"Current lifestyle can be improved" is a recurrent theme which expresses the participants' awareness that their way of living is not as healthy as it should be. Indeed, its sub-theme "Difficulty achieving healthy results" highlights that there are some difficulties in achieving healthy habits. A limitation that seems to be shared by all participants is the weather, which limits outdoor activities. This theme contains two codes: "Healthy behaviours" and "Unhealthy behaviours" which outline some healthy and unhealthy habits, respectively, that participants currently have.	23
<b>10.1</b> Healthy behaviours		0
<b>10.1.1</b> Workout		4
<b>10.1.2</b> Balanced/Vegan diet		3
<b>10.2</b> Unhealthy behaviours		0
<b>10.2.1</b> Poor diet		1
<b>10.2.2</b> Bad sleep schedule		2
<b>10.2.3</b> Alcohol consumption		1
<b>10.3</b> Difficulty achieving healthy results		5
<b>10.3.1</b> Weather influences outdoor activities		4

<b>11</b> People are lazy and unwilling to change their habits	" <i>People are lazy and unwilling to change their habits</i> " is a theme that comprises two codes: " <i>Laziness</i> " and " <i>Unwillingness to change habits</i> ". The latter represents the reluctance of the participants to change their habits, while the former expresses an evident concept present in the interviews that consists of the participants' inertia to act in a proper but effortful way.	17
<b>11.1</b> Laziness		12
<b>11.2</b> Unwillingness to change habits		5
<b>TOTAL</b>		<b>438</b>

# Affinity Diagram



## **Appendix**

### **Transcribed Interviews (with Codes)**

# **Transcribed Interviews (with Codes)**

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## **Participant 1**

1      **INTERVIEWER:** Welcome to the interview. I'm Alessandro and I'll be your interviewer today.

2      *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*

3      *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*

4      *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*

5      *To facilitate our note-taking, we would like to audiotape our conversations today.*

6      *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*

7      *(1) all information will be held confidential,*  
8      *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*  
9      *(3) we do not intend to inflict any harm.*

10     *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*  
11     *in order to push ahead and complete this line of questioning.*

12     Do you agree to these terms?

13     **INTERVIEWEE:** Yes.

14     **INTERVIEWER:** Ok, let's start then. So, what is your current occupation?

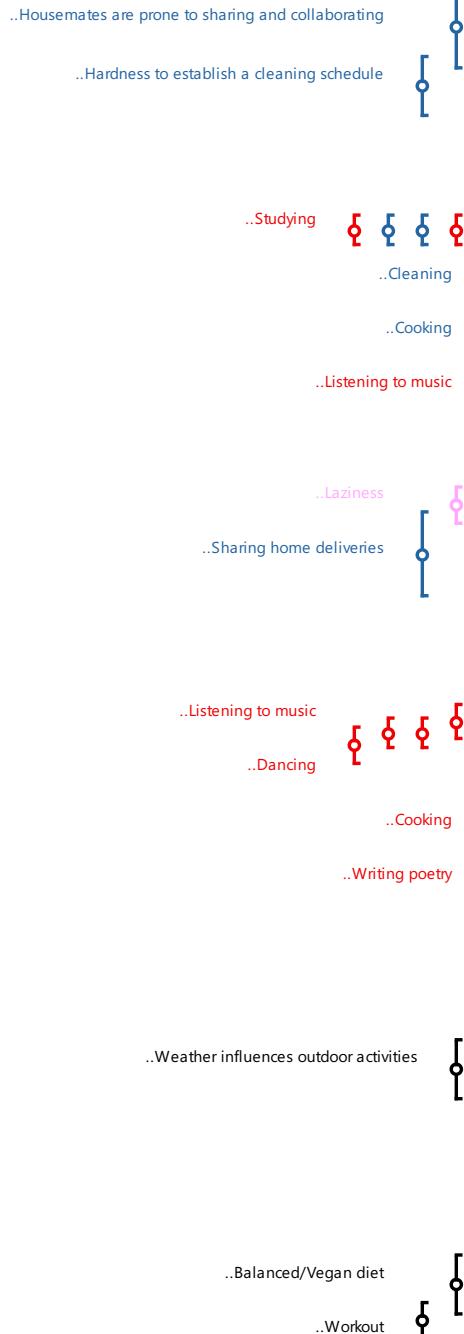
15     **INTERVIEWEE:** Student.

16     **INTERVIEWER:** And where do you currently live? Is it house a flat or University halls?

17     **INTERVIEWEE:** A shared house.

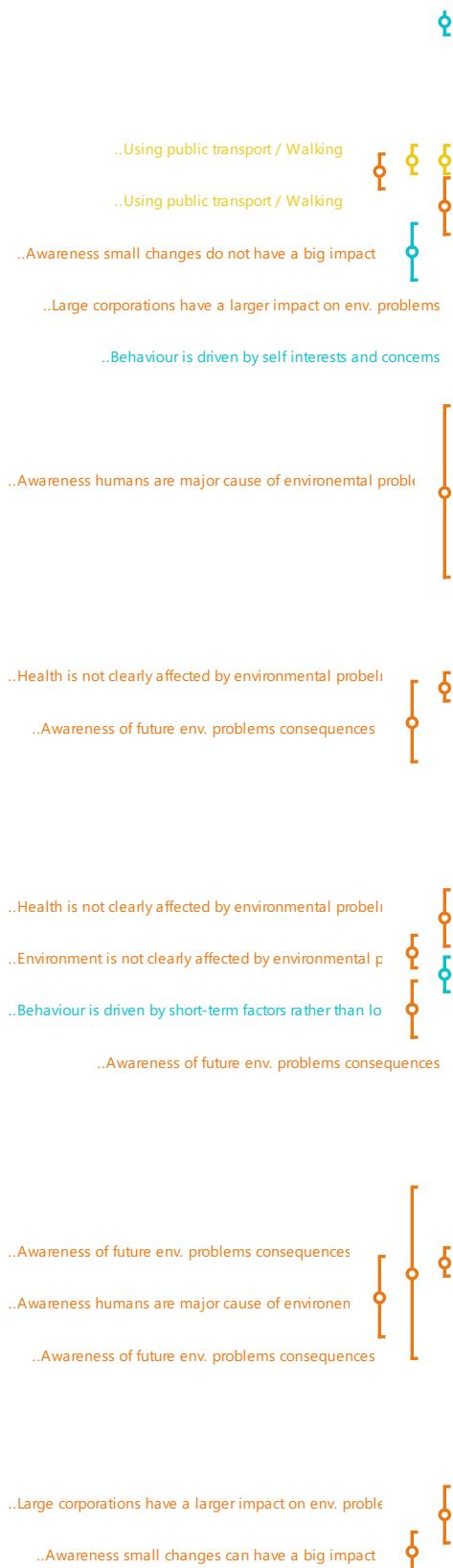
18     **INTERVIEWER:** Thank you. With how many other people?

19     **INTERVIEWEE:** Four other people.



- 20 **INTERVIEWER:** Thank you, and on a scale from 1 to 5, to what extent do you agree with the following: "The coordination in the household is perfect and cannot be improved."
- 21 **INTERVIEWEE:** 3.
- 22 **INTERVIEWER:** Thank you. What are the reasons why you think so?
- 23 **INTERVIEWEE:** Because there is some mutual agreement between everybody such that we will have our own cleaning duties and we all agree not to be loud in certain situations, but a lot of people don't like to the schedules and a lot of people don't agree with the roles they've been assigned, so 3.
- 24 **INTERVIEWER:** Thank you. What activities do you do at home?
- 25 **INTERVIEWEE:** Study clean, cook. Um, learn guitar. I don't know what you mean by activities.
- 26 **INTERVIEWER:** Yeah, that was basically it. Anyway, do you ever use delivery services?
- 27 **INTERVIEWEE:** Yes.
- 28 **INTERVIEWER:** Thank you. What are the reasons why you do so?
- 29 **INTERVIEWEE:** I use delivery services to get quick access to products that I need so I use Amazon and we as a house do Sainsbury's deliveries because none of us has a car and it's hard to carry all our shopping home so we do shared Sainsbury's deliveries.
- 30 **INTERVIEWER:** OK, and what do you like doing in your free time?
- 31 **INTERVIEWEE:** Um. Like creating and listening to music. Learning dance and learning how to cook. Writing poetry. Yeah.
- 32 **INTERVIEWER:** And would you, for example, rather go for a walk or watch something on TV?
- 33 **INTERVIEWEE:** Um, watch something on TV, mostly.
- 34 **INTERVIEWER:** Thank you. What are the reasons why you say so?
- 35 **INTERVIEWEE:** Because watching something on TV is a lot more accessible and easy to like. It's an easy serotonin boost. And sometimes, like, the weather conditions aren't the best for walking or I'm not in the mood to like exercise.
- 36 **INTERVIEWER:** Thank you. To what extent do you think you have a healthy lifestyle?
- 37 **INTERVIEWEE:** Moderately. I live a moderately healthier lifestyle because I'm diabetic and I have to look after my house. So I genuinely eat quite low carb and I'm vegan so I eat quite healthy. I eat a lot of vegetables and legumes and nutrients and I start my day every day with yoga and I try to do a 5-minute workout every day so I'm

..Alcohol consumption ..Bad sleep schedule ..Difficulty achieving healthy results	{	quite healthy in that respect. But I also like drinking alcohol and have a terrible sleep schedule so I'm unhealthy in that respect and I don't drink enough water. You, know it is difficult not to drink alcohol (laughter).
	38	<b>INTERVIEWER:</b> OK, and on a scale from 1 to 5, to what extent do you agree with the following? My social life is perfect and cannot be improved.
..Current social life is satisfying ..Current social life is satisfying	{	<b>INTERVIEWEE:</b> I agree with that. Like quite a lot, like I'm very happy with my social life. It can be improved because everything can be improved, but I'm very happy with my social life, so from one to five I'd say five.
	40	<b>INTERVIEWER:</b> OK. And are there any constraints that influence your social life?
..Introversion diminishes social interactions ..Current social life is satisfying	{	<b>INTERVIEWEE:</b> Right now I'm locked down, so we can't like interact with other bubbles and a lot of the people in my house like quite introverted, whereas I'm quite extroverted, but I'm happy with the amount of time we spend together.
	42	<b>INTERVIEWER:</b> And can you think of some technology to remove those constraints?
..Social media help interact with other people	{	<b>INTERVIEWEE:</b> Yeah, like social media, any kind of social media, Instagram, Facebook, I guess is it always helps with keeping in touch with friends. Seeing what they're up to, talking to them daily. When you are locked indoors.
	44	<b>INTERVIEWER:</b> Thank you. And what is your level of knowledge about the current environmental issues like pollution or global warming?
..Awareness of lacking deep understanding of env. prob ..Awareness of future env. problems consequences	{	<b>INTERVIEWEE:</b> Moderate level of knowledge if we're talking about the scale throughout the world because I did geography GCSE and that introduced me to loads of topics such as ocean health and climate change and pollution in countries like China. But I haven't kept up with that so much, but I do know that, you know, but it's projected by like around 2050 that we're going to start having serious issues with climate change, such as water wars in places like Egypt, so I'm somewhat versed in climate issues, but haven't followed them up too much. Also, as a vegan, I'm very aware of the impact that red meat in particular has on the planet and all the water it takes up. That's part of the reason why I'm vegan, like for the environmental benefits that it brings.
	46	
..Being vegan for the environment	{	
	47	<b>INTERVIEWER:</b> So have you ever had any first-hand experience with the consequences of unsustainable human behaviour like or water pollution?
..Environment is not clearly affected by environmental p ..Health is not clearly affected by environmental probel ..Awareness of the relevance of environmental problem	{	<b>INTERVIEWEE:</b> No, not tangible experience, not tangible things that I can see, but I imagine like living in London, getting on the tube every day, it was quite like stuffy and you feel like you're being polluted, but I haven't seen the effects personally, not really. But I know we're being affected.
	48	
..Awareness of future env. problems consequences	{	
	49	<b>INTERVIEWER:</b> OK, so how does that make you feel?
..Behaviour is driven by concerns about own health	{	<b>INTERVIEWEE:</b> I'm worried about the future if things progress and get worse. It made me worried that my day-to-day living will be affected and my standard living
	50	



- 51 quality will decrease significantly.
- INTERVIEWER: And do you act in any way that can remedy the situation?
- INTERVIEWEE: Yeah, by going vegan, not smoking or owning a car only using public transport or walking. I don't think it counters climate change, but I think that it's more of a, uh, putting pressure on corporations that are going to make the biggest sort of change. But individually, yes, I make changes by being very good essentially.
- INTERVIEWER: Thank you, and on a scale from 1 to 5, How much do you think that humans contribute to such issues?
- INTERVIEWEE: 5. Like, you know humans are destroying the planet like there are theories of climate change that don't, you know, go along with global warming that I learned in like GCSE like the natural stages of the Earth and stuff. But I believe the state we're in now is entirely due to human behaviour, mainly industrialization, and you know the rapid expansion of our population.
- INTERVIEWER: Thank you. Do you believe that these problems negatively affect your life, personally?
- INTERVIEWEE: To some degree, yes. But it's more a very, very sharp awareness that within the next 10 to 20 years things are going to be like disastrous rather than seeing the effects on my day to day life.
- INTERVIEWER: And what are some of the reasons why do you think that they don't affect you right now, personally?
- INTERVIEWEE: I just don't. I don't see like the impact of pollution. I don't really feel like the difference in air quality, I don't. I don't see the oceans dying or species dying out. I don't see all the landfills and everything. I just live my day-to-day life, but I know that those things are going to have long term impacts on us in the very near future.
- INTERVIEWER: Thank you. So why do you think that those problems will negatively affect the lives of future generations?
- INTERVIEWEE: Because it's been proven that you know we have limited resources. Like fossil fuels. We're using them up way too fast. We're polluting the earth and our temperature is rising extremely fast and if we don't act soon, you know irreversible changes will happen. We're damaging our natural ecosystems. Um were causing a rise in the ocean and these will have long term, you know, effects and it's been scientifically shown that these things happen.
- INTERVIEWER: OK, and on a scale from 1 to 5, how much do you think that your behaviour at home affects the quality of life for future generations?
- INTERVIEWEE: Like a two to a three? As I said, I think corporate responsibility is a massive player in these sort of arguments or these sort debates, but if

		<p>..Awareness small changes can have a big impact</p>	
		<p>..Large corporations have a larger impact on env. problem</p>	
		<p>..Governments have a larger impact on env. problems</p>	
		<p>..Behaviour is driven by concerns about own health</p>	
		<p>..Awareness small changes do not have a big impact</p>	
		<p>..Large corporations have a larger impact on env. problem</p>	
		<p>..Live and let live</p>	
		<p>..Awareness of society expectations about sustainability</p>	
		<p>..Behaviour is driven by monetary concerns</p>	
		<p>..Awareness of the relevance of environmental pro</p>	
		<p>..Behaviour is driven by short-term factors rather than long</p>	
		<p>..Awareness of future env. problems consequences</p>	
		<p>..Unwillingness to change habits</p>	
		<p>..Laziness</p>	
		<p>..Unwillingness to change habits</p>	
		<p>..Sustainable behaviour is not practical</p>	
		<p>..Laziness</p>	
		<p>..Behaviour is driven by short-term factors rather than long</p>	
		<p>..Live and let live</p>	
63		<p>everybody made an effort you know to be vegan and recycle and walk places and you know limit and shop local or whatever. I do believe that would have a good impact on delaying, um, all these negative consequences, but more so than anything they would inspire, you know, government legislation and put pressure onto the corporations who are the main cause of pollution.</p>	
64		<p><b>INTERVIEWER:</b> Thank you. If you were to actually change your household behaviour, would the negative impact of those issues regarding your personal life or their impact on future generations urge more to change your behaviour?</p>	
65		<p><b>INTERVIEWEE:</b> Um, personal life because you know, it's hard to think about the health of future generations, like in there, yes, I care a lot. But you know, in practice I'm seeing the tangible effects on my own life. That's going to inspire change. It may.</p>	
66		<p><b>INTERVIEWER:</b> OK, and on a scale from 1 to 5, how much do you agree that household behaviour is the largest contributor to climate change?</p>	
67		<p><b>INTERVIEWEE:</b> Um. 1. I don't think it is. The biggest contributor to climate change. Like I said, I would say that is irresponsible corporations in rapidly industrializing countries.</p>	
68		<p><b>INTERVIEWER:</b> OK, and do you feel that people have any expectations about your household behaviour?</p>	
69		<p><b>INTERVIEWEE:</b> In regards to like environmental, sustainable actions, there are some who pressure you to, you know, to recycle, but beyond that, not really, no. Some tell you to not wastewater, but that's more inspired by monetary concerns like don't put the heating on, don't use water because the bills not because we got to save the world.</p>	
70		<p><b>INTERVIEWER:</b> So according to your experience, what are the reasons why people don't push others to adopt a pro-environmental household behaviour?</p>	
71		<p><b>INTERVIEWEE:</b> I think we're all aware of climate change, but it doesn't matter. They are aware that it's an issue that will come up in the next decade, not today, not tomorrow, and people would much rather like to be stuck in their own ways and live their life. And a lot of the things to do with climate change are to do with these. Like you order from Amazon, because it's easy and you eat meat because you were raised to eat meat and you don't recycle because it's easier to put anything in the bin and that's just easier. Some threat in 10 to 20 years isn't enough to motivate people to change their daily behaviours because there is no immediate reward and we are raising a generation where, you know we're gratified instantly.</p>	
72		<p><b>INTERVIEWER:</b> Thank you. Do you know people that have no expectations about others household behaviour but have sustainable household behaviour themselves?</p>	
73		<p><b>INTERVIEWEE:</b> Um, yeah. A lot of people don't, like a live and let live attitude. So I know a couple.</p>	
		<p><b>INTERVIEWER:</b> And what do you think are their</p>	

		reasons to do so?
..Live and let live	74	<b>INTERVIEWEE:</b> As I said, live and let live, like people don't want to impose their own ideologies onto others. And they hold that at a higher value than promoting the greater good per se.
..Youngsters tend to be more environmentally cons	75	<b>INTERVIEWER:</b> So, in a more general way, do you think there's a certain category of people that are more prone to reduce their unsustainable behaviours?
..Behaviour is driven by concerns about own health	76	<b>INTERVIEWEE:</b> Prone to do what?
..Educated people tend to be environmentaly conc	77	<b>INTERVIEWER:</b> Do you think there's a, let's say, category of people that are more prone to reduce their unsustainable behaviours?
..Acting sustainably requires enough economic resources	78	<b>INTERVIEWEE:</b> Yeah, I'd say like younger people, because we've grown up with the threat of climate change being more imminent. And also, you know, it tends to be University educated people or people whom you know are involved with intellectual practices or who might come across these things. And then also like uh you know more middle-class people because a lot of working-class people can't afford to take the more sustainable option.
Willingness to adopt sustainable behaviours	79	<b>INTERVIEWER:</b> OK, and so on a scale from 1 to 5. To what degree do you believe that your everyday behaviour at home is sustainable?
..Recycling	80	<b>INTERVIEWEE:</b> Three. So, I'm vegan and I tried to recycle but I also you know, I don't do much. I use a little water and sometimes I forget to put things in the recycling and I let food go to waste and stuff like that.
..Awareness of not making enough efforts	81	<b>INTERVIEWER:</b> And what are the reasons why you act this way?
..Reducing water consumption	82	<b>INTERVIEWEE:</b> I'm just lazy, I suppose like we all have faults and sometimes it's more practical to be impractical in the climate change sense.
..Forgetting to recycle	83	<b>INTERVIEWER:</b> Do you feel some moral internal obligations which make you feel obliged to behave sustainably?
..Letting food perish	84	<b>INTERVIEWEE:</b> My only like moral thing would be veganism like I feel very strongly about not torturing animals and not contributing massively to climate change. So my only, my only like strong moral compass is that veganism and then environmentalism comes as like a secondary thought. To me.
..Laziness	85	<b>INTERVIEWER:</b> So why do you think you have those moral obligations? Is there a particular circumstance that caused them?
..Sustainable behaviour is not practical	86	<b>INTERVIEWEE:</b> I just I don't like to see suffering and for me, it's such an easy easy fix to not eat animals. Obviously, it makes me feel better about myself that I'm not contributing to this, this monetization of torture. In my opinion. Watching a lot of the like documentaries about the Treatment of Animals and the impact on environment definitely helped me cement my moral compass in regards to being vegan.
..Behaviour is driven by moral obligations		
..Information raises moral obligations		

