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Public awareness of Misophonia in U.S. adults: a Population-based study

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Abstract

Misophonia was initially described in 2001 as a specific sensitivity to certain sounds (e.g., chewing, pen clicking). Despite greater recognition of misophonia over the last two decades, the extent of awareness of misophonia in the general public is unknown. Extensive research emphasizes the importance of public awareness in recognition and treatment of mental disorders and medical conditions. Awareness of misophonia is important for the continued advancement of misophonia research and identification of individuals with misophonia. As an important first step, this study investigated the general public's understanding of misophonia. Data were collected through Ipsos KnowledgePanel, which maintains a large, probability-based web panel designed to be representative of the United States. Panel members were invited to complete a brief survey, and the final sample was comprised of 4,005 participants (51.5% female). A small portion of individuals (11.3%, n=451) recognized misophonia. A multivariate binary logistic regression model revealed that individuals who were female, younger, White/non-Hispanic, had a Bachelor's degree or higher, or reported an annual income between \$75,000 - \$99,000 were significantly more likely to endorse misophonia recognition. Most participants who were familiar with misophonia reported an accurate understanding about misophonia; yet, low level of knowledge. The internet was most commonly identified as the primary information source. Findings highlight the low level of misophonia awareness among laypersons and emphasize the need to increase public knowledge of misophonia.

Keywords Misophonia · Awareness · Public · Layperson knowledge · Sound sensitivity

Introduction

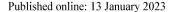
Misophonia is a disorder characterized by selective sensitivity to certain sounds (e.g., chewing, pen clicking), which are experienced as unpleasant and accompanied by strong negative emotional (e.g., irritation, anxiety), physical (e.g., tension), and behavioral (e.g., avoidance of places) responses (Swedo et al., 2022). This sensitivity has been found to occur on a continuum and can be associated with severe distress and functional impairment. Studies have estimated between 6.0 and 19.9% of college students (Wu et al., 2014; Zhou et al., 2017) and 4.6–17.7% of the general population (Dixon et al., 2022; Kılıç et al., 2021) experience clinically

significant misophonia symptoms, suggesting that misophonia is relatively common.

The literature on misophonia has grown considerably over the last two decades. The term misophonia was first coined in 2001 (Jastreboff & Jastreboff, 2001), and although formal diagnostic criteria have not yet been established, misophonia has been increasingly identified in clinical settings (Jager et al., 2020). Further, research on misophonia has spanned the fields of neuroscience, psychology, psychiatry, and audiology. Beyond recognition in clinical and scientific communities, misophonia has also gained the attention of laypersons through news outlets (e.g., Barrow 2015; Fulton, 2019) and social media (e.g., Newcastle University, 2017). Despite this growing recognition, the level of awareness of misophonia in the general population is largely unknown, which has significant implications for the advancement of misophonia and patient care.

Extensive research has examined the role of public awareness in the recognition and treatment of mental health disorders and medical conditions, such as depression (Gabriel

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& Violato, 2010; Singh et al., 2019), diabetes (Jackson et al., 1991), irritable bowel syndrome (Verne, 2004), fibromyalgia (Briones-Vozmediano, 2017), schizophrenia (Picco et al., 2018), dementia (Heger et al., 2019), obsessive-compulsive disorder (Picco et al., 2018; Stewart et al., 2019), and autism spectrum disorder (Dillenburger et al., 2013). Although mental health literacy has improved in Western countries in recent years (Hansson et al., 2016; Robinson & Henderson, 2019), symptoms are often not recognized by laypersons (Akinsulore et al., 2018; Singh et al., 2019; Wu et al., 2017) and misconceptions continue to be pervasive (Angermeyer & Dietrich, 2006; Furnham & Hughes, 2014; Tonsing, 2018). Mental health knowledge and awareness in the general public have been associated with numerous positive outcomes. For example, researchers have found greater awareness increases likelihood of disclosure to friends or family and employers (Henderson et al., 2017), facilitates help-seeking behaviors (Picco et al., 2018), improves support (Picco et al., 2018), enhances treatment options (Jorm, 2012), and predicts treatment utilization (Bonabi et al., 2016). In addition, mental health-related knowledge has been shown to enhance acceptance (Henderson et al., 2012) and increase willingness to be in social contact with those struggling from mental health problems (Evans-Lacko et al., 2013) among laypersons. In contrast, less knowledge has been linked to stigmatizing attitudes (Buizza et al., 2017), prejudice (Foster et al., 2018), and delays in assessment and treatment (Thornicroft, 2008).

