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Selective Sound Sensitivity Syndrome Scale (S-Five): a psychometric tool for assessing misophonia. Summary on three waves of sampling and analysis.

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Abstract

Misophonia is a neurobehavioral condition characterised by an intolerance to specific stimuli, resulting in an extreme physiological and emotional response. The condition is still largely unexplored; however, its study is gaining more interest in the literature. In the past few years, questionnaires assessing misophonia have been devised and implemented to study this population. Each existing questionnaire, scale, and assessment tool approach misophonia in very different ways. The aim of this study is to develop a new psychometric scale to measure misophonia as a trait, by synthesising many different aspects of this condition. Development of this psychometric tool aims to help researchers measure the trait, study its characteristics, their severity and discriminant ability, as well as to explore potential associations of the condition with other traits and/or disorders. This manuscript presents the new tool and summarises the methodology followed in its development and the research strategy for its evaluation.

Introduction

Misophonia is a condition characterised by a decreased tolerance to specific stimuli, resulting in an intense physiological and affective response (Jastreboff & Jastreboff, 2001; Schröder et al., 2013; Edelstein, Brang et al., 2013). Stimuli typically include repetitive sounds produced by humans (Jager, de Koning et al, 2020), but individuals also report decreased tolerance to environmental and mechanical sounds (Edelstein et al 2013; Hansen et al, under review), as well as hypersensitivity to visual, tactile and olfactory stimuli (Wu, Lewin et al 2014). Individuals with misophonia report impaired functioning in work, study, leisure and relationships (Edelstein et al., 2013; Jastreboff & Jastreboff, 2002; Rouw and Erfanian, 2018; Schröder et al., 2013; Wu, Lewin, Murphy, & Storch, 2014).

Individuals with misophonia have described experiencing sounds as invasive, offensive and insulting. Qualitative data has identified appraisals directed at the source of the sound, such as rudeness or thoughtlessness, feelings of shame and embarrassment at their own reaction to sounds and a sense of failure and sadness about the impact of the condition on their lives (Edelstein et al 2013; Rouw and Erfanian, 2018). Perceived loss of control (Jager et al 2020) and a fear of physical outbursts (Reid, Guzik et al., 2016) have also been reported. Further research is warranted to explore the frequency of these appraisals and whether they are associated with misophonia severity and behavioural response. Improved understanding of appraisals may shed light on the relevance of context to the misophonic response, for example a more intense reaction towards close family members or the absence of a response to sounds when made by animals or children (Edelstein et al 2013; Jager et al 2020).

Coping strategies for misophonia include avoidance and leaving situations, blocking sounds with music or earplugs, anticipating sounds, and verbal aggression (Edelstein et al 2013; Jager et al 2020; Rouw and Erfanian 2017). Jager et al (2020) reported that aggressive outbursts were mild relative to the aggressive nature of thoughts experienced during a misophonic reaction. Two studies (Wu et al 2014; Zhou, Wu et al 2017) found that the positive correlation between anger outbursts and misophonia severity was significantly mediated by anxiety, with outbursts measured by the Rage Outbursts and Anger Rating Scale (ROARS), which is not specific to the context of misophonia. Misophonic subjects have been found to have higher self-reported anxiety sensitivity (McKay, Kim et al 2018) and higher awareness of internal body states (Kumar et al 2017) than non-misophonic controls. Further research is needed to build on these findings and to establish whether treatments targeting interoceptive and anxiety sensitivity could reduce outbursts in misophonia. Such research would benefit from a measure of outbursts specific to misophonia.

Jastreboff and Jastreboff (2002) proposed that the misophonic response is the result of heightened connectivity between the auditory, limbic and autonomic systems. Edelstein et al. (2013) used skin conductance response (SCR) to measure sympathetic nervous system activation whilst listening to misophonic “trigger” sounds. They found a positive correlation between subjective aversiveness and SCR in both the misophonic and control groups. The two groups were similar in their reports of which sounds they found aversive and non-aversive, with a heightened subjective aversion rating and SCR in the misophonia group. Kumar et al (2017) also found a heightened physiological response in a misophonic group compared to controls, as measured using heart rate and galvanic skin response (GSR). In a mediation analysis, they found that the relation between group status (i.e. misophonia or control) and physiological response to trigger sounds was mediated by brain activity in the anterior insula cortex (AIC), an area of the brain that is key in the processing the salience of internal bodily states (interoception). This study, using functional magnetic resonance imaging (fMRI), found that the heightened AIC activity was present with misophonic sounds (e.g. eating) but not “unpleasant sounds” (e.g. person screaming). They also found increased functional connectivity between the AIC and core

parts of the default mode network, which activate during memory retrieval, in misophonic subjects during misophonic sounds. This connectivity may provide a brain basis representation of the subjective reports of the relevance of context in response to sounds (Edelstein et al 2013; Jager et al 2020). Vivid memories of childhood misophonic episodes have been reported (Rouw and Erfanian, 2018) and further research is warranted to explore whether memories could be targeted using imagery rescripting (ImRs) as a means of reducing the misophonic response, as is increasingly used as a therapeutic technique in anxiety and obsessive compulsive and related disorders (Arntz, 2012). The results of these neurophysiological studies were in line with a subsequent imaging study (Schroeder, van Wingen et al, 2019), which also reported a subjective increase in the emotions of anger, disgust and sadness in response to misophonic sounds by misophonic participants compared with controls. Taken together, these studies indicated that the subjective emotional response and higher physiological response to misophonic triggers could in part be the result of the meaning applied to trigger sounds and to interoceptive experiences in response to sounds. An appropriate measure of the “meaning” behind sounds and the misophonic response would be useful for future research.

There is no formally agreed categorisation nor diagnostic criteria for misophonia. A recent literature review highlighted the challenge of effectively categorising this phenomenon (Brout et al 2018). Hypersensitivity to auditory stimuli occurs in numerous disorders within multiple disciplines including tinnitus, hyperacusis (Jastreboff & Jastreboff, 2001; 2002), autism spectrum disorder, sensory processing disorders (Tavassoli, et al., 2017), and post-traumatic stress disorder (Morgan & Grillon, 1999). Misophonia has been found to co-occur with obsessive-compulsive personality disorder (Schröder et al., 2013; Rouw & Erfanian, 2018), obsessive-compulsive disorder (Schröder et al., 2013; Edelstein et al., 2013; Wu et al., 2014), mood disorders, anxiety disorders (Wu et al., 2014; Rouw & Erfanian, 2018), post-traumatic stress disorder, attention deficit (hyperactivity) disorder (Rouw & Erfanian, 2018), and eating disorders (Kluckow, Telfer, & Abraham, 2014; Rouw & Erfanian, 2018), raising the question as to whether this is a transdiagnostic phenomenon or a stand-alone condition.