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..Behaviour is driven by moral obligations  
 ..Lack of support for achieving sustainable behaviour  
 ..Live and let live  
 ..Unpopularity of eco-feedback devices  
 ..Housemates are prone to sharing and collaborating  
 ..Information raises moral obligations  
 ..Laziness  
 ..Cleaning  
 ..Taking the bins out  
 ..Cleaning

- 87 **INTERVIEWER:** So if you had to choose the main reason that drives you to adopt a sustainable household consumption, what would it be?
- 88 **INTERVIEWEE:** Being vegan. Like it's the driving force, like the fact that I am being vegan and I agree with the ideology or whatever.
- 89 **INTERVIEWER:** So it's the vegan ideology that makes you adopt a sustainable behaviour in general?
- 90 **INTERVIEWEE:** Yes.
- 91 **INTERVIEWER:** OK, and are there people that support you at curtailing your environmentally unsustainable behaviours?
- 92 **INTERVIEWEE:** Like some people are supportive, yeah. But it's not a massive thing. I don't think anyone wants to tell me what to do.
- 93 **INTERVIEWER:** OK, and are you aware that some devices on the market help you adopt more sustainable behaviours?
- 94 **INTERVIEWEE:** Somewhat yes.
- 95 **INTERVIEWER:** And do you use any of them?
- 96 **INTERVIEWEE:** No, but I did want to download an app where if you wouldn't want the product anymore, like some leftover food or an old T-shirt. They would just put it on the market for free and people would come collect on that day like the leftover like apples or whatever to prevent waste.
- 97 **INTERVIEWER:** So what do you think are the advantages and drawbacks of products like that?
- 98 **INTERVIEWEE:** I mean, the advantages is it promotes sustainable thinking and it's done through an accessible medium technology like we are the age of technology and most people, other than phone, own at least an iPod or laptop and we are all connected by the Internet. It disseminates information like the rapid pace. The drawbacks of sustainable technology. By putting it everything online, people you know there's this kind of thing called them like a click mentality. Like a click mentality where you know people think a click is enough and because they aren't seeing the tangible results of sustainable things they're doing. They just seen a click or there just you know, going online people can get complacent and they don't delve deeper into real-life change. But I'd say that's more a problem with like activism than simply apps that help you live more sustainably.
- 99 **INTERVIEWER:** And could you please tell me what household chores you do during the week?
- 100 **INTERVIEWEE:** I clean the kitchen surfaces and I sweep the kitchen floor. I clean my room and even my room and I get rid of the rubbish in my room in my bin and occasionally I'll clean my mirror and the mirror outside my room.
- 101 **INTERVIEWER:** And are there any of these household

		chores which you believe you can shift in time? For example, do them when, say, water is cheaper or electricity is made with more green sources.
102		<b>INTERVIEWEE:</b> Uh. Not, really, no.
103		<b>INTERVIEWER:</b> And why? What are the reasons that you can't shift the time in which you do those activities?
104		<b>INTERVIEWEE:</b> It's just you know, cleaning. And tidying isn't something that really requires some, like a crazy development in technology. In my opinion. And my things normally revolve around simple cleaning tasks.
105		<b>INTERVIEWER:</b> And do you think your daily or weekly household chores somehow influence each other?
106		
107		<b>INTERVIEWEE:</b> Um, not really.
108		<b>INTERVIEWER:</b> OK, and on a scale from 1 to 5, to what extent do you think that you can adopt more sustainable behaviours?
109		<b>INTERVIEWEE:</b> Five, I don't know. We can always strive to adopt more sustainable behaviours, no matter who.
110		<b>INTERVIEWER:</b> And what makes you think so?
111		<b>INTERVIEWEE:</b> Like no one is perfect and everyone is always so quick to accept the easier path in the sort of age of instant gratification. So I think we can always do something better or better for the collective good because we are all individually minded people.
112		<b>INTERVIEWER:</b> And are there any constraints that are outside of your control that would not allow you to change your behaviour to more sustainable ones?
113		<b>INTERVIEWEE:</b> It's difficult to order vegan cleaning products, for example, and those who are, you know, just below the poverty line. They can't really afford to think about the greater good. They're just trying to like make it through the next day and then like corporations. You know, all the personal work we do is undone by corporations making really stupid, unsustainable decisions.
114		<b>INTERVIEWER:</b> And would you collaborate with other people to achieve sustainable behaviour?
115		<b>INTERVIEWEE:</b> Yes.
116		<b>INTERVIEWER:</b> And how would you do that?
117		<b>INTERVIEWEE:</b> I don't know, like encourage each other to recycle by, you know, keep each other in check and if I was vegan, if someone else wanted to go vegan like giving them options, letting them share meals with me, giving them advice on how to be vegan.
118		<b>INTERVIEWER:</b> And are there any habits that even if you know they're not sustainable, you still won't change?
119		<b>INTERVIEWEE:</b> Not off the top of my head. I like buying certain food, you know, like um, processed foods like I would like very specific like vegan chocolates. And they

- ..Unwillingness to change habits
- ..Unpopularity of eco-feedback devices
- ..Large corporations have a larger impact on env. problem
- ..Awareness small changes can have a big impact
- 120 might be imported from places you know air Miles adding up air Miles, but I don't care, I would still need certain types of food.
- 121 **INTERVIEWER:** Do you think there is there any piece of technology that can help you at overcoming those constraints or habits?
- 122 **INTERVIEWEE:** Not really.
- 123 **INTERVIEWER:** So, on a scale from 1 to 5, what is the extent to which you agree with the following statement? Changes in individuals household behaviour will significantly help at fighting environmental issues.
- 124 **INTERVIEWEE:** 3.
- 125 **INTERVIEWER:** And so why do you think that they may or may not help?
- 126 **INTERVIEWEE:** I mean they will help, but the significance is countered by things like corporations setting us back. But you know, they will have somewhat of an impact. In creating a more sustainable world, yes.
- 127 **INTERVIEWER:** So on a scale from 1 to 5, to what extent are you in favour of laws that makes some sustainable behaviours like recycling compulsory for everyone? As in people will be fined if they don't.
- 128 **INTERVIEWEE:** I think we know we're at a crisis point so 5.
- 129 **INTERVIEWER:** OK and instead to what extent are you in favour of laws that reward businesses and individuals who are sustainable without punishing those who don't?
- 130 **INTERVIEWEE:** From one to five? 4 or 3 around there.
- 131 **INTERVIEWER:** OK, well that concludes the interview and do you think there's anything important that I didn't ask?
- 132 **INTERVIEWEE:** Um no, no.
- 133 **INTERVIEWER:** OK, then thank you for your time and for your contribution to the study and goodbye!
- 134 **INTERVIEWEE:** Goodbye.

**Transcribed Interviews (with Codes)**

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**Participant 2**

1      **INTERVIEWER:** Welcome to the interview. I'm Alessandro and I'll be your interviewer today.

2      *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*

3      *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*

4      *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*

5      *To facilitate our note-taking, we would like to audiotape our conversations today.*

6      *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*

7      *(1) all information will be held confidential,*  
8      *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*  
9      *(3) we do not intend to inflict any harm.*

10     *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*  
11     *in order to push ahead and complete this line of questioning.*

12     Do you agree to these terms?

13     **INTERVIEWEE:** Yes, I agree.

14     **INTERVIEWER:** OK, so let's start the interview. So what is your current occupation?

15     **INTERVIEWEE:** I work part-time with the uni doing CLS checking and I study full time at the University of Southampton.

16     **INTERVIEWER:** And where do you currently live? Is it a house? Flat? Halls?

17     **INTERVIEWEE:** I live in a student house with four other students?

18     **INTERVIEWER:** OK, so on a scale from 1 to 5 where one is strongly disagree and five is strongly agree, to what

..Housemates coordination can be improved



..Watching movies with housemates



..Cooking with housemates

..Socialising with housemates

..Laziness



..Media entertainment



..Reading

..Weather influences outdoor activities



..Behaviour is driven by a comparison with others



..Using public transport / Walking



..Workout

..Current social life is satisfying



extent do you agree with the following? The coordination in the household is perfect and cannot be improved.

19 **INTERVIEWEE:** Um, I say there's room for improvement, so I'd say like a 3.

20 **INTERVIEWER:** And what activities do you do at home?

21 **INTERVIEWEE:** Well, usually at home I watch films with the rest of the house. I cook with them. Sometimes I just socialize with them generally.

22 **INTERVIEWER:** And do you ever use delivery services?

23 **INTERVIEWEE:** Uh, yeah, we use food delivery services in general like packages like for Amazon and Stuff.

24 **INTERVIEWER:** And why do you use the delivery services?

25 **INTERVIEWEE:** Well, especially right now it's most convenient with lockdown, and generally speaking I tend to use online delivery more than in-person shopping.

26 **INTERVIEWER:** OK, So what do you like doing in your free time?

27 **INTERVIEWEE:** Um. Usually I watch films or play video games, or sometimes read for fun.

28 **INTERVIEWER:** Would you rather go on a walk or watch something on TV?

29 **INTERVIEWEE:** Depends on the weather, really. Like on in the summer I'd go for a walk quite often to be honest.

30 **INTERVIEWER:** So it's more situational and like in the summer you prefer to walk and in winter maybe you prefer to watch something on TV?

31 **INTERVIEWEE:** Yeah.

32 **INTERVIEWER:** OK, so to what extent do you think you have a healthy lifestyle?

33 **INTERVIEWEE:** Um, I'd say I'm more active than the average person at my age.

34 **INTERVIEWER:** And can you give some examples?

35 **INTERVIEWEE:** Um. Well, I usually avoid like taking transportation if something is within like walking distance of like half an hour. So like I just walk within half an hour distance to most things if I can.

36 **INTERVIEWER:** OK, on a scale from 1 to 5, to what extent do you agree with the following? My social life is perfect and cannot be improved.

37 **INTERVIEWEE:** I could always, you know, go out more. I could always interact with people more.

38 **INTERVIEWER:** So what would it be on a scale of 1 to 5?

39 **INTERVIEWEE:** Probably three.

- ..Introversion diminishes social interactions
- ..Social media help interact with other people
- ..Awareness of lacking deep understanding of env. prob
- ..Health is not clearly affected by environmental probel
- ..Environment is clearly affected by environmental prob
- ..Governments have a larger impact on env. problems
- ..Donating to environmental charities
- ..Awareness of not making enough efforts
- ..Awareness humans are major cause of environemntal proble
- ..Awareness humans are major cause of environemntal proble
- 40 **INTERVIEWER:** OK, and are there any constraints that influence your social life?
- 41 **INTERVIEWEE:** Well right now, yeah there's lockdown. That's a definite constraint.
- 42 **INTERVIEWER:** And in a more general sense.
- 43 **INTERVIEWEE:** Um. Generally speaking, I'm more like an introverted person, so I suppose I'd prefer to be more extroverted sometimes.
- 44 **INTERVIEWER:** And can you think of some technology to remove these constraints?
- 45 **INTERVIEWEE:** Social media definitely helps a lot. I've made quite a few friends from just social media.
- 46 **INTERVIEWER:** OK, and what is your level of knowledge about the current environmental issues such as pollution and global warming?
- 47 **INTERVIEWEE:** Um. I tend to read about it every now and then on the news and stuff, but I don't research it in detail.
- 48 **INTERVIEWER:** Have you ever had any first-hand experience with consequences of unsustainable human behaviour, like air or water pollution?
- 49 **INTERVIEWEE:** Um. I wouldn't say anything has directly influenced me, but I've seen like broad effects of it on my immediate environment like the environment around where I live.
- 50 **INTERVIEWER:** And what do you feel in those circumstances when you see the consequences of those actions?
- 51 **INTERVIEWEE:** Um. Generally I feel I'm quite happy with how things are but I feel like that local governments can do a lot more to keep their counties and cities more sustainable in terms of the environment.
- 52 **INTERVIEWER:** Do you act in any way to remedy the situation?
- 53 **INTERVIEWEE:** Um. I've donated to charities a few times in my lifetime, charities that would improve the state of the environment and stuff like that, but. Um. Not too much in terms of like active you know reaction to environmental issues.
- 54 **INTERVIEWER:** OK, so on a scale of from one to five, how much do you think that humans contribute to such issues? As in global warming or water pollution-
- 55 **INTERVIEWEE:** I'd probably say 4. Obviously like humans are a major factor in it, but there are some things that are beyond our control.
- 56 **INTERVIEWER:** And are there any reasons that come to your mind for why you think that humans contribute as much to that issue?
- 57 **INTERVIEWEE:** Well, the rapid expansion in technology

3/9

..Awareness of the relevance of environmental problem	58	over the past 200 or so years. The impact is being heavily detrimental. Uh, pollution levels in the atmosphere and the ice caps shrinking.
..Awareness humans are major cause of environmental problem	59	<b>INTERVIEWER:</b> And do you believe that these problems negatively affect your life personally?
..Health is not clearly affected by environmental problems	60	<b>INTERVIEWEE:</b> Um. It's less so on an immediate scale, but I know that in the future those problems will be made drastically larger to deal with.
..Awareness of future env. problems consequences	61	<b>INTERVIEWER:</b> And what makes you say so?
..Awareness of the relevance of environmental problem	62	<b>INTERVIEWEE:</b> It's mainly like the scientific research has been published that you see on the news. Scientists always say that you know this year is the year where it's irreversible, and by this year the ice caps will shrink. Usually I tend to agree with or like have trust in scientific findings.
..Trust on environmental scientific research	63	<b>INTERVIEWER:</b> And do you believe that these problems will negatively affect the lives of future generations?
..Awareness of future env. problems consequences	64	<b>INTERVIEWEE:</b> Yes, definitely.
..Awareness of the relevance of environmental problems	65	<b>INTERVIEWER:</b> And why you do think so?
	66	<b>INTERVIEWEE:</b> I don't see environmental problems as ever truly going away by see them as only being. I am depressed, I feel like we've gone down a path that is at this point, perhaps irreversible. So they I mean the problems. They probably can't be fixed completely, they can only be, you know, diminished somewhat.
..Large corporations have a larger impact on env. problems	67	<b>INTERVIEWER:</b> OK, and on a scale from 1 to 5, how much do you think that your behaviour at home affects the quality of life for future generations?
..Governments have a larger impact on env. problems	68	<b>INTERVIEWEE:</b> Um. I'd say Two. I tend to think that you know, it's the larger corporations and the governments that are more influential in that, but I want to believe that I'm making a change by you know, being more environmentally conscious at home myself, so I feel like you know the individual roles are important too.
Willingness to adopt sustainable behaviours	69	<b>INTERVIEWER:</b> So let's say if you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you to do so more than the impact on future generations or the contrary?
..Awareness small changes can have a big impact	70	<b>INTERVIEWEE:</b> I don't think climate change and environmental issues will affect me too much personally, but when you consider all the future generations that there will be the scale of that problem in the future outweighs my own concern for myself.
..Health is not clearly affected by environmental problems	71	<b>INTERVIEWER:</b> So you're saying that maybe changing your household behaviour has more impact on future generations?
..Awareness of future env. problems consequences		<b>INTERVIEWEE:</b> Well, generally speaking, yes, but in particular I think you know when I, you know, make the conscious choice to recycle more often or when I make the conscious choice to save energy. Turning off the light and turning off the water. I'm more conscious of like the future generations that may be impacted by you know
..Reducing electricity consumption		
Willingness to adopt sustainable behaviours		

4/9

			<p>..Awareness small changes can have a big impact</p>
			<p>..Large corporations have a larger impact on env. proble</p>
			<p>..Governments have a larger impact on env. problems</p>
			<p>..Awareness of society expectations about sustainability</p>
			<p>..Behaviour is driven by concerns of being judged by the soci</p>
			<p>Willingness to adopt sustainable behaviours</p>
			<p>..Behaviour is driven by moral obligations</p>
			<p>..People that make environmental efforts tend to ir</p>
			<p>..Unwillingness to change habits</p>
			<p>..Awareness of society expectations about sustainability</p>
			<p>..People that make environmental efforts tend to incite</p>
			<p>..Awareness of society expectations about sustainability</p>
72			<p>those little differences.</p>
73			<p><b>INTERVIEWER:</b> OK, and on a scale from 1 to 5, how much do you agree with the following: household behaviour is the largest contributor to climate change.</p>
74			<p><b>INTERVIEWEE:</b> Uh, two, uh, I mean when you consider all the households that there are, it obviously adds up. But you know governments and corporations that. Um. Enable on a larger scale climate change, so yeah 2.</p>
75			<p><b>INTERVIEWER:</b> And do you feel that people have any expectations about your household behaviour, such as do you think that other people expect that you recycle or expected you to, for example, switch to green energy or something like that?</p>
76			<p><b>INTERVIEWEE:</b> I think so. Yeah, definitely. Having lived in two different countries in my life, there's definitely a difference in culture of attitudes towards that. Like, uh, here people are far more concerned about recycling. There's dedicated to recycling bins and stuff like that. That's like much more added as like with double glazed windows, that's like a major factor in people deciding on whether to get a house and stuff like that, so I think, yeah, there's a large expectation on people to be environmentally conscious.</p>
77			<p><b>INTERVIEWER:</b> So do these expectations push you to adopt a pro-environmental household behaviour?</p>
78			<p><b>INTERVIEWEE:</b> Um. Yeah, I tend to like go with the popular opinion yes.</p>
79			<p><b>INTERVIEWER:</b> So is it just you following the popular opinion or is there some other reason?</p>
80			<p><b>INTERVIEWEE:</b> Um, I mean, I generally agree with any sort of difference I can make in terms of being more conservative with my energy usage and recycling so, personally, I do agree with it, but also I'm I just don't agree with it through popular opinions, so that's kind of like the way I was moved to that direction.</p>
81			<p><b>INTERVIEWER:</b> And do you know people that have no expectations about others household behaviour but have sustainable household behaviour?</p>
82			<p><b>INTERVIEWEE:</b> Um. No, I'd say people, you know, once they maintain a standard, they tend to try and encourage other people to uh conform with that standard, so I feel, uh, there's a culture of being environmentally conscious.</p>
83			<p><b>INTERVIEWER:</b> So do you think that those people, once they are environmentally conscious and have a sustainable behaviour, try to influence other people? Like for the greater good? Or they? Do they have some reason for doing that?</p>
84			<p><b>INTERVIEWEE:</b> I think so. I think yes. They do, they try, you know, spreading the message of acting for the greater good in my opinion. So I think generally speaking yes.</p>
			<p><b>INTERVIEWER:</b> OK, so could you, for example, describe a category of people that you think are more prone to reduce their unsustainable behaviours?</p>