To date, there are no known studies on public awareness of misophonia; however, one relevant study examined university instructors' knowledge of misophonia. In this study, undergraduate faculty (N=686) responded to questions that assessed awareness of misophonia (Porcaro et al., 2019). The results indicated that 18.4% of participants had knowledge of misophonia; yet, most of these individuals were unable to provide a definition. These findings are the first to suggest that awareness of misophonia is relatively low – even among those with higher education levels and working in an environment where misophonia may be particularly common and problematic (Wu et al., 2014; Zhou et al., 2017).

Given the rising interest in misophonia, the investigation of public knowledge of misophonia is critical for informing the next stages of education and advocacy. Increasing public knowledge is critical for facilitating help-seeking behaviors for individuals and within communities. Additionally, widespread awareness has the potential to lend to greater availability of resources, changes in public policy, and support for publicly funded research (Entwistle et al., 1998). Consequently, the purpose of this study was to further understand the level of misophonia awareness in a nationally representative sample of U.S. adults. First, rates of recognition

of misophonia were examined. In particular, we evaluated the specific role of demographic characteristics in relation to misophonia recognition. Previous studies have demonstrated certain demographic characteristics are associated with recognition of mental health disorders; therefore, we hypothesized that younger age (Stewart et al., 2019), White/ non-Hispanic background (Dillenburger et al., 2013; Stewart et al., 2019), higher level of education (Buizza et al., 2017; Coles et al., 2013; Dillenburger et al., 2013; Stewart et al., 2019), higher income (Stewart et al., 2019), and living in an urban area (Huang et al., 2019) would be unique predictors of recognition of misophonia. Second, we explored personal experience with misophonia (self or other) and interest in learning more about misophonia. Lastly, features of misophonia knowledge, such as level of knowledge and information source, were investigated among individuals who endorsed prior awareness of misophonia.

Methods

Study Design and Sampling

Data collection was conducted by Ipsos KnowledgePanel (KnowledgePanel), which maintains the largest, web-based panel of adults in the United States (U.S.; Ipsos Public Affairs, n.d.). The panel is estimated to include 60,000 members. Individuals are recruited using address-based sampling methodology based on the latest Delivery Sequence File from the U.S. Postal Service. This probability-based sampling includes all known households and facilitates the recruitment of a nationally representative sample, including hard-to-reach individuals. For instance, individuals who do not have access to the internet are provided with a webenabled device. Individuals agree to be a part of the panel and receive invitations to complete individual surveys. Participation in surveys is voluntary, and a modest incentive program is used to encourage ongoing participation as a panel member. Consent is implicit in the completion and return of the survey.

In addition to the aforementioned procedures that KnowledgePanel uses to secure and maintain a nationally representative sample, KnowledgePanel uses sample weighting to further ensure that samples are representative of the U.S. population. Study-specific post-stratification weights are applied to survey data based on geodemographic benchmarks from the latest U.S. Census Bureau's Current Population Survey. This weight process included gender by age group, race/ethnicity, census region, education, and household income. This weighting addresses any potential overor undersampling of certain subgroups and yields a reliable estimate that reflects the parameters of the U.S. population.