Schröder et al. (2013) suggested that misophonia be categorised as a discrete psychiatric condition and proposed diagnostic criteria, which were recently revised by the research team following an observational study of 779 subjects with suspected misophonia (Jager et al 2020). Considering that these criteria were developed from observations of individuals referred to a psychiatric outpatient clinic, it is likely premature to adopt the psychiatric categorisation until similar studies have been completed in other settings where individuals may present with misophonia, e.g. audiology clinics or educational settings, and repeated on samples representative of the general population. Robust psychometric measures of misophonia are needed for use in large scale studies and to identify suitable participants for structured clinical interview to support the categorisation of misophonia.

The recent rapid increase in misophonia research has highlighted the importance of a robust multidimensional scale for measuring misophonia. A number of questionnaires have been developed for use in misophonia research, though none of these have been subjected to rigorous psychometric analysis using up to date scientific approaches. The two used most frequently in the misophonia literature are the Misophonia Questionnaire (MQ; Wu et al., 2014) and the Amsterdam Misophonia Scale (A-MISO-S; Schröder et al, 2013), which are intended to measure the presence and severity of misophonia symptoms. Additional questionnaires in use include the recently published MisoQuest (Siepsiak et al., 2020), the Misophonia Assessment Questionnaire (MAQ; Johnson, 2014) and two single item scales, The Misophonia Activation Scale (MAS-1; Fitzmaurice, 2010) and the Misophonia Physical Response Scale (MPRS; Bauman, 2015). A recent scoping review (Potgieter, MacDonald et al, 2019) identified other questionnaires for which there was no information available about the scale

development or no reference identified. Only the MQ and MisoQuest have published psychometric properties available.

The MQ was tested in a study of 483 undergraduates. The MQ Total score (Chronbach's $\alpha = .89$) is calculated by combining the first two sections of the questionnaire, the 7-item Misophonia Symptom Scale (MSS; $\alpha = 0.86$), assessing the presence of specific triggers, and the 10-item Misophonia Emotions and Behaviours Scale (MEBS; $\alpha = 0.86$). Items are rated on a five-point ordinal scale, ranging from 0 (Not at all True / Never) to 4 (Always True / Always), with a total score of 0-68. Exploratory factor analysis identified a three-factor solution, with factors one and two made up of the MSS and MEBS items, respectively, and the third factor consisting of items cross-loading on the first two factors. The third section of the MQ, the Misophonia Severity Scale, was adapted for misophonia from the NIMH Global Obsessive-Compulsive Scale (NIMH GOCS; Murphy, Pickar & Alterman, 1982; Wu et al., 2014). It is a single item rating the severity of sound sensitivity on a scale from 1 (minimal) to 15 (Very severe sound sensitivities), with a score greater than or equal to 7 indicating clinically significant symptoms. The initial psychometric assessment found satisfactory internal consistency and appropriate convergent and discriminant validity (Wu et al., 2014). Satisfactory internal consistency for the MQ was also found in a study of 415 students from two universities in China (Zhou, Wu, & Storch, 2017). The authors acknowledge that further psychometric testing would be required for use in other populations (Wu et al, 2014). In a clinical setting, the MSS in particular may be limited in its capacity to capture meaningful change. The section asks "In comparison to other people, I am sensitive to the sound of..." before listing the 7 trigger sounds. A respondent whose sound sensitivity had reduced, but remained above average, may still consider it to be "always true" that they are sensitive in comparison to other people, and thus the clinical improvement in symptoms may not be captured by these items.

The A-MISO-S (Schröder et al, 2013) was adapted from the Yale-Brown Obsessive Compulsive Scale (YBOCS), an established clinician-rated tool for measuring severity of OCD symptoms. The A-MISO-S has 6 questions which address different aspect of misophonia, including time spent occupied by misophonia, impact on functioning, distress, attempts to resist, perceived control over sounds and thoughts, and avoidance. The questions are discussed with the patient and the interviewer uses clinical judgement to rate each item from 0 to 4, with a total possible score of 24. Schröder et al (2013) used the A-MISO-S as a clinician-rated tool, but it has also been used as a self-report tool in some research (Ci Quek, Ho et al, 2018), To our knowledge, the psychometric properties of the A-MISO-S have not been published.

A recently published questionnaire, MisoQuest (Siepsiak et al., 2020), was developed based on the proposed diagnostic criteria outlined by Schröder et al. (2013). The initial pool of 60 items was used for the first sample (N = 383) which was reduced to 21 items for the second sample (N = 315). Exploratory Factor Analysis found the best fit was a single factor and graded response IRT models studied the discrimination ability of the items. The final version of MisoQuest contained 14 items and showed good internal consistency, test-retest reliability and preliminary confirmation of criterion-related validity. The tool is intended to screen for the presence of misophonia rather than as a measure of symptom severity. As it is based on the Schröder (2013) diagnostic criteria, it is a reliable and valid tool for circumstances where those criteria are being used. The authors acknowledge that this means it may not effectively screen those who do not have anger as their immediate and core emotional reaction (for example, those who primarily experience disgust or feelings of panic).

The MAQ (Johnson, 2014) is a 63-items questionnaire with a 4-point scale, ranging from 0 (not at all) to 3 (almost all of the time). Questions focus on the emotional, social and functional impact of sound

issues. The MAS-1 (Fitzmaurice, 2010) and the MPRS (Bauman, 2015) are both single item tools rating misophonia severity and intensity of physical reactions, respectively, from 0 to 10. Rouw and Erfanian (2018) found level 9 to be the most common reported rating on the MAS-1, a score that indicates extreme panic or rage with a conscious decision not to use violence, and level 8 on the MPRS, denoting a physical sensation equating to emotional pain. The psychometric properties for the MAQ, MAS-1 and the MPRS have not been published.

MisoQuest Siepsiak et al, 2020) is the only published misophonia questionnaire to have been through rigorous psychometric testing. It is appropriate for use as a screening tool where the Schröder (2013) diagnostic are being applied. The two most used measures for misophonia severity have not been subject to sufficient psychometric testing to be routinely used in research.

With misophonia research on the rise, it is vital to have a multidimensional, psychometrically sound tool for measuring the condition in both research and clinical settings. The aim of the present study was to develop a robust psychometric scale for misophonia, the Selective Sound Sensitivity Syndrome Scale (S-Five). This study examines whether the emotions, behaviours, experiences and appraisals of individuals with misophonia are reliable and valid manifestations of the condition. A scale that effectively measures misophonia will allow for vast improvements in the capacity to report on the condition methodologically, to test hypotheses of differences between groups, and to examine correlations with other traits and co-occurring diagnoses. It will also serve as a clinical tool, assessing the severity for individuals and measuring progress of the misophonic experience over time and in response to intervention. The S-Five uses a reflective latent variable model, where each question is an indicator of the assumed underlying misophonia, in a consistent, methodological manner.