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..Behaviour is driven by concerns about own health	85
..Youngsters tend to be more environmentally conscious	
..Behaviour is driven by monetary concerns	
..Behaviour is driven by a comparison with others	86
..Reducing electricity consumption	
..Reducing electricity consumption	87
..Reducing water consumption	
Willingness to adopt sustainable behaviours	
..Housemates are prone to sharing and collaborating	88
..Behaviour is driven by moral obligations	
..Behaviour is driven by moral obligations	89
..Housemates are prone to sharing and collaborating	
..Behaviour is driven by moral obligations	90
..Awareness of future env. problems consequences	
..Trust on environmental scientific research	91
..Behaviour is driven by moral obligations	
..Educated people tend to be environmentally conc	92
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	97

..Educated people tend to be environmentally conc		
..Awareness of future env. problems consequences		
..Information raises moral obligations		
Willingness to adopt sustainable behaviours		
..Behaviour is driven by moral obligations		
..Awareness of society expectations about sustainability		
..Unpopularity of eco-feedback devices		
..Unpopularity of eco-feedback devices		
..Cost of sustainable devices is prohibitive		
..Unpopularity of eco-feedback devices		
..Housemates are prone to sharing and collaborati		
..Cleaning		
..Taking the bins out		
..Household chores can be shifted in time		
..Household chores can be shifted in time		
	98	know what we're doing is having a negative impact already and will be having a negative impact in the future. So it's the scale of information that's out there available to me that I've seen. And that persuaded me realistically.
	99	<b>INTERVIEWER:</b> So if you had to choose the main reason that drives you to adopt a sustainable household consumption, what would it be?
	100	<b>INTERVIEWEE:</b> Um. Probably the belief that I'm doing something to help the future, probably.
	101	<b>INTERVIEWER:</b> Are there other people that support you at curtailing your environmentally unsustainable behaviours?
	102	<b>INTERVIEWEE:</b> Um. I believe the majority of people in Britain would agree with that statement. My housemates definitely do. They tried to be more environmentally, uh, more environmentally conscious in terms of their energy usage. So I think most people across Britain would agree with that.
	103	<b>INTERVIEWER:</b> Are you aware that some devices on the market help you adopt more sustainable behaviours?
	104	<b>INTERVIEWEE:</b> Um. I couldn't name any. So no.
	105	<b>INTERVIEWER:</b> OK, so why? What are the reasons why you don't know of any of them?
	106	<b>INTERVIEWEE:</b> Well, some devices are used might be. Well, I suppose like. Uh, a fridge can be more economic in terms of energy, so there's that, but generally speaking. I don't think it's worth the investment. I think you know.
	107	<b>INTERVIEWER:</b> Generally speaking, the question was more about proactive things, like for example it went. For example, in the same way you could have a fitness app, you could then have a sustainability app.
	108	<b>INTERVIEWEE:</b> I don't know, maybe it's just not particularly marketed towards me.
	109	<b>INTERVIEWER:</b> OK, so could you please tell me what household chores you do during the week?
	110	<b>INTERVIEWEE:</b> I am in charge of cleaning the living room well so all in charge of cleaning surface is in the kitchen mainly and generally I do my own washing up. I take out the bins whenever I can.
	111	<b>INTERVIEWER:</b> Do you do those chores at a set time like for example after dinner or after lunch, or at 5:00 in the afternoon or something like that?
	112	<b>INTERVIEWEE:</b> I tend to just do them whenever I have the time.
	113	<b>INTERVIEWER:</b> So for example, at what time do you usually clean the living room?
	114	<b>INTERVIEWEE:</b> I do it on a Sunday. I'm usually free most of Sunday so I just do it whenever I have time.
		<b>INTERVIEWER:</b> OK, and do you think that daily or

		weekly household chores somehow influence each other?
115		<b>INTERVIEWEE:</b> How do you mean?
116		<b>INTERVIEWER:</b> For example, let's say if you were to clean the living room. And instead of you know throwing out the water and putting back the mop and all that, you might as well clean the kitchen.
117		<b>INTERVIEWEE:</b> Um, yes, actually, um I whenever I'm done hoovering for example, I leave the Hoover out for whoever else needs it. Sometimes they don't use it, but I, you know, I tried to leave stuff out that they might find useful
118		<b>INTERVIEWER:</b> OK, and on a scale from 1 to 5. To what extent do you think that you can adopt more sustainable behaviours?
119		<b>INTERVIEWEE:</b> Um. I think there's always you know a lot more. You can do even if you do a lot personally so. I'd probably say 4.
120		<b>INTERVIEWER:</b> And are there any constraints that are outside of your control that would not allow you to change your everyday behaviours to more sustainable ones?
121		<b>INTERVIEWEE:</b> Um. Living in a five-person household, you can't always control what everyone does. You can't always, you know, tell people to turn the heating off because some people might be cold and other people might not be cold. And you can't tell people when to turn their lights off in the bedroom and when to open the curtains. So yeah, there's definitely constraints beyond my control.
122		<b>INTERVIEWER:</b> So would you collaborate with your housemates towards having a more sustainable behaviour?
123		<b>INTERVIEWEE:</b> Yeah, we've had discussions about it before I try to remind them to, you know, open the curtains rather than using their lights as often as they can.
124		<b>INTERVIEWER:</b> And are there any habits that even if you know they're not sustainable, you still won't change?
125		<b>INTERVIEWEE:</b> Um. Personally, for myself, I've identified habits like that. I tried my best to, you know, minimize them. Um, I've tried to get into habits actively that would help me. So, like for example, always checking the labels on, on stuff I throw away to see if it's recycled or not. So I'm generally quite proactive in trying to change my habits.
126		<b>INTERVIEWER:</b> But is there anything that is like, not sustainable, that you won't change?
127		<b>INTERVIEWEE:</b> Um. No, I don't think there is. I'm generally, um, quite adapted to that.
128		<b>INTERVIEWER:</b> OK, and could you think of a piece of technology that can help you to be more sustainable? For example, as we talked about before collaborating

..Governments have a larger impact on env. problems

..Acting sustainably requires enough economic resources

..Rewarding is better than punishing

with your housemates to be more sustainable or if somebody were to have non-sustainable habits, help them change them.

129 **INTERVIEWEE:** Uh, I think yeah, uh, if uh, like for example, an app that would, you know, help you reduce power usage by you know reminding your stuff like you mentioned before, I think I'd definitely be interested in that.

130 **INTERVIEWER:** On a scale from 1 to 5, what is the extent to which you agree with the following statement? Changes in individual household behaviour will significantly help at fighting environmental issues.

131 **INTERVIEWEE:** Um. 3

132 **INTERVIEWER:** And why do you think that changes in individual households may or may not help?

133 **INTERVIEWEE:** Um, as I said before, it's yeah, on a large scale, if you know every single household in Britain were to change their behaviours to be more environmentally conscious then it'll make a big difference, but at the same time there are bigger factors at play. Like government policies.

134 **INTERVIEWER:** So then on a scale from 1 to 5, to what extent are you in favour of laws that make some sustainable behaviours, like for example recycling, compulsory. As in like people will be fined if they don't.

135 **INTERVIEWEE:** Um, I'd say five, with some exceptions. Like you know, some people living in poorer conditions might not be able to conform to some of those rules, but generally speaking. Um, I would wholeheartedly agree with adding more laws and policies that would enforce. Uh, be more environmentally conscious.

136 **INTERVIEWER:** So then on a scale of 1 to 5, how much would be in favour of laws that instead reward businesses and individuals who assume sustainable behaviours without punishing those who don't?

137 **INTERVIEWEE:** Um. No 5 as well. I think rewarding is a better way of achieving sustainability.

138 **INTERVIEWER:** OK, thank you for your time, we have concluded the interview. Is there anything important you think I didn't ask?

139 **INTERVIEWEE:** No, I think that's it.

140 **INTERVIEWER:** OK then thank you for your contribution to the study and, well, goodbye.

141 **INTERVIEWEE:** Bye!

**Transcribed Interviews (with Codes)**

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**Participant 3**

1 **INTERVIEWER:** Welcome to the interview. I'm Jury and I'll be your interviewer today.

2 *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*

3 *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*

4 *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*

5 *To facilitate our note-taking, we would like to audiotape our conversations today.*

6 *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*

7 *(1) all information will be held confidential,*  
8 *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*  
9 *(3) we do not intend to inflict any harm.*

10 *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*  
11 *in order to push ahead and complete this line of questioning.*

12 Do you agree to these terms?

13 **INTERVIEWEE:** Yes.

14 **INTERVIEWER:** Ok, let's start then. So, what is your current occupation?

15 **INTERVIEWEE:** Student.

16 **INTERVIEWER:** And where do you currently live? Is it a house a flat or University halls etc?

17 **INTERVIEWEE:** A private tenancy house.

18 **INTERVIEWER:** How many people live with you?

19 **INTERVIEWEE:** 6 including myself.

..Housemates coordination can be improved



..Studying



..Cooking

..Cleaning

..Practising a sport



Current lifestyle can be improved



..Poor diet

20 **INTERVIEWER:** On a scale from 1 to 5 where one is strongly disagree and five is strongly agree, to what extent do you agree with the following? The Coordination in the household is perfect and cannot be improved.

21 **INTERVIEWEE:** I'd say 8.

22 **INTERVIEWER:** From one to five.

23 **INTERVIEWEE:** Oh sorry I thought you said ten, so I'll go four then.

24 **INTERVIEWER:** OK, what are the reasons for why you say so?

25 **INTERVIEWEE:** I'd say that we are relatively coordinated, but there is always room for improvement within the dynamic of the household.

26 **INTERVIEWER:** What activities do you do at home?

27 **INTERVIEWEE:** In sorry, what context?

28 **INTERVIEWER:** Like generally, what do you do? for example studying

29 **INTERVIEWEE:** Yeah, study, cook, clean, eat you know.

30 **INTERVIEWER:** Ok, and do you ever use delivery services? Why or Why not?

31 **INTERVIEWEE:** Food and like generally for sort of supplies and lots of household items.

32 **INTERVIEWER:** OK, what do you like doing in your free time?

33 **INTERVIEWEE:** I play hockey and video games.

34 **INTERVIEWER:** OK, would you rather go on a walk or watch something on TV?

35 **INTERVIEWEE:** Uh, I'd say watch something on TV.

36 **INTERVIEWER:** What are the reasons for why you say so?

37 **INTERVIEWEE:** Generally speaking, like a walk may not be as engaging as watching something on TV, for example.

38 **INTERVIEWER:** To what extent do you think you have a healthy lifestyle?

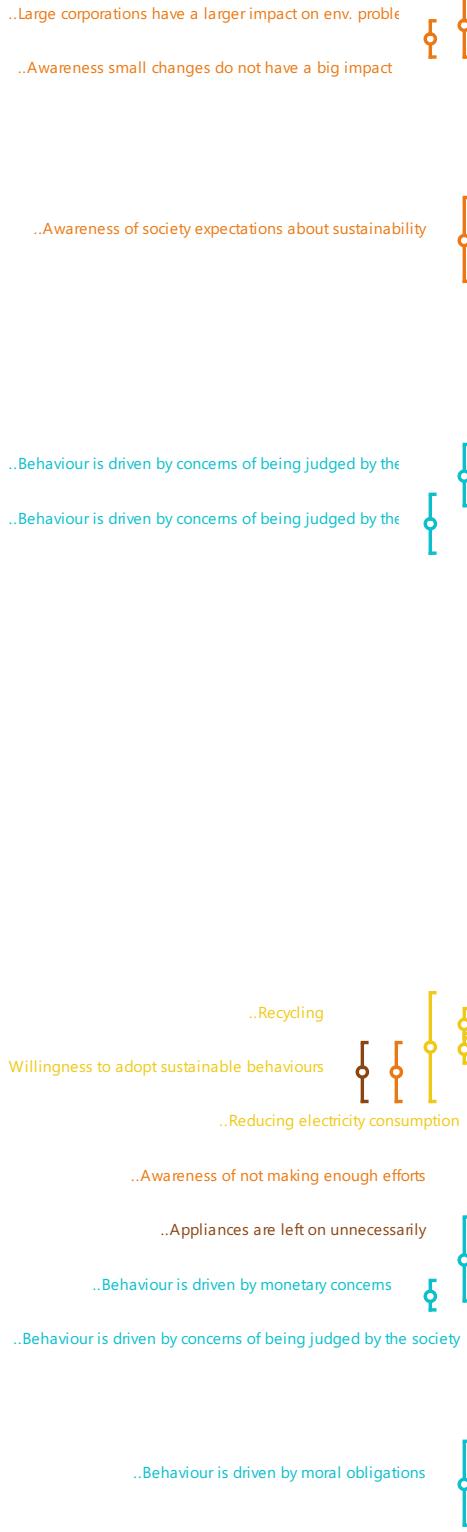
39 **INTERVIEWEE:** Let's say my life is relatively healthy, but it could definitely do with some improvement like my eating habits aren't best.

40 **INTERVIEWER:** What are the reasons why you say so?

41 **INTERVIEWEE:** \*Already answered above\*

- ..Current social life is satisfying
- ..Current social life is satisfying
- ..Awareness of the relevance of environmental problem
- ..Awareness of future env. problems consequences
- ..Environment is clearly affected by environmental problems
- ..Awareness humans are major cause of environmental problem
- ..Awareness humans are major cause of environmental problem
- 42** **INTERVIEWER:** On a scale from 1 to 5 where one is strongly disagree and five is strongly agree, to what extent do you agree with the following? My social life is perfect and cannot be improved.
- 43** **INTERVIEWEE:** Yeah, I'd say 5 my social life is pretty good.
- 44** **INTERVIEWER:** What are the reasons why you say so?
- 45** **INTERVIEWEE:** I'd say my social life is relatively fulfilling and I don't desire any extra sort of, I don't have any extra social needs, so yeah.
- 46** **INTERVIEWER:** Are there any constraints that influence your social life? Can you think of some technology to remove these constraints?
- 47** **INTERVIEWEE:** I'd say the biggest constraint on my social life currently is the national lockdown. So technological solutions I guess would be like a vaccine I guess.
- 48** **INTERVIEWER:** What is your level of knowledge about the current environmental issues? For example pollution, global warming.
- 49** **INTERVIEWEE:** I said my knowledge of the subject is relatively strong. I tried to keep up to date with that sort of thing. It's quite, It's an existential threat to sort of human existence. So kind of important.
- 50** **INTERVIEWER:** OK, have you ever had any first-hand experience with the consequences of unsustainable human behaviour? For example, air or beach or water pollution?
- 51** **INTERVIEWEE:** Having been in London, I've seen first hand that well, with like, low-quality sort of low air quality, black mucus and stuff from your nose. It like it's yeah, pretty bad.
- 52** **INTERVIEWER:** OK, So what did you feel in those circumstances?
- 53** **INTERVIEWEE:** Uh, like quite like, I said I felt actually relatively nonchalant, which is really bad, in fact, that it just didn't really seem like that big of a deal.
- 54** **INTERVIEWER:** OK, There is another question that says if adequate but I don't think it's adequate in this case.
- 55** **INTERVIEWER:** OK, so on a scale from 1 to 5 where one is equal to the minimum and five is equal to the maximum. How much do you think that humans contribute to such issues?
- 56** **INTERVIEWEE:** Oh five, big time.
- 57** **INTERVIEWER:** What are the reasons why you say so?
- 58** **INTERVIEWEE:** Because there is just strong statistical correlation between human activity and like global

- ..Awareness humans are major cause of environmental problems
- ..Health is not clearly affected by environmental problems
- ..Awareness of future env. problems consequences
- ..Environment is not clearly affected by environmental problems
- ..Awareness of future env. problems consequences
- ..Health is not clearly affected by environmental problems
- ..Awareness of future env. problems consequences
- ..Awareness of future env. problems consequences
- ..Awareness small changes do not have a big impact
- ..Awareness small changes do not have a big impact
- ..Large corporations have a larger impact on env. problems
- warming and sort of carbon pollution like carbon emissions and stuff which have a knock-on effect into a sort of other bits of global warming and such.
- INTERVIEWER:** Do you believe that these problems negatively affect your life personally?
- INTERVIEWEE:** I would say not yet, but I believe that they will do in the future.
- INTERVIEWER:** What are some reasons that make you say so?
- INTERVIEWEE:** Uh, the sort of the ongoing melting of like ice caps in the degradation of air quality in water quality, will, I think, will eventually sort of spill into sort of the first world, at the moment, It's not too much of an issue, but I believe it will get to that point.
- INTERVIEWER:** Do you believe that these problems will negatively affect the lives of future generations?
- INTERVIEWEE:** Yeah, definitely. If it doesn't affect me that badly, it will definitely affect just like my children's generation and my grandchildren's generation much worse.
- INTERVIEWER:** What are the reasons that make you say so?
- INTERVIEWEE:** It's kind of. It's a case of it's very progressive, so it's like it's not. It's necessarily bad now, but it's getting worse. So obviously that's the future of it, in 10, 20 years time, it's going to be significantly worse.
- INTERVIEWER:** On a scale from 1 to 5 where one is equal to the minimum and five is equal to the maximum, how much do you think that your behaviour at home affects the quality of life for future generations?
- INTERVIEWEE:** I'd say probably about 2.
- INTERVIEWER:** OK, if you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you more than the impact on future generations or the contrary?
- INTERVIEWEE:** Well, I think it's more a case of that it would. It would affect the lives of future generations better, but I don't think it will have a huge impact either way.
- INTERVIEWER:** OK, On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree, how much do you agree with the following? Household behaviour is the largest contributor to climate change.
- INTERVIEWEE:** one.
- INTERVIEWER:** What are the reasons why you say so?
- INTERVIEWEE:** Statistically speaking 70%



- approximately missions are done by 100 companies and therefore household emissions don't really count for that much.
- INTERVIEWER:** Do you feel that people have any expectations about your household behaviour? If yes, what are these expectations?
- INTERVIEWEE:** I think that like people do have the expectation, you should kind of do things like recycle and you should try and sort of like... it's like a social expectation. It's not like... yeah, it's just a behavioural sort of thing.
- INTERVIEWER:** Do these expectations push you to adopt a pro-environmental household behaviour? Why or why not?
- INTERVIEWEE:** I'd say I think they do, like subtly, there's not... It's not strong like force, but it does subtly kind of the social aspect, like basically the chance you could be judged for not recycling, for example, so people would rather just recycle.
- INTERVIEWER:** Do you know people that have no expectations about others household behaviour but have sustainable household behaviour? What are the reasons they do so?
- INTERVIEWEE:** I can't really think of any examples to be honest.
- INTERVIEWER:** That's fine.
- INTERVIEWER:** On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree to what degree do you believe that your everyday behaviour, at home, is sustainable? Please provide some example of what you do.
- INTERVIEWEE:** I'd say it's about a three because, well, we recycle when we are relatively good with sort of turning lights off and such, but on occasions things like lights get left on, like heating gets left on, unlike unnecessarily. So there's like a there's a bit of balance.
- INTERVIEWER:** What are the reasons why you act this way?
- INTERVIEWEE:** Well, because, well, if you turn the lights off and to make sure that the thing is only on when it needs to be on it saves you money, you have to pay for the bills of it. But and recycling stuff is just good practice.
- INTERVIEWER:** OK. Do you feel more internal obligations values which make? you feel obligated to behave sustainably? What are they?
- INTERVIEWEE:** I'd say so, like internal values and motivations. I know that like being wasteful is bad. Not recycling and generally just not behaving sustainably, is generally speaking wasteful.
- INTERVIEWER:** OK, why do you have these moral obligations? Has there been any particular system

..Moral obligations are assimilated through life process

circumstance which has raised these obligations?

