Psychometric properties of a self-perception questionnaire for adults with suspected misophonia

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# Abstract

Misophonia is a disorder of decreased tolerance to specific sounds or stimuli associated with such sounds, called triggers. The aim was to validate a questionnaire on self-perception of the type of sound, visual identification, and origin of sounds in adults with suspected misophonia by Spanish-speaking people. An interview was conducted with a total of 395 participants, divided into four distinct blocks of questions: the trigger of misophonia, the visual identification of gestures or actions related to selective sounds, the emotional closeness between listener and sender, and the impact on the daily personal relationships of the person with misophonia. Each block used classical test theory to factorially validate the instrument. The first group of questions gave as a result four factors: mouth and throat sounds, environmental sounds, material sounds, and pronunciation sounds (Cronbach's alpha = 0.929; KMO = 0.894). The second group identified two dimensions of reaction to actions and gestures, one related to movements of the mouth and throat and the second to body movements or exaggerated gesticulation (Cronbach's alpha = 0.840; KMO = 0.819). The third block linked low and high emotional closeness factors (Cronbach's alpha = 0.693). The fourth block obtained a factor for daily chores and another for affective relationships (Cronbach's alpha = 0.861; KMO = 0.820). The questionnaire offers valuable insights into the nature of misophonia, and the necessity for further research in this field. These findings emphasize the importance of developing a comprehensive understanding of misophonia to enhance diagnosis.

Appendix 2

The measures of item relevance in each of their respective block.

Block	KMO	Item Chonbach's alpha	Factor Chonbach's alpha
Block 1	Block 1	Block 1	Block 1
Repetitive noises (pencil playing, foot tapping/keyboard)	0.96	0.93	0.91
People eating with their mouths open	0.91	0.93	
Crunchy noises when eating	0.90	0.93	
People who inhale hard	0.94	0.93	
People who sip liquids	0.94	0.93	
People who sniff	0.93	0.92	
People who swallow hard	0.95	0.93	
People, who cough, clear their throat. and/or sneeze	0.93	0.93	
Music of others or that is not to my complete liking	0.90	0.93	0.86
Vehicle noises (engine, horn)	0.91	0.93	
Animal noises (barking or similar)	0.85	0.93	
Crying or screeching of animals	0.83	0.93	
Screaming or crying of children/infants	0.94	0.93	

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Block	KMO	Item Chonbach's alpha	Factor Chonbach's alpha
Whispers	0.80	0.93	0.96
Murmurs	0.81	0.93	
Marker on cardboard	0.85	0.93	0.83
Marker on whiteboard	0.84	0.93	
Fork scratching a plate	0.95	0.93	
Hearing mispronounced words	0.91	0.93	0.85
Listen to fillers	0.90	0.93	
Hear excessive use of letters such as s, r, ch, among others	0.94	0.93	
Block 2	Block 2	Block 2	Block 2
See people who eat with their mouths open	0.74	0.79	0.88
See people talking with food in their mouths	0.76	0.79	
See people spitting	0.90	0.81	
See people chewing gum	0.92	0.80	
See people who talk or laugh very loudly	0.87	0.82	0.58
See people dancing	0.75	0.85	
See people who perform repetitive movements	0.84	0.85	
Block 3	Block 3	Block 3	Block 3
Peers/colleagues	0.60	0.54	0.54
Unknown	0.59	0.63	
Partner	0.69	0.70	0.78
Parent/brothers	0.74	0.63	
Block 4	Block 4	Block 4	Block 4
Labor relations	0.86	0.79	0.83
Studies	0.76	0.81	
Free time or recreation	0.81	0.77	
Love relationship	0.81	0.70	0.72
Relationship with parents and siblings	0.81	0.70	
Relationship with your children	0.90	0.71	

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Table 2.docx available at https://authorea.com/users/719410/articles/704368-psychometric-properties-of-a-self-perception-questionnaire-for-adults-with-suspected-misophonia

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### Misophonia

Misophonia is a condition where individuals have a reduced ability to tolerate certain sounds or stimuli that are associated with those sounds (known as triggers). This can result in excessive emotional, physiological, and behavioral reactions, causing distress and potentially affecting one's social, work, or academic functioning.

#### Influences on reactions

The intensity of the reaction can be influenced by various factors, including the surrounding context, the individual's perception of control over the situation, and the relationship they have with the person who is producing the triggering stimuli.

- Reactions to misophonic triggers
  Emotional reactions include feelings of anger,
  irritation, disgust, and anxiety.
  Physiological responses can involve increased
  muscular tension, an elevated heart rate, and
- sweating.

  Behavioral reactions may include agitation, aggression, attempts to avoid or escape from the triggering stimuli, and even mimicking or imitating the sounds themselves.

### Misophonic triggers

Misophonic triggers
Misophonic triggers encompass a range of sounds, including those related to oral functions, nasal sounds, non-oral/nasal sounds produced by individuals, as well as sounds produced by objects or animals. In addition to auditory triggers, certain visual cues can also provoke a misophonic reaction, the absence are received their between the control of the contro such as observing someone cracking their knuckles or engaging in repetitive leg movements/swinging, or even watching someone eat.

### **Functional impairments**

Misophonia can have detrimental effects on an individual's occupational and/or academic functioning, leading to difficulties in concentration and focus. It can also impair social functioning, strain relationships with others, and ultimately contribute to social isolation.

### Relationship to other conditions/disorders

Misophonia has been found to have connections and associations with various other conditions and disorders, including hearing impairment, tinnitus, hyperacusis (sensitivity to sound), anxiety disorders, mood disorders, personality disorders, obsessive-compulsive related disorders, post-traumatic stress disorder (PTSD), autism spectrum disorder, and attention deficit hyperactivity disorder (ADHD). sound), anxiety disorders,