Methods

Sampling

Three waves of data collection were conducted between January 2019 and March 2020. At each wave we turned to the community of people identifying as having Misophonia and asked for their help to develop the S-Five. We posted to closed Misophonia Facebook groups (specifically UK Misophonia Support Group, Misophonia: Coping and Solutions, Misophonia Support Group for Adults only, Misophonia Support Group, Misophonia Treatment Tracker, Misophonia International Support Group, Misophonia: Selective Sound Sensitivity Syndrome (4S), Misophonia & Misokinesia Support Group, Misophonia Treatment and Management, Misophonia Support Group Australia, Misophonia Research Network, Misophonia-Research-Keeping up) and Reddit group (namely r/misophonia). We also posted to KCL-related and the researchers' personal social media to recruit individuals who do not necessarily identify or are aware of misophonia. At the final, third wave, we used the Prolific.com site to recruit 800 individuals, representative of the UK general population. Inclusion criteria included being 18+ years old and fluent in English and exclusion criteria included diagnosis of severe intellectual/learning disability.

Psychometric analyses

At the first stage of the psychometric evaluation pilot data were analysed to trace problematic items in terms of face validity, test-retest reliability and internal consistency. When required, certain items were rephrased, or omitted. New items were also added under the consultation of the clinical psychologist who joined the team (JG).

During the second wave of sampling, trigger endorsement was studied using the two parametric logistic item response theory model (2PL-IRT; Baker, 2001) to evaluate the properties of the trigger endorsement. That is, we estimated each trigger's difficulty, discrimination ability and information.

Exploratory and confirmatory factor analysis (EFA and CFA respectively) models were used to study the factor structure of the main S-Five scale. The general population and the misophonia specific samples were randomly divided in two split halves, one to be used in EFA and one in CFA when both methods were used.

Full reliability and validity assessment were conducted within each (potential) dimension and for the total scale. With respect to reliability, internal consistency was evaluated using classical test theory methods (alpha, alpha if item deleted, item total correlations, item rest correlations). Convergent concurrent validity was tested using the Misophonia Questionnaire and the Amsterdam Misophonia Scale.

Results

Data collection waves and S-Five versions

The initial pool of items used to construct the S-five is presented in Vitoratou et al. (2018) and consisted of 50 items measured on a 7-point ordinal scale. The triggers version included 36 sounds whose effect on the individual with misophonia was measured on a 6-point ordinal scale. The **first wave** of data collection (January-March 2019) resulted in a misophonia specific sample of 853 individuals. Based on the preliminary analyses from the first wave data, participants' feedback (see summary Table A1 and A2 in Appendix) and experts' advice (JG), 32 items were rephrased, and 71 statements and 12 trigger sounds were added in both triggers and statement sections.

The **second wave** of data collection (June -November 2019) resulted to 202 responses from the general population and 613 responses of people identifying as having misophonia (hereafter referred to as *misophonia sample*). Full psychometric assessment was conducted in the misophonia sample. With respect to the triggers section, Item Response Theory (IRT) models were used to estimate the severity (difficulty) and the ability of each trigger to discriminate between people with higher or lower misophonic complaint. The information (reliability) of each trigger was also estimated along with the information provided by the entire section. Test-retest reliability estimations concluded that all trigger items are stable in time. With respect to the statements' section, exploratory factor analysis revealed that there is a five-factor structure, with strong internal consistency within each factor. Items were then removed based on the strength of their association with their assigned factor. Items which loaded less than 0.5 with their factor were omitted. Items that cross-loaded in two or more factors (secondary loading(s) at least 0.3) were omitted. Items that did not have strong loadings to any of the factors were omitted. Items which correlated to high (higher than 0.8) with other items were also committed. Reliability analysis indicated that statements were stable in time (two weeks test-retest). Based on these analyses, 63 items were omitted. Results were replicated in the general populations sample. Furthermore, based on the feedback of the responders and expert opinion on the factors, 13 items were added, and 18 items were rephrased, giving a total of 68 items in the statement section of the questionnaire. In the trigger version, 6 items were rephrased, 3 items were added, and 1 item was omitted, which gave a total of 37 trigger items.

Those changes were incorporated to the **third wave** of data collection (January-March 2020). The *trigger section* of the 36-items current scale version includes 37 misophonic triggers (Appendix 2.E.i). In this section participants are asked to choose the main feeling a particular sound typically causes to them (no feeling, irritation, distress, disgust, anger, panic, other feeling: negative, other feeling: positive) and then to rate the intensity of their reaction to this sound (0: *doesn't bother me at all* to 10: *unbearable/causes suffering*). The trigger section is optional, as some people have reported that being informed about other people's triggers can affect them negatively and/or make them endorse

those triggers. The *statement section* (Appendix 2.E.ii) consists of the 36 items and asks participants to respond on a scale ranging from 0: *not at all true* to 10: *completely true* regarding one's emotional responses upon experiencing triggers, attitudes towards individuals or objects producing triggering sounds, individual attributes to oneself, impact on an everyday functioning, and aggressive outburst.

Exploratory factor analysis using 393 responses from a misophonic specific sample resulted to the same five factor structure which had emerged in the second wave data analysis. Based on the loadings criteria, the statement section was reduced to 36 items. The 36-items / 5-factors solution provided good fit to our data, yet a 25-items / 5-factors had the best fit to our data. With a view to replicate the exploratory results using confirmatory methods, the 36-items version was administered to another sample of individuals identifying as having misophonia and to a representative sample of the UK general population (using Prolific www.prolific.com).

The full survey is described in the following section

Survey description

The first page of the survey included the study information sheet. Questions regarding the inclusion and the exclusion criteria followed. Next participants were required to complete the informed consent questions.

General demographics were collected including age, gender, ethnic background, education level and current occupation (Appendix 1.A). Participants were asked to select, from a list, any occurring diagnoses (Appendix 1.B). The list consists of the most common conditions within the major classifications of mental disorders. Furthermore, participants were also asked about a diagnosis of restless leg syndrome, and any condition affecting perception and processing of sounds. A brief description of two sensory phenomena, synaesthesia and autonomous sensory meridian response, were provided and participants were asked if, based on these descriptions, they experience either phenomena. Information about familial experience of misophonia, the developmental history of the participants' misophonia, and its impact on impaired functioning measured by the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002) were also collected for those identify as having Misophonia (Appendix 1.C).

The S-Five items followed (*trigger section* presented in Appendix 2.E.i and *statement section* presented in Appendix 2.E.ii).