**INTERVIEWEE:** I don't think so particular circumstances just sort of like morality and like upbringing, kind of they are the biggest influences.

**INTERVIEWER:** If you had to choose the main reasons that drive you to adopt a sustainable household consumption, what would it be?

**INTERVIEWEE:** Could you repeat the question?

**INTERVIEWER:** If you had to choose the main reasons that drives you to adopt a sustainable household consumption, what would it be?

**INTERVIEWEE:** I'd say the main driving force is like the internal. It's sort of yeah, the internal drive effectively like. It's nothing that's done actively. It's a very passive sort of drive.

**INTERVIEWER:** Are there people that support you at curtailing your environmentally unsustainable behaviour?

**INTERVIEWEE:** Uhm behaviours, I'd just say the council generally speaking are relatively good at encouraging, sort of like, recycling and stuff, but sort of, in terms of other practices, no, not really.

**INTERVIEWER:** OK, are you aware that some devices in the market help you adopt more sustainable behaviours? Do you use any of them?

**INTERVIEWEE:** Yeah, I know of like smart meters and stuff that they exist for trying to sort of get to reduce your like energy usage, but other than that you know not really.

**INTERVIEWER:** Do you use any of them?

**INTERVIEWEE:** No.

**INTERVIEWER:** What are the reasons why you do not own one of those devices yet?

**INTERVIEWEE:** the energy Company with doesn't offer a smart meter as part of its thing, but they themselves produce, or their electricity sustainably so yeah, balances out.

**INTERVIEWER:** Could you please tell me what household chores you do during the week?

**INTERVIEWEE:** Um, so I'll do sort of, washing clothes occasionally will clean up like, you know, the kitchen collectively lots, I cook for myself, etc...

**INTERVIEWER:** Which of the previous household chores do you believe you can shift in times and which not?

**INTERVIEWEE:** Sorry which?

..Behaviour is driven by moral obligations

..Lack of support for achieving sustainable behaviour

..Unpopularity of eco-feedback devices

..Unpopularity of eco-feedback devices

..Cleaning

..Cooking

..Household chores (CLEANING) cannot be shifted in time

..Household chores can be shifted in time

..Household chores (CLEANING) cannot be shifted in time

..Awareness of not making enough efforts

..Behaviour is driven by a comparison with others

..Awareness of not making enough efforts

..Housemates are prone to sharing and collaborating

- 106 **INTERVIEWER:** It's sort of like, do you believe that you can change the time, shift the time?
- 107 **INTERVIEWEE:** Yeah, I think I can, pretty much everything there except like cleaning, I can shift relatively freely so I can choose one, say I do the washing, etc.
- 108 **INTERVIEWER:** What are the reasons why you can not shift in time in those activities?
- 109 **INTERVIEWEE:** Well because they like household cleaning stuff done collectively. So it's sort of I can't personally just unilaterally choose to switch it, like it has to be done, sort of, is a group decision.
- 110 **INTERVIEWER:** Do you think your daily weekly household chores somehow influence each other?
- 111 **INTERVIEWEE:** yeah, I'd say so and to an extent like I'm well, it's more of like as I can't be doing more than one of them at once, so it's I've got to. If, I've gotta do some washing I can't be cooking at the same time, so I've got to maybe do my washing earlier in the day, for example, or later.
- 112 **INTERVIEWER:** OK. On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree, to what extent do you think you can adopt more sustainable behaviours?
- 113 **INTERVIEWEE:** I'd say about 3, 4, definitely adopt some more behaviours, but I am relatively sustainable already so.
- 114 **INTERVIEWER:** What are the reasons?
- 115 **INTERVIEWEE:** Yeah, I probably could. Yeah adopts a more sustainable behaviour, but I already do some sustainable behaviours. So like it's kind of yeah, I could do more.
- 116 **INTERVIEWER:** Are there any constraints that are outside of your control that you would not that would not allow you to change your everyday behaviours to more sustainable ones?
- 117 **INTERVIEWEE:** Well, I'm a private tenant so I can't like get insulation in my walls for example, so I can't. Yeah, there's nothing. There are certain things I can't change about where I live, so I can't necessarily affect all of that sort of day-to-day sort of emissions in not unsustainable sort of features.
- 118 **INTERVIEWER:** Would you collaborate with other people to achieve a more sustainable behaviour? Why? How?
- 119 **INTERVIEWEE:** Yeah, I would. I think working collectively always, generally speaking, benefits the sort of the group as a whole. And so in this in terms of like sustainability and everything, I'd say that we could. We could sort of in our house collectively start doing more things, like for example making sure he our heating is better regulated. Make sure light lights etc. Like better

Willingness to adopt sustainable behaviours

..Awareness small changes do not have a big impact

..Awareness small changes do not have a big impact

.Rewarding is better than punishing

..Rewarding is better than punishing

organized.

120 **INTERVIEWER:** Are there any habits that even if you know they're not sustainable, you're still not willing to change? What are these habits and why wouldn't you change them?

121 **INTERVIEWEE:** Um, I'm not really sure that I'm aware of any habits that I wouldn't be willing to change.

122 **INTERVIEWER:** OK, could you think of a piece of technology that can help you overcome those constraints or habits?

123 **INTERVIEWEE:** Well, as I said, I don't really think that I would say that there are any habits I can over I can overcome, this because I don't really think there anything I wouldn't just change if there was someone some sort of better way to do them.

124 **INTERVIEWER:** OK, on a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree. What is the extent to which you agree with the following statement? Changes in individual households behaviour will significantly help up fighting environmental issues.

125 **INTERVIEWEE:** That's a 2. Like it might help, but like I said before, they are not a huge contributor to the whole rights issue with sustainability.

126 **INTERVIEWER:** Why do you think changes individual household behaviour cannot help?

127 **INTERVIEWEE:** Yeah, as I said, they aren't big enough contributor to really make much for change. Even if they were completely eliminated.

128 **INTERVIEWER:** OK, on a scale from 1 to 5 where one is equal to strongly disagree and five is equals to strongly agree to what extent are you in favour of arguing in favour of laws that makes some sustainable behaviours like recycling compulsory for everyone, as in people will be fined if they don't follow this set behaviours.

129 **INTERVIEWEE:** I'd say like 4 'cause I like the idea of being sort of forcing the sustainability, but I think it would be better to do it as a system of reward rather than punishment for not doing.

130 **INTERVIEWER:** OK, to what extent are you in favour of laws that reward businesses and individuals who assume sustainable behaviours without punishing those who don't?

131 **INTERVIEWEE:** So it's still yeah. So yeah, I'd say 5 for that because it's it's. It's the better version of the two in my opinion. It's still it's. It's even better. It's, it's good because it's encouraging sustainability, but it's even better because it's not punishing, it's just rewarding those who do.

132 **INTERVIEWER:** OK, is there anything important you think I didn't ask?

- 133      **INTERVIEWEE:** Not that I can think of.
- 134      **INTERVIEWER:** OK, thank you for contributing to the study. Do you have any further questions?
- 135      **INTERVIEWEE:** No.
- 136      **INTERVIEWER:** OK, thank you very much and we can stop recording.

**Transcribed Interviews (with Codes)**

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**Participant 4**

1      **INTERVIEWER:** Welcome to the interview. I'm Jury and I'll be your interviewer today.

2      *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*

3      *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*

4      *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*

5      5      *To facilitate our note-taking, we would like to audiotape our conversations today.*

6      6      *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*

7      7      *(1) all information will be held confidential,*  
8      *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*  
9      *(3) we do not intend to inflict any harm.*

10     10     *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*  
11     *in order to push ahead and complete this line of questioning.*

12     12     Do you agree to these terms?

13     13     **INTERVIEWEE:** I do

14     14     **INTERVIEWER:** Perfect, let's start then. So, what is your current occupation?

15     15     **INTERVIEWEE:** I am a student.

16     16     **INTERVIEWER:** And where do you currently live? Is it a house a flat or University halls etc?

17     17     **INTERVIEWEE:** I live in a house.

18     18     **INTERVIEWER:** How many people live with you alright?

19     19     **INTERVIEWEE:** Uh. Two others, so three including me.

20     20     **INTERVIEWER:** Ok. On a scale from 1 to 5 where one is

strongly disagree and five is strongly agree, to what extent do you agree with the following? The Coordination in the household is perfect and cannot be improved.

21 **INTERVIEWEE:** coordination the coordination with your housemate?

22 **INTERVIEWER:** In your household, just like general your interactions.

23 **INTERVIEWEE:** Yeah 3.

24 **INTERVIEWER:** OK, what are the reasons for why you say so?

..Housemates do not see each other



25 **INTERVIEWEE:** Uh, don't really see much of them to be honest.

26 **INTERVIEWER:** What activities do you do at home?

..Media entertainment



27 **INTERVIEWEE:** Ann Not very much, watching Netflix.

28 **INTERVIEWER:** Ok, and do you ever use delivery services? Why or Why not?

..Laziness



29 **INTERVIEWEE:** yes, because it's convenient, it means I don't have to go through all the hassle of checking out my mask and doing all the one-way system when I go out.

30 **INTERVIEWER:** OK, what do you like doing in your free time?

..Reading



31 **INTERVIEWEE:** Um.. Again, watching Netflix, doing some reading.

32 **INTERVIEWER:** OK, would you rather go on a walk or watch something on TV?

..Weather influences outdoor activities



33 **INTERVIEWEE:** That really depends. I guess if it's a nice sunny day, probably gonna walk, but if I've had a long busy day doing work then probably just watching on TV.

34 **INTERVIEWER:** What are the reasons for why you say so?

..Weather influences outdoor activities



35 **INTERVIEWEE:** like if it's nice weather it's rare to have nice weather in this country, so gotta make the most of that. Generally, if I'm just too tired from working. Then it's easier to take it easy, sit back on the sofa and watching TV.

36 **INTERVIEWER:** To what extent do you think you have a healthy lifestyle?

Current lifestyle can be improved



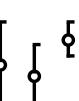
..Difficulty achieving healthy results



37 **INTERVIEWEE:** Uh. It's a relatively, so I mean, I tried to keep myself physically healthy and mentally healthy, but I suppose is all.. There are some things that I could probably improve on.

38 **INTERVIEWER:** What are the reasons why you say so? Please give some examples

..Balanced/Vegan diet



..Difficulty achieving healthy results



39 **INTERVIEWEE:** like I try and have a balanced diet, trying varied diets as well and try to keep myself physically active, go do some exercise at least two hours

..Difficulty achieving healthy results	<p>of exercise a week and also mentally so, keep myself healthy by engaging in my degree, in my studies and also engaging in mentally challenging activities in my free time.</p>
	<p>40 <b>INTERVIEWER:</b> On a scale from 1 to 5 where one is strongly disagree and five is strongly agree, to what extent do you agree with the following? My social life is perfect and cannot be improved.</p>
	<p>41 <b>INTERVIEWEE:</b> I'd say, maybe a 4</p>
	<p>42 <b>INTERVIEWER:</b> What are the reasons why you say so?</p>
	<p>43 <b>INTERVIEWEE:</b> I try to keep a healthy social life. I go out at least once or twice a week usually more under normal life without restrictions and probably I could vary my social circle a bit more, maybe that is the reason why it's not 5, but other than that it's pretty solid.</p>
	<p>44 <b>INTERVIEWER:</b> Are there any constraints that influence your social life? Can you think of some technology to remove these constraints?</p>
	<p>45 <b>INTERVIEWEE:</b> Well, the big one is, you know lockdown and covid regulations at the moment and technologies like Zoom and Facebook and Snapchat sort of ameliorate those issues. That's really the only big restriction on my social life at the moment.</p>
	<p>46 <b>INTERVIEWER:</b> What is your level of knowledge about the current environmental issues? For example pollution, global warming.</p>
	<p>47 <b>INTERVIEWEE:</b> For this I know not that much. I have a vague understanding of the environmental crisis, but I wouldn't say it's in depth in any way.</p>
	<p>48 <b>INTERVIEWER:</b> OK, have you ever had any first-hand experience with the consequences of unsustainable human behaviour? For example, air or beach or water pollution?</p>
	<p>49 <b>INTERVIEWEE:</b> Um, I wouldn't say I had been affected by it by what you define as consequences, but I have witnessed. These types of pollutions air, noise, beach. But it wouldn't say it affected me in any way, didn't cause any consequences</p>
	<p>50 <b>INTERVIEWER:</b> OK, So what did you feel in those circumstances?</p>
	<p>51 <b>INTERVIEWEE:</b> I'd probably say it's quite frustrating, but the same time I'd say it's also you kind of have a, uh... What's what's the word I'm looking for? Is almost like a board response to it, like because it's not directly affecting me. It's only I'm just witnessing it. I guess it's a sort of a... I don't feel I have any input into it if that makes sense.</p>
	<p>52 <b>INTERVIEWER:</b> OK, so on a scale from 1 to 5 where one is equal to the minimum and five is equal to the maximum. How much do you think that humans contribute to such issues?</p>
	<p>53 <b>INTERVIEWEE:</b> 4, maybe even 5.</p>

..Awareness humans are major cause of environmental problems

..Awareness of the relevance of environmental problem

..Health is not clearly affected by environmental problems

..Health is not clearly affected by environmental problems

..Awareness of future env. problems consequences

..Awareness of future env. problems consequences

..Behaviour is driven by a comparison with others

..Awareness of not making enough efforts

..Awareness of future env. problems consequences

54 **INTERVIEWER:** What are the reasons why you say so?

55 **INTERVIEWEE:** I think it's pretty obvious, large scale deforestation, mass production of certain animals that like contribute heavily to greenhouse gases, such as through the consumption of red meat and massive supply chains that allow for large scale pollution to occur. I am such as transporting that kinda stuff.

56 **INTERVIEWER:** Do you believe that these problems negatively affect your life personally?

57 **INTERVIEWEE:** No, definitely not.

58 **INTERVIEWER:** What are some reasons that make you say so?

59 **INTERVIEWEE:** I mean, I haven't personally had to. Um Change my own outlook on life will change how I act in my life because of the environmental issues.

60 **INTERVIEWER:** Do you believe that these problems will negatively affect the lives of future generations?

61 **INTERVIEWEE:** Yes.

62 **INTERVIEWER:** What are the reasons that make you say so?

63 **INTERVIEWEE:** Um, I mean large scale deforestation, those kinds of massive global crisis clearly are both presented to the wider public and kind of, it's obvious that those kind of issues will have some sort of negative impact on the future generations in term of how their lifestyles are going to bee.

64 **INTERVIEWER:** On a scale from 1 to 5 where one is equal to the minimum and five is equal to the maximum, how much do you think that your behaviour at home affects the quality of life for future generations?

65 **INTERVIEWEE:** probably a three like, I wouldn't say I'm not on the epitome of waste and self-indulgence in the sense that and I contribute massively in comparison to others, but I'd say I don't make sacrifices that some on the extreme end will to protect the environment.

66 **INTERVIEWER:** OK, if you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you more than the impact on future generations or the contrary?

67 **INTERVIEWEE:** So... could you repeat the question?

68 **INTERVIEWER:** OK, if you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you more than the impact on future generations or the contrary?

69 **INTERVIEWEE:** So if I was to change my own lifestyle would it have an effect on?

70 **INTERVIEWER:** No, would it be because of the issues on your personal life or the impact on future generations?

- .Behaviour is driven by concerns about own health
- ..Awareness small changes do not have a big impact
- ..Large corporations have a larger impact on env. problems
- ..Awareness of society expectations about sustainability
- ..Awareness of society expectations about sustainability
- ..Behaviour is driven by monetary concerns
- ..Awareness of not making enough efforts
- ..Cost of sustainable food is prohibitive
- 71** **INTERVIEWEE:** probably the impact on my personal life and my generation.
- 72** **INTERVIEWER:** OK, On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree, how much do you agree with the following? Household behaviour is the largest contributor of climate change.
- 73** **INTERVIEWEE:** No definitely not. So it's one
- 74** **INTERVIEWER:** What are the reasons why you say so?
- 75** **INTERVIEWEE:** It's kind of obvious that like over the past 10 15 years while government slowly restrict the, slowly restrict the sort of products and services for the general public that is supposed to reduce climate change it's still obvious that corporations are the biggest contributors to like greenhouse gases.
- 76** **INTERVIEWER:** Do you feel that people have any expectations about your household behaviour? If yes, what are these expectations?
- 77** **INTERVIEWEE:** The very basic expectations like, just like generally contribute to the recycling. I don't think there are any expectations that are out of the ordinary, such as going zero waste or always buying recyclable products.
- 78** **INTERVIEWER:** Do these expectations push you to adopt a pro-environmental household behaviour? Why or why not?
- 79** **INTERVIEWEE:** No because again, they're not expectations. They are expectations that are sort of a social obligation at this point rather than something that is out of society's comfort zone if that makes sense and thus I don't feel pressured in any way like it seems like a normal thing to recycle. It seems like a normal thing to sort of don't litter.
- 80** **INTERVIEWER:** Do you know people that have no expectations about others household behaviour but have sustainable household behaviour? What are the reasons they do so?
- 81** **INTERVIEWEE:** I can't think of anyone on the top of my mind. I probably know someone who's quite sustainable in relation to everyone else. I think those people that seem to be more sustainable than the average person, mainly probably do it out of cost benefits. It's a lot cheaper to recycle than it is to constantly buy, consume.
- 82** **INTERVIEWER:** On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree to what degree do you believe that your everyday behaviour, at home, is sustainable? Please provide some example of what you do.
- 83** **INTERVIEWEE:** Um... I'd probably say a three you know, I recycle, I try not to waste water, I don't litter but then again I am not zero waste, I am not always buying green products or products that have the lowest environmental sustainability rating at the supermarket, I try to buy cheap rather than sustainable.

..Behaviour is driven by monetary concerns

..Cost of sustainable food is prohibitive

..Behaviour is driven by self interests and concerns

..Information raises moral obligations

..Behaviour is driven by monetary concerns

..Lack of support for achieving sustainable behaviour

..Unpopularity of eco-feedback devices

..Cost of sustainable devices is prohibitive

..Behaviour is driven by monetary concerns

..Cleaning

84 **INTERVIEWER:** What are the reasons why you act this way?

85 **INTERVIEWEE:** Mainly just out of cost.

86 **INTERVIEWER:** OK. Do you feel more internal obligations values which make? you feel obligated to behave to behave sustainably? What are they?

87 **INTERVIEWEE:** Do I have any moral obligation to? Yes, I'd say, but it's not a deciding factor in me acting sustainably, I feel like I have a moral obligation to Trying to keep the world turning as per se but I don't get any feeling that it's my moral obligation to save the world through sustainability.

88 **INTERVIEWER:** OK, why do you have these moral obligations? Has there been any particular system circumstance which has raised these obligations?

89 **INTERVIEWEE:** I probably just say like openness and the. Intensified reporting on the climate crisis in general and saw the spotlight being shone on It has sort of thrust and moral obligation on me too.

90 **INTERVIEWER:** If you had to choose the main reasons that drive you to adopt a sustainable household consumption, what would it be?

91 **INTERVIEWEE:** Cost really.

92 **INTERVIEWER:** Are there people that support you at curtailing your environmentally unsustainable behaviour?