At the end of the survey, the Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001), General Anxiety Disorder-7 questionnaire (GAD-7; Spitzer et al., 2006), and Bryant and Smith Aggression Questionnaire (AQ; Bryant & Smith, 2001) were administered. The first two scales are standardised screening tools and symptom severity measures for depression and anxiety disorders, respectively. BS-AQ is a shorter 12-item version of the original 29-item Aggression Questionnaire (Buss & Perry, 1992), which measures aggression on four dimensions: physical aggression, verbal aggression, hostility, and anger. This completes the obligatory part of the survey.

Participants were then asked whether they want to participate in a retest study in two weeks' time. Subsequently, in the misophonia population sampling, participants were given an option to either complete more questionnaires or finish the survey. Those who decided to continue were randomly presented with twelve additional questionnaires. An estimation of the time required to complete each questionnaire was given beforehand and people were informed that they can stop the survey at any point and all the data they had given thus far will be included in the study. In the Prolific sample data

collection, participants were randomly assigned to one of two blocks of questionnaires, each consisting by 6 measures. The twelve measures are listed below.

1. The **Beliefs about Emotions Scale** (BES; Rimes & Chalder, 2010) is a 12-item questionnaire on beliefs regarding the inability to accept negative emotions, and the adverse consequences of experiencing and expressing those emotions. Items are rated on a 7-point Likert scale, specifying level of agreement or disagreement.
2. The **Mindful Attention Awareness Scale** (MAAS; Brown & Ryan, 2003) assesses a receptive state of mind, which is a core feature of mindfulness. MAAS contains 15 items measured on a 6-point ordinal scale ranging from 'almost always' to 'almost never'.
3. The **Autonomous Sensory Meridian Response** (ASMR-15; Roberts et al., 2019) is a questionnaire assessing altered state of consciousness phenomena, namely autonomous sensory meridian response (ASMR), which is characterised by pleasurable tingling sensation in response to certain audio-visual stimuli, causing relaxation and euphoria. The 15-item scale is rated on a scale from 1, 'completely untrue for me' to 5, 'completely true for me', and consists of four subscales: altered consciousness, sensation, relaxation and affect.
4. The reduced-item **Disgust Propensity and Sensitivity Scale-Revised** (DPSS-R; Fergus & Valentiner, 2009) consists of 12 items on a 5-point response scale that assess how easily one is disgusted, known as disgust propensity, and how bothered a person is by their disgust, which is described as disgust sensitivity, both of which contribute to disgust reactions.
5. The **Anxiety Sensitivity Index** (ASI-3; Taylor et al., 2007) is a shorter 18-item version of the original Anxiety Sensitivity Index (Peterson & Reiss, 1992). It assesses anxiety sensitivity conceptualised as one's considerations regarding misinterpretations of anxiety-related sensations. The scale measures anxiety sensitivity on physical, cognitive, and social dimensions.
6. The **Adult Eating Behaviour Questionnaire** (AEBQ; Hunot et al., 2016) is a 35-item measure that assesses appetitive traits in adulthood. AEBQ consists of 8 subscales; however, for the purpose of this study only 'food fussiness' subscale was implemented, which consists of 5 items measured on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.
7. The **Temperament Evaluation of Memphis, Pisa, Paris and San Diego - autoquestionnaire** (TEMPS-A; Akiskal et al., 2005) measures temperamental variations based on diagnostic classifications for affective temperaments, namely cyclothymic, dysthymic, irritable, hyperthymic, and anxious, and has five subscales named as such. The scale is a yes-or-no type questionnaire and consists of 39 items.
8. The **Big Five Inventory** (BFI; John & Srivastava, 1999) is a 44-item questionnaire with a 5-point Likert agreement scale, which measures one's personality on the Big Five Factors of personality: extraversion vs introversion, agreeableness vs antagonism, conscientiousness vs lack of direction, neuroticism vs emotional stability, openness vs closedness to experience. Those factors are further separated into personality dimensions.
9. The **Leahy Emotional Schema Scale II** (LESS II; Leahy, 2012) is a 28-item measure with a 6-point ordinal response scale that determines beliefs and attributions about emotions. The scale is divided into fourteen dimensions: invalidation, incomprehensibility, guilt, simplistic view of emotion, devalued, loss of control, numbness, overly rational, duration, low consensus, non-acceptance of feelings, rumination, low expression, and blame.
10. The **Body Consciousness Questionnaire** (BCQ; Miller et al., 1981) contains 15 items with a 5-point Likert scale and assesses inner bodily awareness, which is subdivided into three subscales, namely private body, public body, and body competence.

11. The **Misophonia Questionnaire** (MQ; Wu et al., 2014) is a 34-item scale consisting of 3 sections that assesses misophonia regarding the presence of specific triggers, emotional and behavioural responses and its severity. The first two sections, Misophonia Symptom Scale and Misophonia Emotions and Behaviours scale, are rated on a 5-point ordinal scale, whilst the third section, Misophonia Severity Scale, measures one's severity of sound sensitivity on a 1 to 15-point scale with 1 suggesting minimal sound sensitivity and 15 indicating very severe sensitivity.
12. The **Amsterdam Misophonia Scale** (A-MISO-S; Schröder et al., 2013) is a 6-item scale that measures different facets of misophonia, namely time consumed by the condition, its impact on one's functioning, level of distress, level of resistance, perceived control over thoughts, and avoidance behaviours.

Permission to use the above measures were granted after communication with the intellectual property rights holders.

Final S-Five

The 25-items 5-factors solution had the closest fit across 4 different samples (*EFA*, *CFA*, *general population*, and *individuals who identify with misophonia* samples). The final statement items and their assignment to factors are presented in Table 1 below. The copyright of the scale belongs to Dr Vitoratou and King's College London¹ and can be used freely for non-commercial, educational and research purposes, provided that the developers are informed and acknowledged. Please contact Dr Vitoratou for advice on the administration of the scale.

The five factor emerging were: **internalising** appraisals (e.g. "Sometimes I think that I am crazy because of the way I feel when I hear certain sounds"), **externalising** appraisals ("I get angry at other people because of how disrespectful they are with the noises they make"), perceived **threat** and avoidance behaviour ("If I can't get away from certain noises, I am afraid I might panic or feel like I'll explode"), **outbursts** ("Some sounds are so unbearable that I will shout at people to make them stop") and **impact** on functioning ("I don't meet friends as often as I'd like to because of the noises they make"). Reliability indices were excellent within each factor. Strong correlations emerged with other misophonia scales. There was evidence that the five factors and the trigger endorsement were related to Depression and Anxiety. Age and gender had mild effects on the S-Five scores. The trigger section of 37 sounds remained unaltered.

Detailed information on the psychometric properties (endorsement, norms, reliability, stability, validity) will be presented in a peer reviewed journal article currently under preparation.

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Table 1: Assignment of the 25 S-Five statements to the 5 factors.

Externalising
<p>People should not make certain sounds, even if they do not know about others' sensitivities</p> <p>I get angry at other people because of how disrespectful they are with the noises they make</p> <p>People should do everything they can to avoid making noises that might bother others</p> <p>I react strongly to certain sounds because I cannot stand how selfish, thoughtless or bad-mannered people can be</p> <p>Certain sounds are just bad manners, and it is not strange to feel intense anger about that</p>
Internalising
<p>The way I react to certain sounds makes me wonder whether deep inside I am just a bad person</p> <p>The way I react to certain noises makes me feel like I must be an unlikable person deep down</p> <p>I respect myself less because of my responses to certain sounds</p> <p>I feel like I must be a very angry person inside because of the way I react to certain sounds</p> <p>I dislike myself in the moments of my reactions to sounds</p>
Impact
<p>My job opportunities are limited because of my reaction to certain noises</p> <p>I do not meet friends as often as I would like to because of the noises they make</p> <p>There are places I would like to go but do not, because I am too worried about how the noises will impact me</p> <p>I can see future where I cannot do everyday things because of my reactions to noises</p> <p>The way I feel/react to certain sounds will eventually isolate me and prevent me from doing everyday things</p>
Outburst
<p>I can get so angry at certain noises that I get physically aggressive towards people to make them stop</p> <p>Sometimes I get so distressed by noises that I use violence to try and make it stop</p> <p>Some sounds are so unbearable that I will shout at people to make them stop</p> <p>If people make certain sounds that I cannot bear, I become verbally aggressive</p> <p>I am afraid I will do something aggressive or violent because I cannot stand the noise someone is making</p>
Threat
<p>I feel trapped if I cannot get away from certain noises</p> <p>I feel anxious if I cannot avoid listening to certain sounds</p> <p>If I cannot get away from certain noises, I am afraid I might panic or feel like I will explode</p> <p>If I cannot avoid certain sounds, I feel helpless</p> <p>I can experience distress as the result of some noises</p>
All items are rated in a 0-10 ordinal scale. Please randomise items before administering.

Discussion: next steps and future research

Based on the analyses of data from three waves we have established that the S-Five is a multidimensional reliable and valid tool to measure Misophonia. We are in the process of analysing the data from the third and final data collection wave to extract further information, such as measurement invariance, thresholds and sensitivity. Psychometric and neurobehavioral correlates are estimated. The effect of demographic and clinical characteristics is explored. Our team also prepares an estimation of the UK misophonia prevalence is estimated using the representative of the UK general population sample. The scale will be used in a study with 100 volunteers signed up to participate in electroencephalogram (EEG) tests in London.

Our team aims to administer the final S-Five to representative samples from the USA, Canada, Australia and New Zealand populations. Translations of the S-Five to Greek, Polish, Farsi, French, Italian, and other languages are considered, and collaborations are welcomed. Please contact the first author for details and collaborations.

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Appendix

1. Participants' feedback

Table A1. Comments from the first wave of data collection

Item	Comment
Crunching an apple	Apples were not a great example. Carrots or chips... things crunchier and louder than apples seem to be missing
Foot wiggling Tapping foot	I thought some were too similar such as foot movement and foot wiggling.
I cannot explain how but some everyday sounds make me lose my cool	The question that starts with "I cannot explain how" may be misleading because I can explain how. However, I understood the intent of the question and answered accordingly.
When people are enjoying their tea or coffee in a quiet room with me, I feel like I cannot take it	The tea and coffee one - it would depend if they were slurping or swallowing loudly. If they were quiet, it wouldn't bother me much. I am much more affected by all noise if I feel the person is being rude or unthinking and not aware of the wellbeing of people around them.
I cannot stand the sound of people eating apples or crisps near me for more than a few minutes	The question about standing people eating for more than a few minutes feels misleading to answer because I can't stand it for even one minute.
	The question about standing people eating for more than a few minutes feels misleading to answer because I can't stand it for even one minute
	About the one where it asks about standing the sound of someone eating an apple for more than a few minutes, seconds only, and to be honest whoever is eating the apple does even have to start eating to drive me up the wall.
I might dislike someone permanently just because of a certain sound they make	Regarding "I might dislike someone permanently just because of a certain sound they make" This depends on whether they're aware of my condition or not. If they've been informed and do it more because it amuses them to watch me squirm and get upset, then it's likely that we're not going to be associating for much longer
	When subjected to sounds of eating I feel that the person making the sound is being selfish and uncaring
I find the sounds even more annoying if I am distressed or anxious	Definitely mood, stress levels and how tired I am has a major impact of the reaction to certain noises.
There are certain sounds that I cannot bear to the degree that I may become aggressive towards people so they stop making them	Some of us feel the need to run and withdraw when the panic sets in with the trigger sounds and not get aggressive
	You are using the term "aggressive" but not distinguishing between verbal aggression and physical aggression. I often feel on the brink of verbal aggression and can sometimes become verbally aggressive but have not become physically aggressive
	I would only be verbally aggressive, i.e. snapping at someone. I've never and feel no urge, to be physical with someone. It's true rage - but I would never act on it.
	In some cases, where I can't escape a certain sound, I've become violent. However, this violence is targeted at myself; I'll punch a wall, or in the past I would have cut myself or forced myself to throw up
I am too embarrassed to let others know that I can't stand the noises they make	It's not that I'm embarrassed to let people know how bad my reaction is to certain sounds, but it's been used against me before, to provoke a reaction. I hide it to the best of my ability.