93 **INTERVIEWEE:** Uhm no

94 **INTERVIEWER:** OK, are you aware that some devices in the market help you adopt more sustainable behaviours? Do you use any of them?

95 **INTERVIEWEE:** I was aware but I do not.

96 **INTERVIEWER:** What are the reasons why you do not own one of those devices yet?

97 **INTERVIEWEE:** Purely out of just constituting an unnecessary purchase I believe, also is not super convenient.

98 **INTERVIEWER:** Could you please tell me what household chores you do during the week?

99 **INTERVIEWEE:** Vacuuming, washing, dusting.

100 **INTERVIEWER:** Which of the previous household chores do you believe you can shift in times and which not?

101 **INTERVIEWEE:** sorry can you repeat that?

102 **INTERVIEWER:** Which of the previous household chores do you believe you can shift in times and which not?

103 **INTERVIEWEE:** What do you mean by shift?

..Household chores can be shifted in time	<p>104 <b>INTERVIEWER:</b> Instead of doing it at a certain time you usually do it. You could either do it earlier or later in the day.</p>
..Household chores can be shifted in time	<p>105 <b>INTERVIEWEE:</b> In general, later in the day, probably all of them.</p>
..Household chores do not influence each other	<p>106 <b>INTERVIEWER:</b> What are the reasons why you can not shift in time in those activities?</p> <p>107 <b>INTERVIEWEE:</b> They're not really time-dependent.</p>
..Awareness of not making enough efforts	<p>108 <b>INTERVIEWER:</b> Do you think your daily weekly household chores somehow influence each other?</p> <p>109 <b>INTERVIEWEE:</b> I mean, they're all and all necessary chores I believe. So, like they are all independent In that regard none of them influence the other They kind of have to have to be done.</p>
..Live and let live	<p>110 <b>INTERVIEWER:</b> OK. On a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree, to what extent do you think you can adopt more sustainable behaviours?</p>
..Housemates are prone to sharing and collaborating	<p>111 <b>INTERVIEWEE:</b> Four.</p> <p>112 <b>INTERVIEWER:</b> What are the reasons?</p>
..Unwillingness to change habits	<p>113 <b>INTERVIEWEE:</b> I mean this way just little things I can definitely do, especially when it comes to sort of washing and using water I probably waste a lot more water than I actually need to, so definitely there definitely easy methods that are quite widespread that I just don't bother using that I could implement into my week... My daily routines that save water.</p>
Willingness to adopt sustainable behaviours	<p>114 <b>INTERVIEWER:</b> Are there any constraints that are outside of your control that you would not that would not allow you to change your everyday behaviours to more sustainable ones?</p> <p>115 <b>INTERVIEWEE:</b> I don't believe so, no.</p> <p>116 <b>INTERVIEWER:</b> Would you collaborate with other people to achieve a more sustainable behaviour? Why? How?</p>
	<p>117 <b>INTERVIEWEE:</b> Yeah, I would if it sort of didn't have a direct input into my life and as if it wasn't people coming in and telling me how to do things. If it was more of a peer to peer. So the thing where someone might suggest "hey do this", "Instead try doing this instead, cause it's a lot better for the environment" that it doesn't force me to have to go buy a bunch of new things and completely change the way in which I do something. It all just slightly modifies it.</p>
	<p>118 <b>INTERVIEWER:</b> Are there any habits that even if you know they're not sustainable, you're still not willing to change? What are these habits and why wouldn't you change them?</p>
	<p>119 <b>INTERVIEWEE:</b> I don't think there are any habits I'm not willing to change.</p>

..Large corporations have a larger impact on env. problems

..Awareness small changes do not have a big impact

120 **INTERVIEWER:** OK, could you think of a piece of technology that can help you overcome those constraints or and habits?

121 **INTERVIEWEE:** No.

122 **INTERVIEWER:** OK, on a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree. What is the extent to which you agree with the following statement? Changes in individual households behaviour will significantly help up fighting environmental issues.

123 **INTERVIEWEE:** Uh... 2

124 **INTERVIEWER:** Why do you think changes individual household behaviour cannot help?

125 **INTERVIEWEE:** Because like I said before, that corporations are more to blame for environmental issues, so they need to be held more accountable. The environmental impact I have, like my carbon footprint, I imagine at this point is very negligible in comparison to the wider scope.

126 **INTERVIEWER:** OK, on a scale from 1 to 5 where one is equal to strongly disagree and five is equal to strongly agree to what extent are you in favour of arguing in favour of laws that makes some sustainable behaviours like recycling compulsory for everyone, as in people will be fined if they don't follow this set behaviours.

127 **INTERVIEWEE:** Just a one to five?

128 **INTERVIEWER:** Yes

129 **INTERVIEWEE:** Uhh, 5

130 **INTERVIEWER:** OK, to what extent are you in favour of laws that reward businesses and individuals who assume sustainable behaviours without punishing those who don't?

131 **INTERVIEWEE:** 5.

132 **INTERVIEWER:** OK, is there anything important you think I didn't ask?

133 **INTERVIEWEE:** No.

134 **INTERVIEWER:** OK, thank you very much for your contributions. Do you have any further questions?

135 **INTERVIEWEE:** No.

136 **INTERVIEWER:** OK, thank you.

**Transcribed Interviews (with Codes)**

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**Participant 5**

- 1 **INTERVIEWER:** Welcome to the interview. I'm Davide, I'll be your interviewer today.
- 2 *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*
- 3 *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*
- 4 *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*
- 5 *To facilitate our note-taking, we would like to audiotape our conversations today.*
- 6 *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*
- 7 *(1) all information will be held confidential,*
- 8 *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*
- 9 *(3) we do not intend to inflict any harm.*
- 10 *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*
- 11 *in order to push ahead and complete this line of questioning.*
- 12 Do you agree to these terms?
- 13 **INTERVIEWEE:** Yes. I agree.
- 14 **INTERVIEWER:** Ok, let us begin. What is your current occupation?
- 15 **INTERVIEWEE:** Student.
- 16 **INTERVIEWER:** Where do you currently live?
- 17 **INTERVIEWEE:** In a flat in private student halls.
- 18 **INTERVIEWER:** How many people live with you?
- 19 **INTERVIEWEE:** Two other people
- 20 **INTERVIEWER:** On a scale from 1 to 5. To what extent

..Housemates are prone to sharing and collaborating

..Studying



..Cooking

..Socialising with housemates

..Laziness



..Media entertainment



..Clubbing



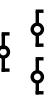
..Practising a sport



..Difficulty achieving healthy results



..Workout



..Balanced/Vegan diet



..Difficulty achieving healthy results



..Current social life is satisfying

do you agree with the following statement? "The coordination in the household is perfect and cannot be improved."

21 **INTERVIEWEE:** Four

22 **INTERVIEWER:** What are the reasons why you say so?

23 **INTERVIEWEE:** We have a perfect system that I have designed which allows us to keep track of our tasks and do them at any time we please, without any time pressure.

24 **INTERVIEWER:** What activities do you usually do at home?

25 **INTERVIEWEE:** In general I study, I cook, sleep and I socialize with my flatmates.

26 **INTERVIEWER:** Do you ever use delivery services and why or why not?

27 **INTERVIEWEE:** Yes, because I sometimes am too lazy to cook.

28 **INTERVIEWER:** What do you like doing in your free time? Just generally.

29 **INTERVIEWEE:** Uhm, during these times my only free time, like my only activity in the in my free time has been gaming. Or watching movies.

30 Normally in another time I would also go clubbing or play sports.

31 **INTERVIEWER:** So would you rather go on a walk or watch something on TV?

32 **INTERVIEWEE:** Go go on a walk.

33 **INTERVIEWER:** Why?

34 **INTERVIEWEE:** Because it's healthier for the mind and body.

35 **INTERVIEWER:** To what extent do you think you have a healthy lifestyle?

36 **INTERVIEWEE:** I try but I am not as healthy as I would like to be.

37 **INTERVIEWER:** Why would you say so?

38 **INTERVIEWEE:** Because I just come back from my 45-minute walk and I cut out all caffeine from my life and I try to watch what I eat, but I haven't achieved the results I want to achieve yet.

39 **INTERVIEWER:** OK. On a scale from 1 to 5, to what extent do you agree with the following statement? "My social life is perfect and cannot be improved."

40 **INTERVIEWEE:** I mean, one, because of the quarantine. Without the whole coronavirus situation I would say 4.

41 **INTERVIEWER:** Why would you say so?

42 **INTERVIEWEE:** In normal times my situation is this: I

		<p>..Current social life is satisfying</p>	
43			<p>have a girlfriend and I have a lot of friends that I see a few times a week.</p>
44			<p><b>INTERVIEWER:</b> Are there any constraints except the pandemic that would normally influence your social life? And can you think of some technology to remove these constraints?</p>
45			<p><b>INTERVIEWEE:</b> Technology has to be computer science-related, right can it be anything?</p>
46			<p><b>INTERVIEWER:</b> No, it could be anything.</p>
47			<p><b>INTERVIEWEE:</b> Well, transportation is sometimes an issue, so a way to make it cheaper and or, like, more effortless would be nicer.</p>
48			<p><b>INTERVIEWER:</b> OK, so you would say a constraint that influences your social life is getting from one place to the other.</p>
49			<p><b>INTERVIEWEE:</b> Yes.</p>
50			<p><b>INTERVIEWER:</b> OK, now changing topic, What is your level of knowledge about the current environmental issues like pollution or global warming?</p>
51			<p><b>INTERVIEWEE:</b> I am very aware of the environment.</p>
52			<p><b>INTERVIEWER:</b> Have you ever had any first-hand experience with the consequences of unsustainable human behaviour? For example, air, beach or water pollution?</p>
53			<p><b>INTERVIEWEE:</b> Yes, when I go to the beach, sometimes the water is of terrible quality due to obvious pollution.</p>
54			<p><b>INTERVIEWER:</b> OK, and What did you feel in those circumstances?</p>
55			<p><b>INTERVIEWEE:</b> So sad, and worried about my health.</p>
56			<p><b>INTERVIEWER:</b> On a scale from 1 to 5, How much do you think that humans contribute to such issues?</p>
57			<p><b>INTERVIEWEE:</b> 5.</p>
58			<p><b>INTERVIEWER:</b> OK, and what are the reasons why you say so?</p>
59			<p><b>INTERVIEWEE:</b> Because all pollution is human-made.</p>
60			<p><b>INTERVIEWER:</b> So do you believe that these problems negatively affect your life personally?</p>
61			<p><b>INTERVIEWEE:</b> Not by too much, but yes, yes.</p>
62			<p><b>INTERVIEWER:</b> OK. Um. What are some reasons that make you say so? You already mentioned the water, but is there something else as well?</p>
63			<p><b>INTERVIEWEE:</b> Obviously, air pollution influences everyone. Everyone wants to be breathing clean air and breathing in oxygen is nice and breathing in chemicals is harmful to everyone's health, especially if you live in a city. For example, Southampton, from what I know, the port is very polluting and we do breathing air</p>

3/7

		from ships.
	64	<b>INTERVIEWER:</b> Yes, and do you believe that these problems will negatively affected the lives of future generations?
..Awareness of future env. problems consequences	65	
	66	<b>INTERVIEWEE:</b> Yes, in the fact that it will impact their health.
..Awareness of future env. problems consequences	67	<b>INTERVIEWER:</b> Yeah, why do you think so?
	68	<b>INTERVIEWEE:</b> Because I would like them not to persist but I am not optimistic in this regard.
..Awareness of not making enough efforts	69	<b>INTERVIEWER:</b> And on a scale from 1 to 5, how much do you think that your behaviour at home affects the quality of life for future generations? In other words, what impact does it have on the environment that might be long lasting?
Willingness to adopt sustainable behaviours	70	<b>INTERVIEWEE:</b> I would say two or three because I believe that my impact is not as good as I would like it to be. However, I don't believe that it will directly influence the lives of my children.
..Awareness small changes do not have a big impact	71	<b>INTERVIEWER:</b> If you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you more than the impact on future generations or the contrary?
..Behaviour is driven by concerns about own health	72	<b>INTERVIEWEE:</b> Definitely the one on my personal life. I mean, I am still young, I am the future generation (laughter).
..Large corporations have a larger impact on env. problems	73	<b>INTERVIEWER:</b> Right, On a scale from 1 to 5, how much do you agree with the following? "Household behaviour is the largest contributor to climate change."
	74	<b>INTERVIEWEE:</b> One. Businesses and factories are the main contributors
	75	<b>INTERVIEWER:</b> OK, and do you feel that people have any expectations about your household behaviour and if so what are these expectations?
..Awareness of society expectations about sustainability	76	<b>INTERVIEWEE:</b> In general, society expects you not to create too much trash. And to keep your electricity usage to a reasonable level.
	77	<b>INTERVIEWER:</b> Do these expectations push you to adopt a pro-environmental household behaviour? Why or why not?
..Behaviour is driven by moral obligations	78	<b>INTERVIEWEE:</b> Uhm no, I don't do it for the expectations. I just do it for what I believe is right.
	79	<b>INTERVIEWER:</b> OK, next question. Do you know people that have no expectations about other's household behaviour but have sustainable household behaviour and what are their reasons to do so?
..Awareness of society expectations about sustainability	80	<b>INTERVIEWEE:</b> I yes, I do know people that don't expect others to behave perfectly, but they do, such as myself. I do not have expectations of others, but I behave nicely. And I do it because of as I said, what I think is right.
..Live and let live		
..Behaviour is driven by moral obligations		

..Educated people tend to be environmentally conscious



Willingness to adopt sustainable behaviours



..Large production of waste

..Warming the house is indispensable

..Behaviour is driven by moral obligations



..Information raises moral obligations



..Moral obligations are assimilated through life process

..Behaviour is driven by moral obligations



..Lack of support for achieving sustainable behaviour



..Unpopularity of eco-feedback devices



..Cost of sustainable devices is prohibitive

..Taking the bins out



..Cleaning

81 **INTERVIEWER:** In a more general way, could you provide a classification of people that you think are more prone to reduce their unsustainable behaviours?

82 **INTERVIEWEE:** I believe people who have been educated on the issue might be a candidate category.

83 **INTERVIEWER:** Um, on a scale from 1 to 5? To what degree do you believe that your everyday behaviour at home is sustainable and can you provide some examples?

84 **INTERVIEWEE:** As I said three, because I try to recycle as much as I can, although I create more trash than I would like to and as much as I try to keep my electricity usage down, I still have to use it for warmth.

85 **INTERVIEWER:** Do you feel some moral internal obligations, or do you have any values that make you feel obliged to behave sustainably?

86 **INTERVIEWEE:** As I said, yes, because the environment is a shared human asset that we need to take care of.

87 **INTERVIEWER:** So since you have a moral obligation in this sense, has there been any particular circumstance which has raised the moral obligation which you feel?

88 **INTERVIEWEE:** I guess just growing up with a family Who already mildly felt these concerns. Also, watching some documentaries at school, even though it wasn't a specific instance that made me realise "Oh my god, I need to care for the environment from now on," it was more like a process.

89 **INTERVIEWER:** If you had to choose the main reason that drives you to adopt A sustainable household consumption what would it be?

90 **INTERVIEWEE:** As I said before, the fact that I care about the environment and I don't want to pollute it beyond what is strictly necessary.

91 **INTERVIEWER:** Are there people that support you at curtailing your environmentally unsustainable behaviours?

92 **INTERVIEWEE:** No, I don't think so.

93 **INTERVIEWER:** Are you aware that some devices in the market help you adopt more sustainable behaviours? Do you use any of them?

94 **INTERVIEWEE:** I am aware and I have heard something about some of those devices.

95 **INTERVIEWER:** OK, why don't you use them?

96 **INTERVIEWEE:** I have never gotten into them personally. Never had a chance to try them. They are usually more expensive than I'd like them to be

97 **INTERVIEWER:** Would you please tell me what housing chores you do during the week?

98 **INTERVIEWEE:** Taking out the trash, cleaning the floor Cleaning the kitchen.

..Household chores (CLEANING) cannot be shifted in time

99 **INTERVIEWER:** Which of the previous household chores do you believe you can shift in time and which not?

100 **INTERVIEWEE:** The ones I can shift are for example, cleaning the floors or the windows. Or perhaps clean the filters of the dryers at anytime you'd like, as long as it's reasonable. And cleaning  
101 the shower is a bit more time-sensitive, but a day of difference will not damage it too. While something that is time sensitive would be cleaning after myself whenever I eat.

102 **INTERVIEWER:** What are the reasons why you cannot shift in time those activities?

103 **INTERVIEWEE:** Because If I don't clean after myself whenever I eat, the kitchen will start to become dirty and messy very quickly, especially if other people in the flat do the same thing.

104 **INTERVIEWER:** Do you think your daily/weekly household chores somehow influence each other?

105 **INTERVIEWEE:** Usually I wouldn't say so. It maybe happens sometimes that a weekly chore like cleaning the bathroom could take longer than expected and in that case yes, it would influence the rest of my day. Apart from that, though, no.

106 **INTERVIEWER:** On a scale from 1 to 5, to what extent do you think you can adopt more sustainable behaviours?

107 **INTERVIEWEE:** 5

108 **INTERVIEWER:** And why do you say so?

109 **INTERVIEWEE:** Because everyone can become a 5 if they want to. If they really want to.

110 **INTERVIEWER:** OK, and are there any constraints that are outside of your control that would not allow you to change your everyday behaviours to more sustainable ones?

111 **INTERVIEWEE:** No, I cannot think of any.

112 **INTERVIEWER:** Would you collaborate with other people to achieve a more sustainable behaviour?

113 **INTERVIEWEE:** Yes, of course.

114 **INTERVIEWER:** And how and why would you do it?

115 **INTERVIEWEE:** By making sure that we all have a lower our footprint on the environment as much as possible and supporting each other.

116 **INTERVIEWER:** Are there any habits that even if you know they're not sustainable, you're still not willing to change?

117 **INTERVIEWEE:** Buying pre-packaged foods because in England that's the most readily available type of food.

118 **INTERVIEWER:** I see, and could you think of a piece of

..Household chores (CLEANING) cannot be shifted in time

..Household chores do not influence each other

..Household chores influence each other

..Awareness of not making enough efforts

..Housemates are prone to sharing and collaborating

..Laziness

..Rewarding is better than punishing

technology that can help you at overcoming these constraints?

119 **INTERVIEWEE:** I have no idea, honestly.

120 **INTERVIEWER:** On a scale from 1 to 5, what is the extent to which you agree with the following statement? Changes in individual household behaviour will significantly help at fighting environmental issues

121 **INTERVIEWEE:** 3.5

122 **INTERVIEWER:** On a scale from 1 to 5. To what extent are you in favour of laws that make some sustainable behaviours like recycling compulsory for everyone? As in, people will be fined if they don't follow the said behaviours?

123 **INTERVIEWEE:** 3.5

124 **INTERVIEWER:** And to what extent are you in favour of Laws that reward businesses and individuals who assume sustainable behaviour?

125 **INTERVIEWEE:** Oh yeah, 5, I would really support that. I like a society which rewards people better than one that punishes them.

126 **INTERVIEWER:** As we reach the end, is there anything important you think I didn't ask?

127 **INTERVIEWEE:** No, it was perfect.

128 **INTERVIEWER:** OK, thank you very much for your contribution to the study. And thank you for taking part in the interview.

129 **INTERVIEWEE:** All right, no problem.