	People think misophonia is made up, therefore I can't explain I have misophonia to some people as they won't believe me or they will purposely trigger me thinking it's funny.
	Most times I'm not embarrassed to tell people their sounds or actions bother me, I'm embarrassed at the way I tell them, because it always comes out in anger.
	I am not embarrassed to let others know, I am cautious because in my experience their reaction will be one of the following: 1. Ridicule or dismissive 2. Call me crazy- not a normal person 3. Offended think I'm making it up to hurt them. 4. Torture me with the sounds that they now know hurt me.
Sometimes in response to sounds I felt rage that is difficult to control	It isn't rage I feel it's more extreme distress and intense anxiety and panic...a need to escape or to make the sound stop
I can feel physical pain if I cannot avoid a sound	In regards to the question about feeling "physical pain", I'm not sure it's actual physical pain I feel but I do feel intense emotional pain
	I wouldn't classify the physical reaction as pain, but it is horribly unpleasant. Almost like being tickled to the point you can hardly breath. It's a twisting nervy sensation.
When people make certain sounds I feel like I almost hate them, even if this is not true at all	Most of the worst triggers are from the people you love the most. I hate the trigger but not the person. Hard to distinguish sometimes.
	People I just met do not bother me as much versus someone I have known for a longer period of time.
To make people understand how annoying are the sounds they make, I mimic them, exaggerating the sounds	I do mimic people's sounds and movements, and in an exaggerated way, but it is to sooth my internal pain response, not to let them know it is bothering me.
	There is another reason for mimicking the sound - something to do with control or reclaiming it, not just to show someone how annoying it is. I often repeat or mimic as a coping strategy or reaction
	When I mimic the sound it's to relieve my own feelings not others. If I cannot mimic the sound the negative feelings become more intense. I have become aware over many years that some of my triggers are specific to certain people and they are more often than not people who I see regular or live with.
I don't like myself because of my responses to certain sounds	I don't dislike myself consistently. I don't like myself in the moments of my reactions to sound.
Some sounds have caused me use violence towards myself or others	I use violence more towards myself, as the rage and inability to stop a sound will make me feel suicidal
	I have never been violent towards others. Only myself. Distinguishing this in the question would help.
	I have never been violent toward others but I do scratch/punch myself or dig my nails into my neck if I cannot avoid a trigger

Table A2. Comments from the second wave of data collection

Item	Comment
Sound of biting/picking/cutting nails or skin	You have too many trigger sounds that are different grouped into one question. E.g. fingernail biting and nail clipping. Different sounds that are grouped on one question. Cutlery on plates and teeth grouped onto one question. Very different sound. I am triggered by nail biting not nail clipping. And triggered by cutlery on teeth not plates.
Cutlery noises, e.g. scraping utensils on plate or teeth	
Mechanical sounds like engines revving	It's worse when the sounds are unexpected or uncontrollable. I wish the questions were a little clearer or there was a way to specify things like distance/duration/intensity. Sudden loud engine revving noises are a lot more upsetting than a car driving by

	<p>normally. Listening to a car with loud distorted bass parked outside for 15 minutes is worse than hearing one just drive down the block. A baby crying across the street is a little distracting, but one crying in the same room can be almost unbearable. Etc...</p> <p>I didn't know if the question about car engines was all engines or just loud engines. Loud engines and motorcycles are triggering noises, but quiet engines are fine. Emergency vehicles sirens are also unbearable.</p>
I am afraid that people will see me lose my temper in response to noise, and they will think I'm not the kind or calm person they thought I was	The question that assumes people are kind and would lose that status if they exploded is a poor question. It is assuming that all people who suffer from Misophonia are kind or label themselves as kind outside of their suffering.
I would change jobs if I could not stand the sounds made in the work environment	The statements are regarding hypothetical "can happen" situations, but in my case it already "happened". Example: "I would change jobs if I could not stand the sounds" - I am not even looking for a job anymore. My career (and life) is completely ruined.
I am cautious when telling people that the sounds they make are unbearable in fear of offending them	Even if something bothers me profoundly I'm not inclined to say anything because other people get angry. So I can't say I'd leave a job or alienate myself. But I may cry or have an anxiety attack in private.
The way I react to certain triggering sounds makes others dislike me	In question 13 about "The way I react to certain triggering sounds makes others dislike me" it is hard to say since I've rarely confronted anybody with my problem. But the few times I've done with people close to me, I have felt ashamed as I've felt them being disappointed that I could get upset about something "so small"
I avoid visiting friends' houses as I worry that I will have to bear horrible sounds which they and their families make	The verbiage can create skewed answers. Some questions use the words "horrible sounds". It could be worded better to not invoke unrelated emotions.
	I don't have any friends that trigger me as that's a selection criteria I use for friends.
	This one was interesting because for me if someone makes horrible sounds I would just not be their friend.
I feel embarrassed by the way I tell people I don't like the noises they make, because it usually comes out when I'm already angry or upset	I did not answer "I feel embarrassed by the way I tell people I don't like the noises they make, because it usually comes out when I'm already angry or upset" because I never told anyone when being angry or upset I did not answer "I get angrier when triggering sounds are made by people who I think should know better" because I did not understand.
	"Embarrassed" isn't the right word, but I usually don't tell other people about miso because it's more trouble than it's worth. I'm worried about how they'll respond, I don't like trying to explain myself, worry about their reaction, etc.
I take it as a personal insult when people make certain sounds in my presence	"I take it as a personal insult when people make certain sounds in my presence" depends if they know I have some certain triggers but disregards it. if they do not have any idea it is not their fault at all and I don't feel it is an insult.
Sounds that are made by animals or children are less triggering because they don't realise that they are making them	My reaction to animals is different from my reaction to children. I find babies and children completely intolerable. Most sounds from pets are fine including eating sounds. Repetitious barking from my neighbour's dogs builds my bad reaction over a few minutes and does not prevent me from having dogs of my own that I take care of and train so that they don't develop such bad habits. On the other hand, a child or baby screaming or crying sends me into hell immediately. I want nothing to do with them and refuse to ever have any of my own. Children are not allowed in my home, but pets are welcome.

	<p>Animals and children are not in the same category. I don't know why, but animals eating doesn't bother unless I am extremely tired or irritable to begin with. But 90% animals eating doesn't spark any feeling. Children are different. Children will set me off the same as an adult. Except babies. They're in the animal category. Two years old or older don't could toward the "don't know any better" category.</p>
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2. S-Five Survey

A) Demographics

What is your year of birth?

Which of the following represents your current gender identity?

- ☐ Woman/Female (cis)
- ☐ Man/Male (cis)
- ☐ Woman/Female (trans)
- ☐ Man/Male (trans)
- ☐ Non-binary
- ☐ Other (please specify)

Which ethnicity best describes you?

- ☐ White or Caucasian
- ☐ Black/African/Caribbean/Black British
- ☐ Hispanic or Latino
- ☐ Asian or Asian British
- ☐ Mixed/multiple ethnic groups
- ☐ Other ethnic group (please specify)

What is the highest level of education you have completed?

- ☐ Less than high school degree / secondary school
- ☐ High school graduate
- ☐ Some years if college/university, no degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ PhD degree or equivalent

Which of the following best describes your current occupation?

In which country were you born?

In which country did you spend most of your childhood?

In which country did you spend most of your adolescence?

Where do you currently live?