**Transcribed Interviews (with Codes)**

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**Participant 6**

- 1   **INTERVIEWER:** Welcome to this interview. I am Giovanni and I will be your interviewer today.
- 2   *You have been selected to speak with us today because we think you might have a great deal to share about your household's behaviour.*
- 3   *Our research project as a whole focuses on its improvement, with a particular interest in understanding how habitual, intentional, situational and social processes influence it, how people practice (and think about) sustainability, and whether we can begin to use what we know about Environmental Psychology to help people adopt more sustainable behaviours.*
- 4   *Our study does not aim to evaluate your techniques or experiences. Instead, we are trying to learn more about different household behaviours and, in particular, about those practices that can make them more environmentally sustainable. The final aim is to fill the literacy gap between Environmental Psychology and HCI, through the creation of a new interactive product that, applying the best findings of both Environmental Psychology and HCI, succeeds in helping people adopt more sustainable behaviours at home.*
- 5   *To facilitate our note-taking, we would like to audiotape our conversations today.*
- 6   *For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. In order to proceed, you must agree to our Participant Information policy and Consent Form requirements, as required by the ERGO/FPSE/24744.A1 (Version 3.0) Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences. Essentially, they state that:*
- 7   *(1) all information will be held confidential,*  

8   *(2) your participation is voluntary and you may stop at any time if you feel uncomfortable,*  

9   *(3) we do not intend to inflict any harm.*

10   *We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you*  

11   *in order to push ahead and complete this line of questioning.*

12   Do you agree to these terms?

13   **INTERVIEWEE:** Yes.

14   **INTERVIEWER:** Fantastic so we can start with the questions. What is your current occupation?

15   **INTERVIEWEE:** Student.

16   **INTERVIEWER:** Thank you, and where do you currently live?

17   **INTERVIEWEE:** In university halls.

18   **INTERVIEWER:** Thank you. How many people live with you?

19   **INTERVIEWEE:** We are seven in total, so six people.

- ..Some people are more willing to coordinate than others
- ..Housemates are prone to sharing and collaborating
- ..Hardness to establish a cleaning schedule
- ..Cooking
- ..Studying
- ..Cleaning
- ..Doing recreational activities
- ..Going out for photography
- ..Listening to music
- ..Media entertainment
- ..Walking
- ..Media entertainment
- ..Going to indoors venues
- 20** **INTERVIEWER:** Thank you. On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), to what extent do you agree with the following: The coordination in the household is perfect and cannot be improved?
- 21** **INTERVIEWEE:** 3
- 22** **INTERVIEWER:** Ok, what are the reasons why you say so?
- 23** Um, I feel like there the there are different types of people with different attitudes towards living with other people. So coordinating is hard from that point of view. Meaning that some people are more willing than others to coordinate, and as a result, there is less collaboration.
- 24** **INTERVIEWER:** Thank you. Are there any specific areas in which you think people are more willing to collaborate or help each other?
- 25** **INTERVIEWEE:** Being students, and being in a new environment, and being all first years, I think we are willing to help each other on those sort of tasks like cooking or studying. And also, it is easier to collaborate on recreational activities. Cleaning or having cleaning rotas is harder to coordinate.
- 26** **INTERVIEWER:** Thank you. Going on with the next question, what activities do you do at home?
- 27** **INTERVIEWEE:** Right now mainly studying, cooking, some recreational activities and cleaning. That is pretty much it.
- 28** **INTERVIEWER:** Do you ever use delivery services?
- 29** **INTERVIEWEE:** Yeah we do. Not so much though. People in my flat tend to prefer to go and pick up stuff rather than ordering delivery. There is only one of my flatmates who regularly orders delivery on Sunday, but I think that's the most regular thing we have. Other people just prefer to go and pick things up.
- 30** **INTERVIEWER:** Thank you. What do you like doing in your free time?
- 31** **INTERVIEWEE:** When I have free time I like spending time with friends, going out for photography, listening to music and other usual hobbies. And if I'm by myself, watch videos online.
- 32** **INTERVIEWER:** What are the kind of activities that you do with your friends?
- 33** **INTERVIEWEE:** Going on walks or going watching movies, go to restaurants and or cafes or bars. Just grab something to eat and then talking over that. And then when covid wasn't a thing yet then maybe going to indoors like cinema or bowling or ping pong.
- 34** **INTERVIEWER:** Thank you. Would you rather go on a walk or watch something on TV?
- 35** **INTERVIEWEE:** Um, I might be influenced by the fact that coronavirus is keeping us at home a lot, but going for a walk.

- ..Bad sleep schedule
- Current lifestyle can be improved
- ..Behaviour is driven by a comparison with others*
- ..Organisation influences social life
- ..Social media help interact with other people
- ..Organisation influences social life
- 36 **INTERVIEWER:** What are the reasons why do you say so?
- 37 **INTERVIEWEE:** It is a way that allows me to disconnect from technology more and connect to the world better. And it is a way of connecting with reality more and disconnecting from my mind.
- 38 **INTERVIEWER:** Thank you. Next question is to what extent do you think you have a healthy lifestyle?
- 39 **INTERVIEWEE:** Should I rate that on a scale?
- 40 **INTERVIEWER:** No, just explain what are your thoughts.
- 41 **INTERVIEWEE:** So a healthy lifestyle. I define it as eating healthy and having the right amount of exercise. And sleeping enough. *I think from a sleeping point of view I definitely could improve it.* Exercise-wise. I mean, I feel I could improve every aspect, to be honest, but um, it is satisfactory in the eating and exercise areas, maybe a little less satisfactory in the sleeping area, but yeah, that's pretty much it.
- 42 *Overall, I think I have a healthier lifestyle than average, but I could improve it a lot.*
- 43 **INTERVIEWER:** Thank you. Let's go to the next question. On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), to what extent do you agree with the following: My social life is perfect and cannot be improved?
- 44 **INTERVIEWEE:** 3 1/2.
- 45 **INTERVIEWER:** What are the reasons why you say so?
- 46 **INTERVIEWEE:** Coronavirus and the ability to organise. Having a balance between studying and housekeeping/ cooking.
- 47 **INTERVIEWER:** Ok, actually the next question is related to what you already said. Are there any constraints that influence your social life? Can you think of some technology to remove these constraints for example?
- 48 **INTERVIEWEE:** *Coronavirus-wise technology is removing many constraints. I can chat with people. I can video chat with people. So technology is a way of having social contact. Not direct social contact, but still.* Can you repeat the question? I'm sorry I got lost.
- 49 **INTERVIEWER:** Sure. Are there any constraints that influence your social life?
- 50 **INTERVIEWEE:** Yeah, that and the ability to organize and balance things. Technology-wise I'd say being able to organise myself with a calendar or having alarms set for specific things. But those are things not strictly connected to technology. I could organise myself with a paper calendar or an alarm, so we consider technology, but is not strictly connected technology. But doing everything on my phone or my laptop could help.
- 51 **INTERVIEWER:** Thank you. Let's go on. What is your level of knowledge about current environmental issues? Like air pollution, water pollution or global warming?

..Awareness of lacking deep understanding of env. prot

..Behaviour is driven by a comparison with others

..Behaviour is driven by short-term factors rather than lo

..Awareness of lacking deep understanding of env. prot

..Awareness of the relevance of environmental problems

..Environment is clearly affected by environmental problems

Willingness to adopt sustainable behaviours

..Awareness of not making enough efforts

..Awareness small changes can have a big impact

52 **INTERVIEWEE:** It's difficult to rate it, to be honest. Because I understand I do have an understanding of those topics, but I know my understanding could be so much better. I don't know how much, how much better it could be though, so I wouldn't be able to rate it. I'd say it's an average, I know as much as the average person let's say.

53 **INTERVIEWER:** Why do you say that you know as much as the average person?

54 **INTERVIEWEE:** Because I understand there are people way more informed than I am on the topic. And even if it shouldn't be this way it's not my first worry, especially given the current situation, so I don't spend that much time educating myself on the topic. I just know what I read in newspapers or hearing news, social media and stuff, and maybe the most I do is just go and check if what I'm reading is true, but never spend time researching the topic myself, going on a website where I can find papers on the topic or extremely reliable information on the topic and detailed information on the topic. If I run into information, I record that information in my head. But I am sure there is a lot of information out there, which I don't know and there are people who know that much better than I do.

55 **INTERVIEWER:** So you, you don't go and inform yourself because you don't feel it is an urgent thing?

56 **INTERVIEWEE:** No, I do feel it's an urgent thing. What I am talking about is the detail on topics. I know the effects of global warming, the effects of pollution and I do feel it's an urgent topic. But I'd rather do things that help solve the problem rather than informing myself in much more detail than already. I feel like I already know enough to act.

57 **INTERVIEWER:** Thank you. So, um, have you ever had any first-hand experience with the consequences of unsustainable human behaviour, for example, air or beach or water pollution?

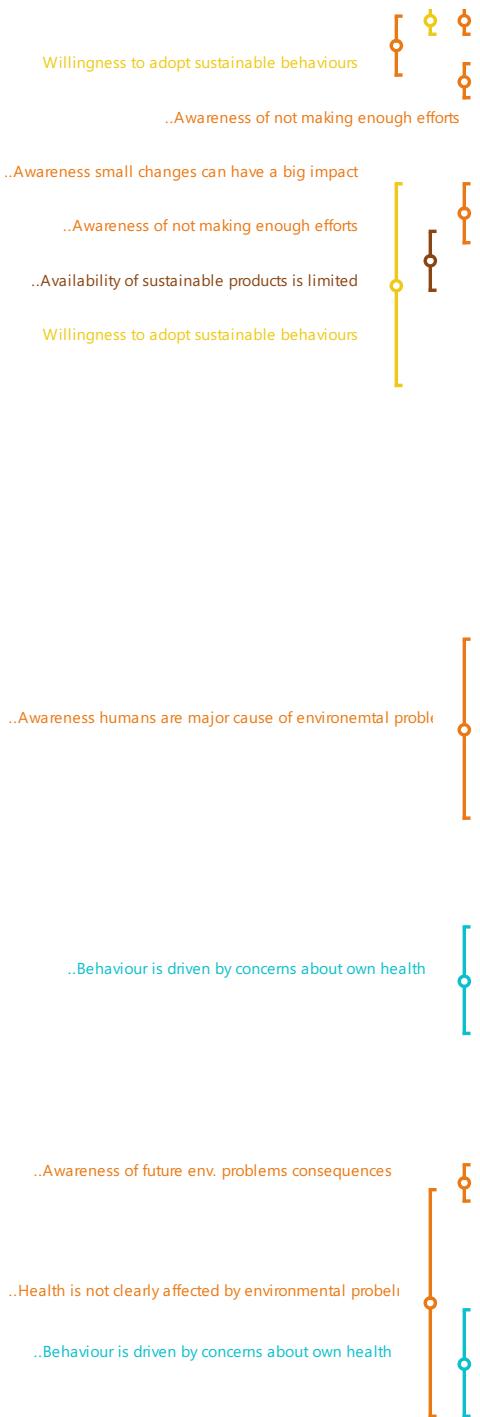
58 **INTERVIEWEE:** Yeah, beach pollution and water pollution so dead fish on the beach. I think it was visible during lockdown how much boat traffic, for example, impacts wildlife. Also, studying medicine. It is not a direct thing, but in lectures, we have mentioned the impacts of air pollution on causing diseases such as emphysema. Around me, several things suggest this. Yeah directly yeah yeah

59 **INTERVIEWER:** Thank you. So how did you feel in those circumstances that you mentioned?

60 **INTERVIEWEE:** I felt powerful from the point of view of being able to have an impact and, conversely, guilty because I was not doing the specific things that could have helped even though it would have been easy.

61 **INTERVIEWER:** The next question is: Did you act to remediate such issues?

62 **INTERVIEWEE:** On a big scale, no. I never joined campaigns or programs and stuff like that. But in general, after informing myself and so on, I do small



things that I think may help. Um, then again, this is a topic where I think I could do so much better, so I see people doing much better than I do. But I did do some changes in my life that I thought could impact positively.

- 63 **INTERVIEWER:** Can you give some examples?
- 64 **INTERVIEWEE:** Uh, maybe eating less meat than I did before, sourcing specific products, which I don't always do. But if I had the opportunity to pick between a product which I believe is better to buy for the environment and another I'll buy that one. Buying more sustainable clothing rather than fast fashion. Being more careful letting the water run from my tap or maybe do fewer baths and just to have a shower. Maybe turn off the lights if I know I know they are not useful. And so on.

- 65 **INTERVIEWER:** Thank you. Going on, on a scale from 1 to 5 where one is the minimum and five is maximum. How much do you think that humans contribute to such issues?

- 66 **INTERVIEWEE:** 4 1/2.
- 67 **INTERVIEWER:** What are the reasons why you say so?
- 68 **INTERVIEWEE:** Pollution is related to humans. It is created by humans. Global warming, I understand temperature should naturally go up, but human activities are pushing this even and speeding them up. So I think there's there are natural components. That's why I wouldn't say 5. There are natural components, but basically, 95% of responsibility can be attributed to humans.

- 69 **INTERVIEWER:** Thank you. Do you believe that these problems negatively affect your life personally?

- 70 **INTERVIEWEE:** They do, the risk of cancer is higher, for example, and I am one of the people who could get cancer so. Even air pollution, for example, could cause diseases and I am more exposed than my parents were when they were younger.

- 71 **INTERVIEWER:** Thank you. Do you think that these problems will negatively affect the lives of future generations?

- 72 **INTERVIEWEE:** Definitely, those are the generations that will be more impacted by this whole problem. I feel like when people do not tackle warming is not because they don't understand the issue, some people don't understand the issue, but those who understand and not put into effort into it is because they cannot see it in their daily life. They cannot see that impacting their daily life yet, so they feel like it's a problem which will not touch them. So they are not motivated to do anything. And that is going to cause problems for them and other people in the future.

- 73 **INTERVIEWER:** On a scale from 1 to 5 (1 = Minimum, 5 = Maximum), how much do you think that your behaviour at home affects the quality of life for future generations?

- 74 **INTERVIEWEE:** 4.

- ..Behaviour is driven by concerns about own health
- ..Health is not clearly affected by environmental problems
- ..Large corporations have a larger impact on env. problems
- ..Awareness of society expectations about sustainability
- ..Awareness of society expectations about sustainability
- ..People that make environmental efforts tend to incite
- ..Behaviour is driven by moral obligations
- ..Live and let live
- ..Behaviour is driven by concems of being judged t
- 75 **INTERVIEWER:** Ok, thank you. If you were to change your household behaviour, would the negative impact of environmental issues on your personal life urge you more than the impact on future generations, or the contrary?
- 76 **INTERVIEWEE:** I think both. Unconsciously, probably the impact on myself. But I am also a future generation if I think about it. And I also care about future generations because they'll probably be related to me. So I'd say both, but unconsciously, probably I'd be more prone to do to behave in specific ways which help the environment if I felt there was a bigger impact on me.
- 77 **INTERVIEWER:** On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), how much do you agree with the following: Household behaviour is the largest contributor of climate change?
- 78 **INTERVIEWEE:** Many people do spend much time in their houses, so I say 4.
- 79 **INTERVIEWER:** Thank you. What are the reasons why you say so?
- 80 **INTERVIEWEE:** Because I feel transport impacts a lot and also factories and commercial activities in general. I just think it is because people do not spend their time at home only.
- 81 **INTERVIEWER:** Thank you. Do you feel that people have any expectations about your household behaviour? What are these expectations?
- 82 **INTERVIEWEE:** Related to the environment?
- 83 **INTERVIEWER:** Related to the way you behave at home.
- 84 **INTERVIEWEE:** Yeah, respect wise and hygiene wise, people have expectations. I do believe certain people have expectations on me and my flatmates for things such as eating or letting the water run unnecessarily or turning off the lights.
- 85 **INTERVIEWER:** Thank you. What are the specific expectations that you think your housemates have about you?
- 86 **INTERVIEWEE:** The expectation would be like not letting the water run unnecessarily, turning off the lights, not using the heating. I think if people behave in a specific way, at the end, especially environmental friendly behaviours, they do expect other people to make an effort as well because they are making an effort.
- 87 **INTERVIEWER:** Do you think that these expectations push you to adopt a pro-environmental household behaviour?
- 88 **INTERVIEWEE:** I wouldn't say they "push me" to be honest. If I assume a specific behaviour, it's because I've documented myself and I am willing to do that, not because of the people that push me. But seeing people adopting a specific behaviour I wouldn't say push me, but do motivate me to adopt specific behaviours. Is not the expectation itself. It's the fact that I feel pressured.

6/10

- ..Behaviour is driven by moral obligations
- ..Educated people tend to be environmentally conscious
- ..Some people are more easily influenceable by the info
- ..Health is not clearly affected by environmental problems
- ..Reducing water consumption
- ..Reducing electricity consumption
- ..Awareness of not making enough efforts
- ..Warming the house is indispensable
- Willingness to adopt sustainable behaviours
- ..Awareness of not making enough efforts
- ..Behaviour is driven by short-term factors rather than long term
- 89** **INTERVIEWER:** Thank you. Do you know people that have no expectations about others' household behaviour but have sustainable household behaviour? What are their reasons to do so?
- 90** **INTERVIEWEE:** Yeah. I mean, I cannot know if they have expectations. I never asked them explicitly. But I do think some people adopt specific behaviours which they believe are useful to the environment and they may encourage others to do that.
- 91** **INTERVIEWER:** Thank you. Could you provide a classification of people that you think are more prone to reduce their unsustainable behaviours?
- 92** **INTERVIEWEE:** What do you mean? Could you explain that question?
- 93** **INTERVIEWER:** Yes, do you think there is a specific group or specific category of people that you think are more prone to reduce their unsustainable behaviours?
- 94** **INTERVIEWEE:** Yes, but I wouldn't know how to categorise them. There may be people who are more informed than others on the topic. There may be people who are more influenceable by the information they receive and so on...
- 95** **INTERVIEWER:** So do you think that the fundamental factor is information?
- 96** **INTERVIEWEE:** And experience. I feel like the experience is much stronger than information, just knowing facts won't let you change that much. I believe a lot of people know that climate change is a problem but they're not touched by it enough to change their behaviour.
- 97** **INTERVIEWER:** On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), to what degree do you believe that your everyday behaviour at home is sustainable?
- 98** **INTERVIEWEE:** 3
- 99** **INTERVIEWER:** Thank you. Can you give some examples of what you do?
- 100** **INTERVIEWEE:** What I do for example, again, those things I listed before are related to not letting the water run, turning off the lights when is not necessary. Those small things. But I could improve things like heating for example. I'm really cold usually, so I keep it on a lot, which is doesn't help the environment.
- 101** **INTERVIEWER:** Thank you. What are the reasons why you act in this way?
- 102** **INTERVIEWEE:** Well, positive behaviours. Because I inform myself and I feel like they can have an impact. I still have behaviours which I don't think are helpful to the environment probably because, again short-term problems matter to me more than long-term problems.
- 103** **INTERVIEWER:** Thank you. Do you feel some moral obligations (values) which make you feel obliged to behave sustainably?

Willingness to adopt sustainable behaviours

..Behaviour is driven by moral obligations

..Information raises moral obligations

..Behaviour is driven by moral obligations

..Unpopularity of eco-feedback devices

..Cleaning

..Household chores can be shifted in time

..Awareness of not making enough efforts

104

**INTERVIEWEE:** Definitely, yeah. The responsibility towards the environment. The fact that having the power to change things and not change things makes me feel guilty. I do have a moral obligation towards the thing that is providing me with life, providing me with food, providing me with air and so on.

105

**INTERVIEWER:** Thank you. Has there been any particular circumstance which has raised these obligations?

106

**INTERVIEWEE:** In high school, I studied Environmental Systems and Societies for a while, and that opened my eyes on a variety of topics. Everything is interconnected.

107

**INTERVIEWER:** If you had to choose the main reason that drives you to adopt a sustainable household consumption, what would it be?

108

**INTERVIEWEE:** It would be feeling a moral obligation together with knowing that it does help not only me but also other people now and in the future.

109

**INTERVIEWER:** Are there any people that support you at curtailing your environmentally unsustainable behaviours?

110

**INTERVIEWEE:** There are people who, without knowing, do motivate me to change my behaviour.

111

**INTERVIEWER:** Are you aware that some devices in the market help you adopt more sustainable behaviours?

112

**INTERVIEWEE:** No.

113

**INTERVIEWER:** Thank you. Could you please tell me what household chores do you do during the week?

114

**INTERVIEWEE:** I vacuum and wash the floor. And do the dishes. And there's laundry.

115

**INTERVIEWER:** Which of the previous household chores do you believe you can shift in time and which not?

116

**INTERVIEWEE:** I mean I can move everything to another day, another moment of the day or another day entirely, yes. Yeah, it's pretty flexible.

117

**INTERVIEWER:** Thank you. Do you think that your daily household chores somehow influence each other?

118

**INTERVIEWEE:** If I take more time doing one thing I have less time to do other things. But that is the only way I see them overlapping and influencing each other.

119

**INTERVIEWER:** Thank you. On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), to what extent do you think you can adopt more sustainable behaviours?

120

**INTERVIEWEE:** 3 1/2.

121

**INTERVIEWER:** What are the reasons?

122

**INTERVIEWEE:** I think I already adopted specific behaviours, especially compared to other people. I know

8/10

..Behaviour is driven by a comparison with others



I could improve usually, but I also know I do have certain behaviours that some people don't have.

123 **INTERVIEWER:** Thank you. Are there any constraints that outside of your control that will not allow you to change your everyday behaviours to more sustainable ones?

124 **INTERVIEWEE:** No, I do not think so.

125 **INTERVIEWER:** And would you collaborate with others in your household to achieve a more sustainable behaviour? Why would you collaborate?

126 **INTERVIEWEE:** Yes, I will be happy to improve myself. Also, collaborating leads to improvement of not only me but also other people. That can have a positive impact without me putting in that much more effort in it.

127 **INTERVIEWER:** Thank you. Are there any habits that even if you know that they are not sustainable, you are still not willing to change? Why wouldn't you change them?

128 **INTERVIEWEE:** As I said, for example, the heating thing. Or um, travelling with planes which I know has a huge negative impact on the environment, but I still want to go home, so that's selfish reasons, to be honest.

129 **INTERVIEWER:** Thank you. Could you think of a piece of technology that can help you overcome these constraints?

130 **INTERVIEWEE:** Not really, because not having the willingness to do that won't be changed by a piece of technology. I feel like technology could help when I do already want to change but I am not motivated enough to change.

131 **INTERVIEWER:** On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), what is the extent to which you agree with the following statement: Changes in individuals household behaviour will significantly help at fighting environmental issues?

132 **INTERVIEWEE:** 4.

133 **INTERVIEWER:** On a scale from 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree), to what extent are in favour of laws that make some sustainable behaviours (like recycling) compulsory for everyone?

134 **INTERVIEWEE:** For the recycling thing, I would say 5, but I I would have to see the long specifically so I'm going to say 4.

135 **INTERVIEWER:** To what extent are in favour of laws that reward businesses and individuals who assume sustainable behaviours?

136 **INTERVIEWEE:** 4 1/2, because there are always ways of going around the law and getting the reward without actually doing the action.

137 **INTERVIEWER:** Is there anything important that you think I did not ask?

..Housemates are prone to sharing and collaborating

..Laziness



..Warming the house is indispensable

..Behaviour is driven by self interests and concerns



..Behaviour is driven by moral obligations



138

**INTERVIEWEE:** Not really.

139

**INTERVIEWER:** So this is the end of the interview. I would like to thank you for your time and your contributions to the study. But lastly, I would like to ask you if you have any further questions.

140

**INTERVIEWEE:** No

141

**INTERVIEWER:** Ok, so in that case, I will stop the recording and end the interview.

# FPSE Participant Information and Consent Forms

As requested by the Coursework Specifications, and in accordance with the principles of an Ethical Design Process, we have formally asked all our interviewees to give their consent before starting each of our interviews.

In the following pages you can find the full **ERGO/FPSE/ 24744.A1 (Version 3.0)** Ethics document provided by the University of Southampton - Faculty of Engineering and Physical Sciences.

## FPSE Ethics Committee FPSE EC Application Form

Ver 6.6d

Refer to the *Instructions* and to the *Guide* documents for a glossary of the key phrases in **bold** and for an explanation of the information required in each section. The *Templates* document provides some text that may be helpful in presenting some of the required information.

Replace the highlighted text with the appropriate information.

Note that the size of the text entry boxes provided on this form does **not** indicate the expected amount of information; instead, refer to the *Instructions* and to the *Guide* documents in providing the complete information required in each section. Do **not** duplicate information from one text box to another.

Reference number: <b>ERGO/FPSE/ 24744.A1</b>	Version: 3.0	Date: 13/09/2019
Name of <b>investigator(s)</b> : COMP2213 class of 2018/19, and the module lecturers: Mike Wald, Yvonne Howard, Sarah Hewitt, Richard Gomer		
Name of supervisor(s) (if student <b>investigator(s)</b> ): COMP2213 lecturers: Mike Wald , Yvonne Howard, Sarah Hewitt, Richard Gomer		
Title of study: Student interviews for COMP2213- 2019		
Expected study start date: 01-10-2019	Expected study end date: 31-09-2019	
Note that the dates requested on the "IRGA" form refer to the start and end of <i>data collection</i> . These are not the same as the start and end dates of the study for which approval is sought.		
Note that approval must be obtained before the study commences; retrospective approval cannot be given.		

The investigator(s) undertake to:

- Ensure the study Reference number ERGO/FPSE/**24744.A1** is prominently displayed on all advertising and study materials, and is reported on all media and in all publications;
- Conduct the study in accordance with the information provided in the application, its appendices, and any other documents submitted;
- Conduct the study in accordance with University policy governing research involving **human participants** (<http://www.southampton.ac.uk/ris/policies/ethics.html>);
- Conduct the study in accordance with University policy on data retention (<http://www.southampton.ac.uk/library/research/researchdata/>);
- Submit the study for re-review (as an amendment through ERGO) or seek FPSE EC advice if any changes, circumstances, or outcomes materially affect the study or the information given;
- Promptly advise an appropriate authority (Research Governance Office) of any adverse

- 
- study outcomes, changes, or circumstances (via an adverse event notification through ERGO);
  - Submit an end-of-study form as may be required by the Research Governance Office upon completion of the study.

**REFER TO THE INSTRUCTIONS DOCUMENT WHEN COMPLETING THIS FORM.**

**PRE-STUDY**

**Characterise the proposed participants**

The class of 218 students of COMP2213 will be instructed to interview 2 participants each, making approximately 436 participants in total. Students will be asked to recruit healthy adult participants aged between 18-80. Participants are likely to include friends and family members of the students as well as potentially others from the general public. Students will be specifically instructed not to interview anyone outside of these age ranges or vulnerable individuals (i.e. diminished mental capacity, low-income / homeless, disabled etc).

**Describe how participants will be approached**

Students will be instructed to approach friends and family informally- in person, or via email or social media. Students wishing to recruit interviewees outside of their immediate friend/family circle will be instructed to recruit using snowball sampling from existing contacts.

**Describe how inclusion and/or exclusion criteria will be applied (if any)**

The COMP2213 teaching staff will explicitly instruct students not to approach individuals who may conceivably be from vulnerable populations, or people outside of the ages of 18-80.

**Describe how participants will decide whether to take part**

Students will be instructed to brief their participants about the nature of the experiment on the first contact (verbally or via email), and will be shown the participant information sheet if they express an interest. Students will be instructed to again show each participant the information sheet, give the participant a chance to ask any further questions before ensuring each participant verbally consents to take part in the study. (Refer appendices i and ii)

***Participant Information***

Provide the **Participant Information** in the form that it will be given to **participants** as an appendix. All studies must provide **participant information**.

***Consent Form***

Provide the **Consent Form** (or the request for consent) in the form that it will be given to **participants** as an appendix. All studies must obtain **participant** consent.

Some studies may obtain verbal consent, other studies will require written consent, as explained in the *Instructions* and *Guide* documents.

## DURING THE STUDY

Describe the study procedures as they will be experienced by the **participant**

Identify how, when, where, and what kind of data will be recorded (not just the formal research data, but including all other study data such as e-mail addresses and signed consent forms)

COMP2213 students must choose one of five themes upon which to formulate questions and interview willing participants. These themes are:

1. Increasing productivity in the workplace
2. Indoor air quality in lectures/offices/home
3. Reducing energy consumption at home/office
4. Conceptions of online privacy

5. (If unhappy with all of the above), a suitable theme suggested by a student or student group PROVIDED the theme and the expected participant sample and sampling method is cleared with the COMP2213 teaching team prior to data collection.

Students will choose one of these themes upon which to base their research, formulate their own research questions in groups of 4-5 students and conduct interviews. The themes are purposefully broad and applicable to the widest possible range of participants.

Students will be instructed in class to conduct interviews in mutually acceptable locations for their participants. Many of these interviews are likely to take place on campus. They may choose to take notes themselves or audio-record the interviews with their mobile phones and transcribe them later. Students will be explicitly instructed not to take any identifiable photographs or videos of their participants in their interviews, not to ask personal or sensitive questions during the interviews and will be further instructed to request each of their participants does not mention names or give any form of identifiable information in the interviews. All interview recordings will be deleted after the anonymised transcription is done.

### ***Participant questionnaire***

As an appendix, if using a questionnaire, reproduce any and all **participant** questionnaires or data gathering instruments in the exact forms that they will be given to or experienced by **participants**. If conducting less formal data collection, provide specific information concerning the methods that will be used to obtain the required data.

## POST-STUDY

Identify how, when, and where data will be stored, processed, and destroyed

As mentioned, students will be instructed to ensure no identifiable information is recorded in any of the interviews.

Data will be in the form of students' notes or sketches from the interviews and/or audio-recordings and/or transcripts of the audio recordings.

Students will use excerpts of the interview transcripts in their reports for the subject. All students will be instructed to store all interview data on their personal password protected laptops. Please note however that all interview data kept by the students will be non-identifiable. It will be left up to the students as to how to store, process, and eventually destroy the interview notes or transcripts. All students will be instructed to store data on their laptops and all interview recordings will be deleted after the anonymised transcription is completed.

If Study Characteristic M.1 applies, provide this information in the **DPA Plan** as an appendix instead and do not provide explanation or information on this matter here.

## STUDY CHARACTERISTICS

(L.1) The study is funded by a commercial organisation: **No**

(L.2) There are **restrictions** upon the study: **No**

(L.3) Access to **participants** is through a third party: **No**

(M.1) **Personal data** is collected or processed: **No**  
Data will be processed outside the UK: **No**

If 'Yes' to either question, provide the **DPA Plan** as a separate appendix. Do not provide information or explanation on this matter here. Note that using or retaining e-mail addresses, signed consent forms, or similar study-related **personal data** requires M.1 to be "Yes"

(M.2) There is no inducement given to any participants

(M.3) The study is **intrusive**: **No**

(M.4) There is **risk of harm** during the study: **No**

(M.5) The true purpose of the study will be hidden from **participants**: **No**  
The study involves **deception** of **participants**: **No**

(M.6) **Participants** may be minors or otherwise have **diminished capacity**: **No**

(M.7) **Sensitive data** is collected or processed: **No**

(H.1) The study involves: **invasive** equipment, material(s), or process(es); or **participants** who are not able to withdraw at any time and for any reason; or animals; or human tissue; or biological samples: **No**

***Technical details***

If one or more Study Characteristics in categories M.3 to M.7 or H applies, provide the description of the technical details of the experimental or study design, the power calculation(s) which yield the required sample size(s), and how the data will be analysed, as separate appendices. Do not provide explanation or information on these matters here.

## APPENDICES (AS REQUIRED)

While it is preferred that this information is included here in the Study Protocol document, it may be provided as separate documents.

If provided separately, be sure to name the files precisely as "Participant Information", "Questionnaire", "Consent Form", "DPA Plan", "Permission to contact", "Risk Management Plan", "Debrief Plan", "Contact Information", and/or "Technical details" as appropriate.

If provided separately, each document must specify the reference number in the form ERGO/FPSE/24744.A1, its version number, and its date of last edit.

Appendix (i): **Participant Information** in the form that it will be given to **participants**.

Appendix (ii): **Consent Form** in the form that it will be given to **participants**.

### *Appendix (i) Participant Information*

#### Participant Information

Ethics reference number: <b>ERGO/FPSE/24744.A1</b>	Version: 3.0	Date: 13/09/2019
Study Title: Student interviews for COMP2213- 2019/20		
Investigator: ***STUDENTS TO INSERT THEIR NAME(S) HERE***		

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to provide your verbal consent to take part. Your participation is completely voluntary.

**What is the research about?** This research project is part of the COMP2213 group project. The research will be on related to: (1) Increasing productivity in the workplace (2) Indoor air quality (3) Energy consumption at home (4) Conceptions about online privacy or a separate topic that has been approved by the teaching team.

**Why have I been chosen?** You have been approached because you are known to the student(s) or because you have been identified by the students as being appropriate for an interview on one of four topics listed above.

**What will happen to me if I take part?** You will take part in a short interview (~15-20 minutes) which may also involve a sketching exercise or other co-design activity. The interview will involve non-personal questions about your opinions one of the topics listed above. Interviews may be audio-recorded.

**Are there any benefits in my taking part?** The study will add to the current knowledge on each topic, as well as being a valuable practical learning tool for the student(s) who are learning qualitative interview techniques.

**Are there any risks involved?** None beyond everyday life.

**Will my data be confidential?** Please do not give any identifiable information during your interview. Your interviewer (student) is will ask for your verbal consent to participate in the research. Because no identifiable information will be gathered in the interview, the students will retain anonymous interview transcripts and notes until the end of the semester. **What happens if I change my mind?** You may withdraw at any time and for any reason. You may decline to give your verbal consent and not take part in the interview without penalty.

**What happens if something goes wrong?** If you have any concern or complaint, contact the COMP2213 teaching staff ([mw@ecs.soton.ac.uk](mailto:mw@ecs.soton.ac.uk)), otherwise please contact Research Governance Office (02380 595686, [Rgoinfo@soton.ac.uk](mailto:Rgoinfo@soton.ac.uk)).

## **Appendix (ii) Consent Form**

### **Consent Form**

Ethics reference number: <b>ERGO/FPSE/24744.A1</b>	Version: 3.0	Date: 13/09/2019
Study Title: Student interviews for COMP2213- 2019/20		
Investigator: *** <b>STUDENTS TO INSERT THEIR NAME(S) HERE***</b>		

Please read the following and indicate to the researcher verbally (i.e. yes/no) if you agree with the following statements:

#### **Data Protection**

*I understand that information collected during my participation in this study is completely anonymous / will be stored on a password protected computer/secure University server and that this information will only be used in accordance with the Data Protection Act (1998). The DPA (1998) requires data to be processed fairly and lawfully in accordance with the rights of participants and protected by appropriate security.*

:  
I have read and understood the Participant Information (version 3.0 dated 13/09/2019) and have had the opportunity to ask questions about the study.

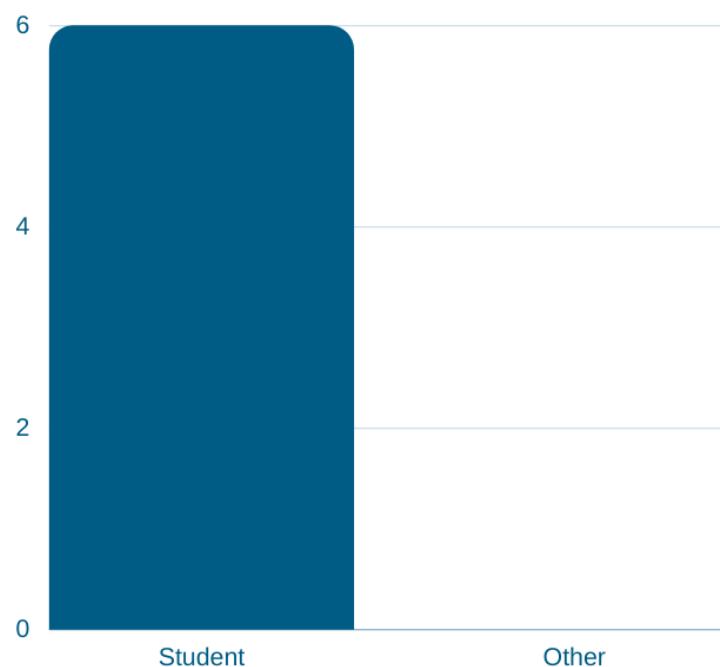
I agree to take part in this study.

I understand my participation is voluntary and I may withdraw at any time and for any reason.