B) Co-occurring diagnoses

Do you have a diagnosis of any mood disorder? *(please select all that apply)*

- ☐ Depression
- ☐ Bipolar disorder
- ☐ Persistent depressive disorder (dysthymia)
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any mood disorder

Do you have a diagnosis of any anxiety disorder? *(please select all that apply)*

- ☐ Generalized anxiety disorder
- ☐ Social anxiety disorder
- ☐ Obsessive-Compulsive Disorder (OCD)
- ☐ Panic Disorder
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any anxiety disorder

Do you have a diagnosis of any neurodevelopmental disorder? *(please select all that apply)*

- ☐ Attention deficit hyperactivity disorder (ADHD)
- ☐ Attention deficit disorder (ADD)
- ☐ Autism spectrum disorder (ASD)
- ☐ Dyslexia
- ☐ Dyspraxia/developmental coordination disorder
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any neurodevelopmental disorder

Do you have a diagnosis of any personality disorder? *(please select all that apply)*

- ☐ Borderline personality disorder
- ☐ Obsessive-compulsive personality disorder
- ☐ Antisocial personality disorder
- ☐ Narcissistic personality disorder
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any personality disorder

Do you have a diagnosis of any psychotic disorder? *(please select all that apply)*

- ☐ Schizophrenia
- ☐ Delusional Disorder
- ☐ Brief Psychotic Disorder
- ☐ Schizophreniform Disorder
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any psychotic disorder

Do you have a diagnosis of any eating disorder? *(please select all that apply)*

- ☐ Anorexia nervosa
- ☐ Bulimia
- ☐ Binge eating disorder
- ☐ Other (please specify)
- ☐ I don't have a diagnosis of any eating disorder

Do you have a diagnosis of any trauma-related disorder? *(please select all that apply)*

- ☐ Post-traumatic stress disorder (PTSD)
- ☐ Acute stress disorder (ASD)
- ☐ Other (please specify)
- ☐ *I don't have a diagnosis of any trauma-related disorder*

Do you have a diagnosis of a substance abuse disorder?

- ☐ Yes
- ☐ No

Do you have a diagnosis of condition that affects how you perceive or process sounds? *(please select all that apply)*

- ☐ Hyperacusis
- ☐ Tinnitus
- ☐ Auditory processing disorder
- ☐ Other (please specify)
- ☐ *I don't have a diagnosis of condition affecting sound perception or processing*

Do you have a diagnosis of restless leg syndrome?

- ☐ Yes
- ☐ No
- ☐ Not sure

Do you have a diagnosis of any tic or habit disorders? *(please select all that apply)*

- ☐ Tourette Syndrome
- ☐ Trichotillomania (hair pulling)
- ☐ Skin Picking
- ☐ Other (please specify)
- ☐ *I don't have a diagnosis of any tic or habit disorder*

Autonomous Sensory Meridian Response (ASMR) is a phenomenon in which feelings of pleasure and/or euphoria occur in response to specific sensory stimuli.

From this description, have you ever experienced ASMR?

- ☐ Yes
- ☐ No
- ☐ Unsure

Synaesthesia is a phenomenon in which stimuli from one modality triggers another modality. For example, number or letters have specific colours, or sounds can trigger visual images.

From this description have you ever experienced synaesthesia?

- ☐ Yes
- ☐ No
- ☐ Unsure

C) Misophonia Specific Questions

Do any members of your family experience intense reactions to sounds? *(please pick all who do)*

- ☐ Father and/or mother
- ☐ Sister and/or brother
- ☐ Daughter and/or son
- ☐ Grandfather and/or grandmother
- ☐ Aunt and/or uncle
- ☐ None
- ☐ I don't know

Are you aware of the term Misophonia?

- ☐ Yes
- ☐ No

Do you identify as having Misophonia?

- ☐ Yes
- ☐ No
- ☐ Not sure

How old (in years) were you when you noticed your first significant trigger?

Which of the following categories did the trigger(s) that you first ever noticed belong to?

- ☐ People eating (e.g. chewing, swallowing, lips smacking, slurping, etc.)
- ☐ Repetitive tapping (e.g. pen on table, foot on floor, etc.)
- ☐ Rustling (e.g. plastic, paper, etc.)
- ☐ People making nasal sounds (e.g. inhale, exhale, sniffing, etc.)
- ☐ People making throat sounds (e.g. throat-clearing, coughing, etc.)
- ☐ Certain consonants and/or vowels (e.g. "k" sounds, etc.)
- ☐ Environmental sounds (e.g. clock ticking, refrigerator humming, etc.)
- ☐ Other (please specify):
- ☐ Don't know

Over the past 5 years have your triggers changed in:

	Not applicable	Significantly decreased	Somewhat decreased	Have not changed	Somewhat increased	Significantly increased
Number	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You are about to start answering some questions related to sound sensitivities. Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true

0 1 2 3 4 5 6 7 8 9 10 Completely true

Some triggering sounds are much easier to tolerate when made by **animals**

Some triggering sounds are much easier to tolerate when made by **babies**

Is there anything else you would like to tell us about your experiences with misophonia?

E) S-Five

i) Trigger Section

On the following page we ask you to rate certain sounds that sometimes cause people to have strong emotional reactions (known as 'auditory triggers'). You will not be listening to sounds at any point in this questionnaire, but this section does mention several possible auditory triggers.

Some people have reported that hearing about other people's triggers can affect them negatively and/or make them endorse those triggers. If you think this is the case for you, please skip this section of the questionnaire by selecting 'no' below.

If you choose to complete this section but feel discomfort at any point while reading the triggers, please stop answering the questions in this section by clicking '**Please take me out of here, I have had enough**' at the bottom of the page. In this case, you will still have to fill in that page, but then you will be taken away from the triggers and to the next section.

Do you wish to answer the 'auditory triggers' section of this questionnaire?

- ☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Normal eating sounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all
0 1 2 3 4 5 6 7 8 9 10
Unbearable (suffering)

Normal eating sounds

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

[illegible]

Doesn't bother me at all

0 1 2 3 4 5 6 7 8 9 10

Unbearable (suffering)

- ☐ Yes
- ☐ No

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Mushy foods being eaten (such as eating pasta, pudding, mousse, porridge)								

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

- ☐ Yes
- ☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Sound of clipping nails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Sound of clipping nails

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Swallowing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Swallowing

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Keyboard tapping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Keyboard tapping

Please take me out of here, I have had enough.
Are you sure?

- ☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Lip smacking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Lip smacking

Please take me out of here, I have had enough.
Are you sure?

- ☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Normal breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Normal breathing

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Repetitive engine noises (e.g. car, leaf blowers, lawn mower, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Repetitive engine noises (e.g. car, leaf blowers, lawn mower, etc)

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Loud/unusual breathing, e.g. blocked nose or mouth breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Loud/unusual breathing, e.g. blocked nose or mouth breathing

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Mobile phone sounds (tapping and/or tone noises)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Mobile phone sounds (tapping and/or tone noises)

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Repetitive coughing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Repetitive coughing

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Humming noise of a machine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Humming noise of a machine

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Repetitive sniffing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Repetitive sniffing

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Snoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Snoring

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Certain accents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Certain accents

Please take me out of here, I have had enough.
Are you sure?

☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Whistling sound	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Whistling sound

Please take me out of here, I have had enough.
Are you sure?

☒ Yes
☐ No

[illegible]

Doesn't bother me at all

0 1 2 3 4 5 6 7 8 9 10

Unbearable (suffering)

--

☐ Yes

☐ No

[illegible]

Doesn't bother me at all Unbearable (suffering)

0 1 2 3 4 5 6 7 8 9 10

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Chewing gum loudly, e.g popping/cracking or with mouth open	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Chewing gum loudly, e.g popping/cracking or with mouth open

Please take me out of here, I have had enough.
Are you sure?

☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Footsteps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Footsteps

Please take me out of here, I have had enough.
Are you sure?

☒ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Hiccups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10
Hiccups										
<div><div></div></div>										

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Slurping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10
Slurping										
<div><div></div></div>										

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Cutlery noises, e.g. scraping utensils on plate or/and teeth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Cutlery noises, e.g. scraping utensils on plate or/and teeth

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Sneezing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Sneezing

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

[illegible]

Doesn't bother me at all

0 1 2 3 4 5 6 7 8 9 10

Unbearable (suffering)

☐ Yes

☐ No

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Kissing								

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Joint cracking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Joint cracking

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
- ☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Muffled sounds through walls/ceiling/headphones (e.g. music, talking, walking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

Muffled sounds through walls/ceiling/headphones (e.g. music, talking, walking)

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
- ☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Throat clearing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Throat clearing

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Baby crying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all									Unbearable (suffering)	
0	1	2	3	4	5	6	7	8	9	10

Baby crying

Please take me out of here, I have had enough.
Are you sure?

☐ Yes

☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Repetitive barking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Repetitive barking

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Loud chewing or eating with mouth open	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Loud chewing or eating with mouth open

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Clock ticking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Clock ticking

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

Thinking about the past few weeks, what is the main feeling this sound has caused you? (please choose the most characteristic one)

	No feeling	Irritation	Distress	Disgust	Anger	Panic	Other feeling: Negative	Other feeling: Positive
Crunching eating sounds (such as eating apples, carrots, crisps or other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the past few weeks, please rate the intensity of your reaction to this sound when made by another person or object (from 0: doesn't bother me at all to 10: unbearable/causes suffering).

Doesn't bother me at all Unbearable (suffering)
0 1 2 3 4 5 6 7 8 9 10

Crunching eating sounds (such as eating apples, carrots, crisps or other)

Please take me out of here, I have had enough.
Are you sure?

- ☐ Yes
☐ No

[illegible]

Doesn't bother me at all

0 1 2 3 4 5 6 7 8 9 10

Unbearable (suffering)

☐ Yes

☐ No

[illegible]

Doesn't bother me at all 0 1 2 3 4 5 6 7 8 9 10 Unbearable (suffering)

☐ Yes

☐ No

ii) Statements Section

You are about to start answering some questions related to sound sensitivities. Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true 0 1 2 3 4 5 6 7 8 9 10 Completely true

I don't meet friends as often as I'd like to because of the noises they make

If I can't get away from certain noises, I am afraid I might panic or feel like I'll explode

If I cannot avoid certain sounds, I feel helpless

If people make certain sounds that I cannot bear, I become verbally aggressive

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true 0 1 2 3 4 5 6 7 8 9 10 Completely true

I respect myself less because of my responses to certain sounds

Certain repetitive sounds performed by others can cause a strong emotional response to me

People should do everything they can to avoid making noises that might bother others

I feel anxious if I can't avoid listening to certain sounds

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true 0 1 2 3 4 5 6 7 8 9 10 Completely true

I take it as a personal insult when people make certain sounds in my presence

I react strongly to certain sounds because I can't stand how selfish, thoughtless or bad-mannered people can be

Some noises will bother me so much I end up slamming doors, throwing objects or hitting things

Please slide the bar to option '5' here, for us to ensure the validity of the responses.

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true
0 1 2 3 4 5 6 7 8 Completely true
9 10

There is no way I can change how I feel about sounds as long as other people are behaving so badly

I can get so angry at certain noises that I get physically aggressive towards people to make them stop

Please slide the bar to option '1' here, for us to ensure the validity of the responses

Sometimes I think that I am crazy because of the way I feel when I hear certain sounds

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true
0 1 2 3 4 5 6 7 8 Completely true
9 10

The way I react to certain noises makes me feel like I must be an unlikable person deep down

The way I feel/react to certain sounds will eventually isolate me and prevent me from doing everyday things

Please slide the bar to option '9' for us to ensure the validity of the responses

I can experience distress as the result of some noises

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true
0 1 2 3 4 5 6 7 8 Completely true
9 10

There are places I would like to go but don't, because I'm too worried about how the noises will impact me

My relationships with other people suffer because of the way I react to certain sounds

Please slide the bar to option '7' here, for us to ensure the validity of the responses.

I can see future where I can't do everyday things because of my reactions to noises

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true

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Completely true

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Please slide the bar to option '6' here, for us to verify the validity of your responses.

The way I react to certain sounds makes me wonder whether deep inside I'm just a bad person

The way I react to certain sounds causes problems in my professional life

I dislike myself in the moments of my reactions to sounds

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true

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8

Completely true

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Sometimes I get so distressed by noises that I use violence to try and make it stop

Some sounds are so unbearable that I will shout at people to make them stop

Please slide the bar to option '3' here, for us to verify the validity of your responses.

There are some sounds which I simply cannot ignore

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true

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Completely true

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I feel trapped if I can't get away from certain noises

I feel like I must be a very angry person inside because of the way I react to certain sounds

Please slide the bar to option '2' here, for us to ensure the validity of the responses.

People should not make certain sounds, even if they do not know about others' sensitivities

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true
0 1 2 3 4 5 6 7 8 9 10
Completely true

My job opportunities are limited because of my reaction to certain noises

Certain sounds are just bad manners, and it's not strange to feel intense anger about that

The way I feel/react to certain sounds prevents me from having an enjoyable life

Please slide the bar to option '4' here, for us to verify the validity of your responses.

Please read each statement carefully and base your answer on how true they feel to you based on your current thoughts, experiences, and reactions.

Not at all true
0 1 2 3 4 5 6 7 8 9 10
Completely true

I avoid events where food is likely to be served

I'm afraid I will do something aggressive or violent because I can't stand the noise someone is making

Most people would not understand this, but certain sounds make me lose my cool

I get angry at other people because of how disrespectful they are with the noises they make