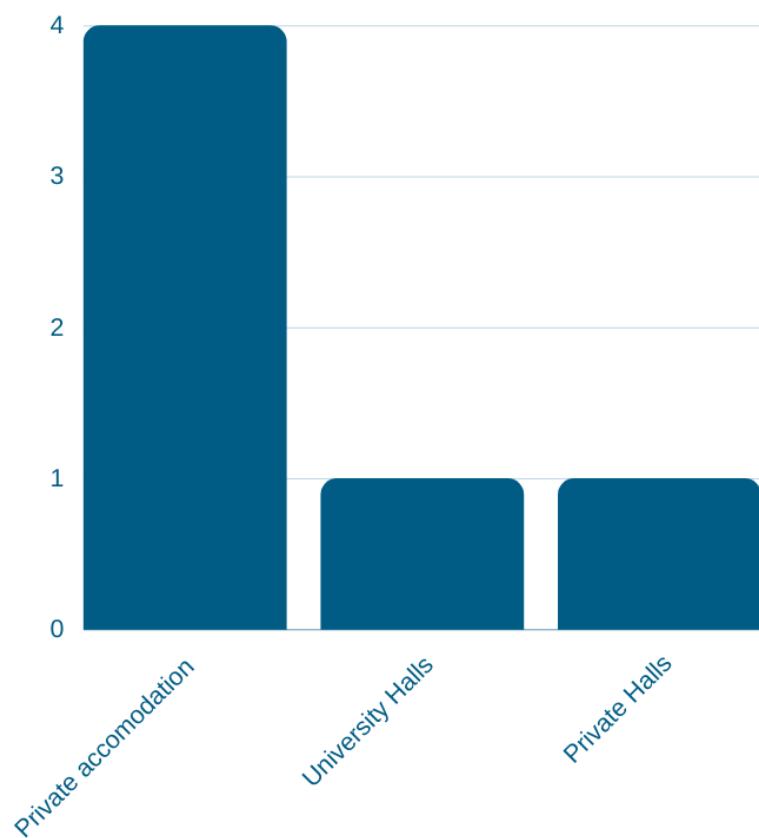
**If the participant has verbally agreed to the above, and consented to take part in the research, the study may commence.**

# **Quantitative Representation of Data**

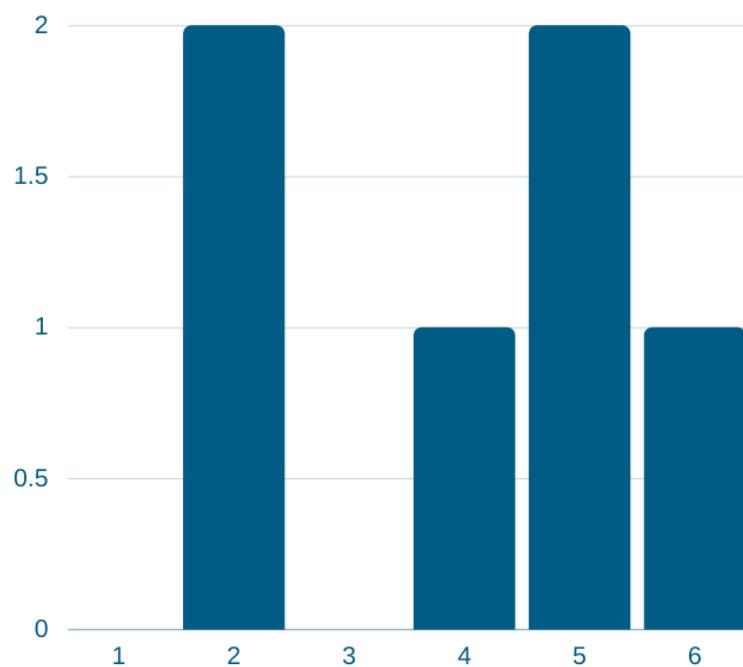
**Interviewee occupation**



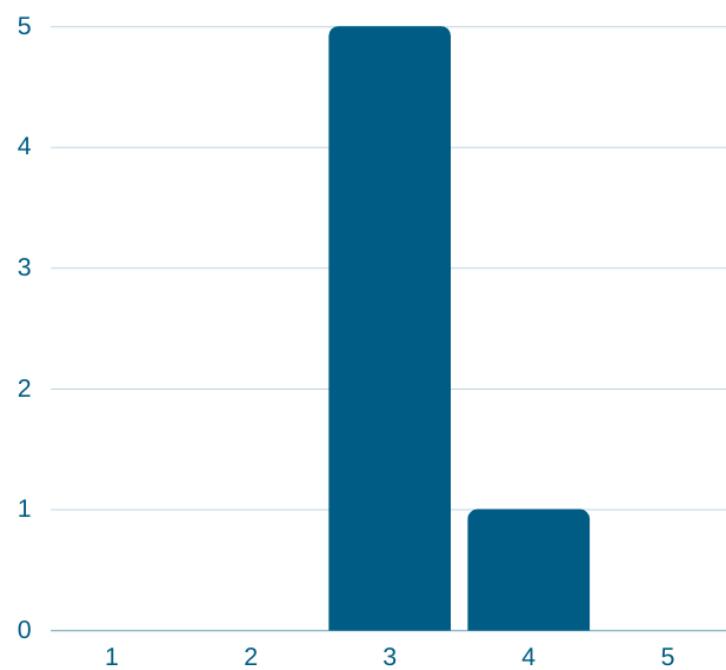
**Where do the interviewees live?**



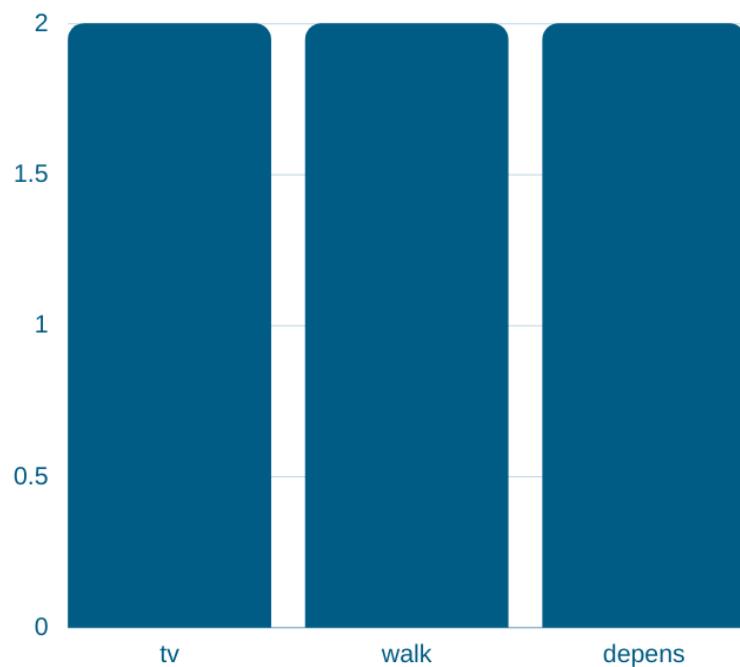
**How many people do the interviewees live with?**



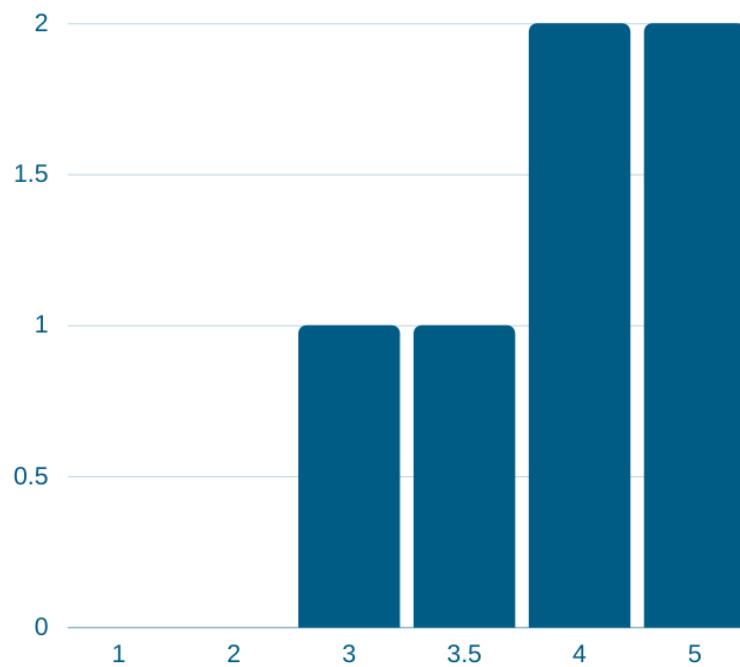
**To what extent to the interviewees think that their household is coordinated?**



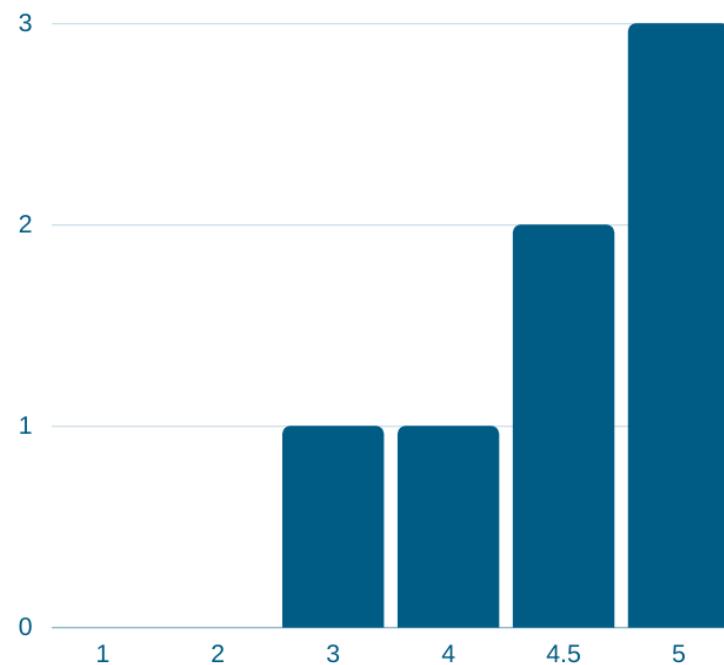
**Would the interviewees rather go on a walk or watch something on tv?**



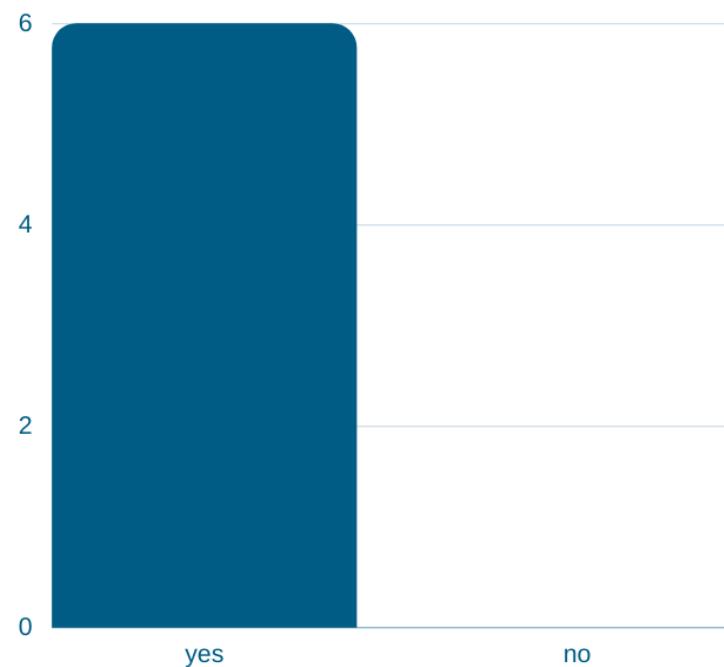
**Social life quality of the interviewees**



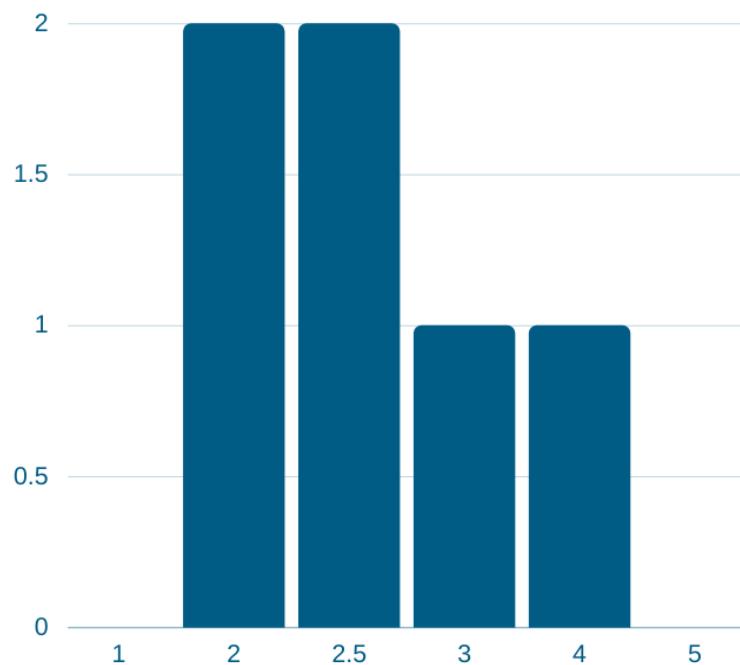
**To what extent do the interviewees think humans contribute to climate change?**



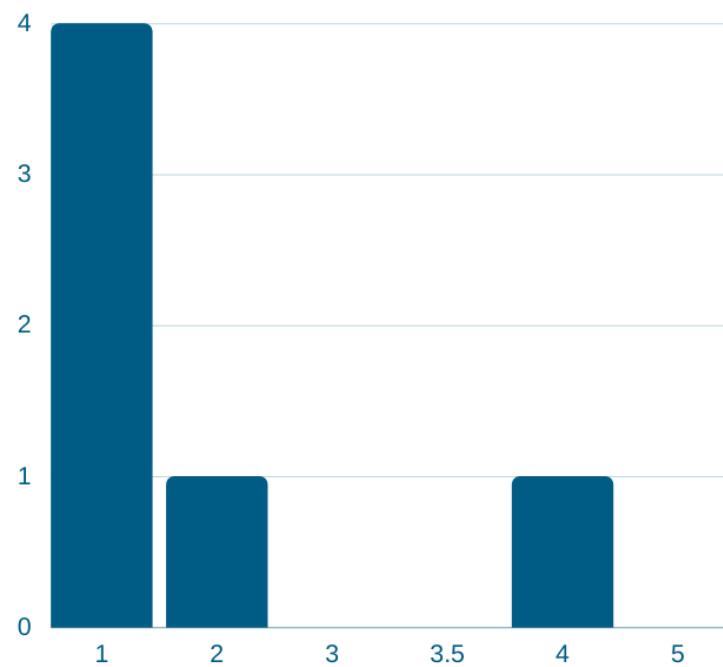
**Do the interviewees think that climate change will have an impact on future generations?**



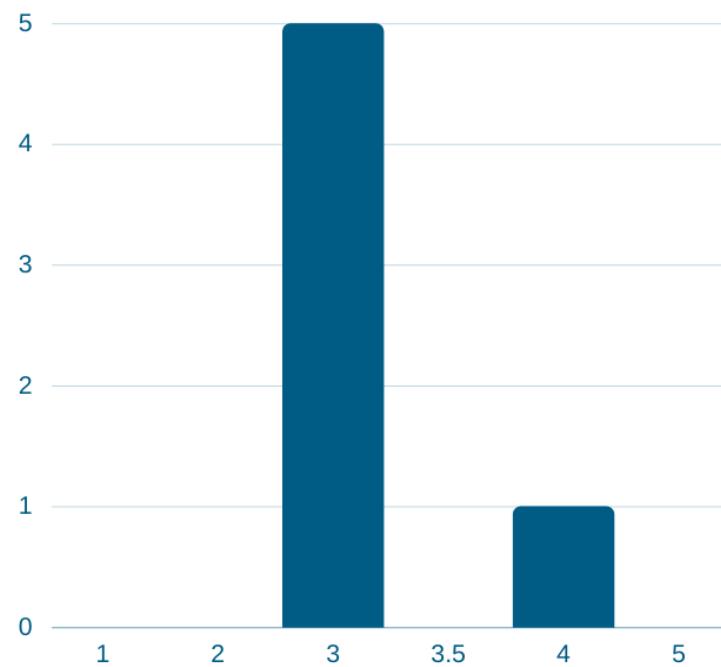
**To what extent do the interviewees think that their behaviour will have a impact on future generations?**



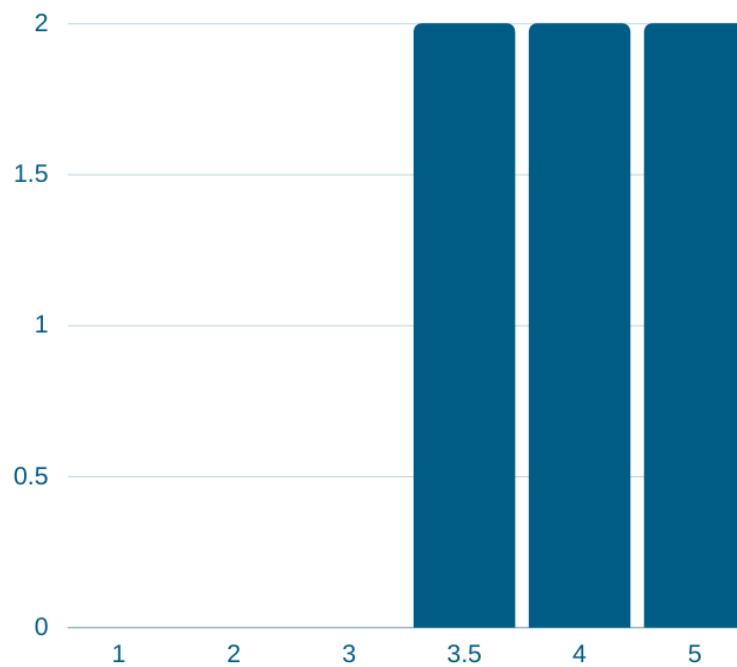
**To what extent do the interviewees think that household behaviour is the largest contributor to climate change?**



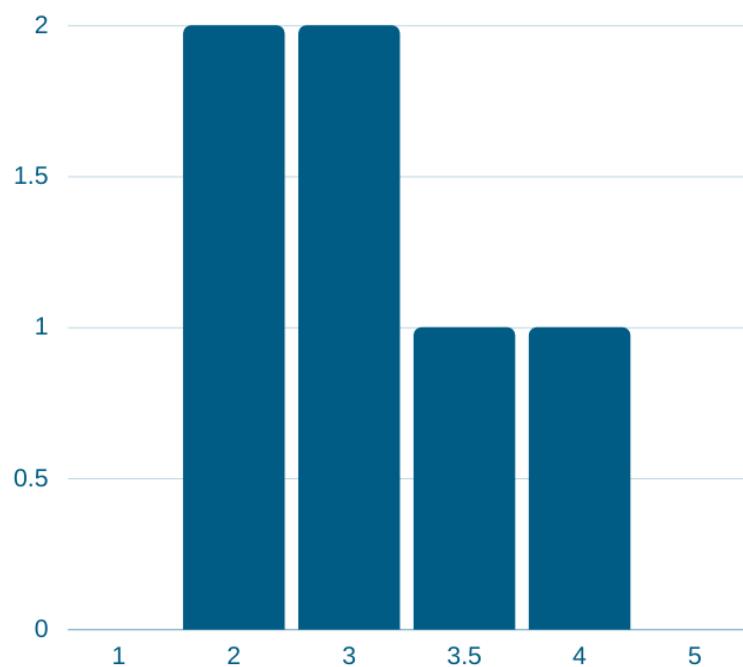
**To what extent do the interviewees think that their home behaviour is sustainable?**



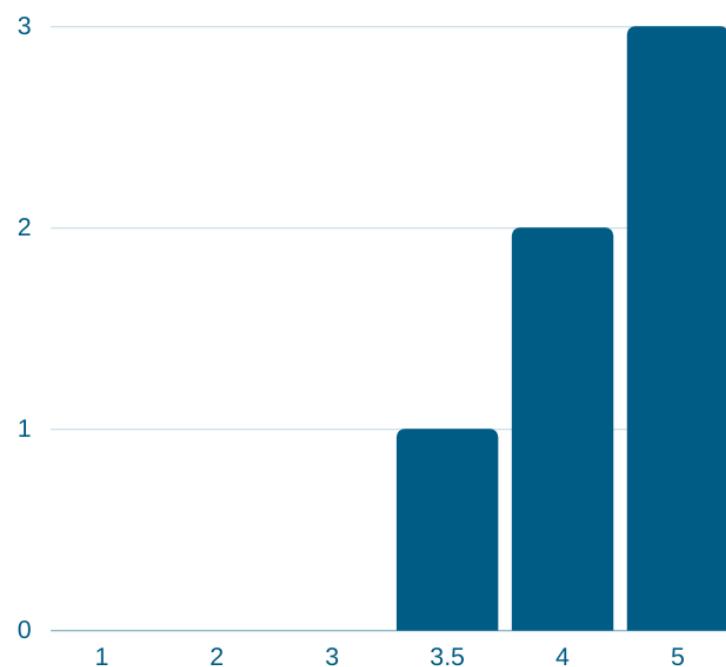
**To what extent do the interviewees think they can adopt more sustainable behaviours?**



### Percieved impact of changes in individual households



### Popularity of laws that make sustainable behaviours compulsory



### **Popularity of laws that reward sustainable behaviours**