Table 1 Demographic characteristics (N=4,005)

	% (n)
Gender	
Male	48.5 (1942)
Female	51.5 (2063)
Age Group	
18–24	8.4 (335)
25–34	19.5 (782)
35–44	17.9 (718)
45–54	14.0 (559)
55–64	18.0 (720)
65–74	14.8 594)
75+	7.4 (295)
Race/Ethnicity	
White, non-Hispanic	62.5 (2,505)
Black, non-Hispanic	12.0 (480)
Other, non-Hispanic	7.2 (287)
Hispanic	16.9 (676)
2+races, non-Hispanic	1.4 (58)
Education	
<high school<="" td=""><td>9.6 (384)</td></high>	9.6 (384)
High school graduate (high school diploma or GED equivalent)	28.3 (1133)
Some college	27.1 (1084)
≥Bachelor's degree	35.0 (1403)
Household Income	
< \$25,000	12.8 (513)
\$25,000 to \$49,999	17.0 (682)
\$50,000 to \$74,999	16.3 (654)
\$75,000 to \$99,999	13.2 (527)
\$100,000 to \$149,999	17.9 (717)
≥ \$150,000	22.8 (911)
Metropolitan Area	
Non-Metro	13.3 (534)
Metro	86.7 (3471)

Note. Weighted data are reported.

Participants

A total of 6,688 individuals were invited to complete this survey, and the final sample included 4,005 individuals (59.9% response rate). Approximately half the sample was female (51.5%) and the mean age was 48.32 years (SD=17.76). Weighted demographic characteristics are reported in Table 1.

Procedure

The questions developed for the current study were included in a larger project investigating the prevalence of misophonia in the general population (Dixon et al., 2022). The survey was administered to randomly selected KnowledgePanel members aged 18 and older residing in the U.S.

A pretest of the survey items was conducted in January of 2022, and the survey was conducted between January 21, 2022 and February 6, 2022.

Demographic characteristics were recorded by KnowledgePanel, and participants responded to up to seven questions that evaluated awareness and knowledge of misophonia. First, recognition of the term misophonia was assessed ("Prior to this survey, had you heard of the term misophonia?"). Next, participants received a brief definition of misophonia based on the consensus definition (Swedo et al., 2022):

Misophonia is a disorder of decreased tolerance to specific sounds (e.g., chewing, slurping, breathing, pen clicking, typing) or stimuli associated with the sounds (e.g., visual triggers). Sounds are experienced as unpleasant or distressing and tend to evoke strong negative emotional (e.g., anger, anxiety), physical (e.g., tension, sweating), and behavioral (e.g., agitation, avoidance) responses. These intense negative reactions are not seen in most other people and may contribute to suffering, distress, and/or life impairment. This disorder can be present in people with or without normal hearing, and symptoms are not explained by other disorders, such as autism spectrum disorder or obsessive-compulsive disorder (OCD).

This definition was provided to ensure that participants had an accurate definition of misophonia and could respond to the subsequent questions. Following this information, personal experience with misophonia was evaluated by assessing if they identified as having misophonia (yes/no) or knew someone who had misophonia (yes/no). In addition, participants rated their interest in learning more about misophonia on a 5-point Likert-type scale from "very uninterested" to "very interested."

Participants who initially endorsed that they had heard of misophonia received three additional questions to further assess misophonia knowledge. With regard to the provided definition of misophonia, participants were asked "does this description match your understanding of misophonia?" and could respond "yes", "no", "somewhat", or "did not have an understanding of misophonia." Next, level of familiarity or knowledge of misophonia was rated on a 5-point Likert-type scale from "not at all familiar" to "extremely familiar". Lastly, participants were asked to identify their primary source of information on misophonia, and several options were listed, including personal experience (e.g., self or someone I know), media (e.g., news article, television, TV, radio), social media (e.g., Facebook, Instagram, Reddit, TikTok), health education (e.g., school, workshops), doctor or healthcare provider (e.g., audiologist, mental health),



 Table 2
 Demographic characteristics in relation to misophonia recognition

		Heard of misophonia	
	<u>Y</u> (%		
Gender			
Male	37.3	49.9	
Female	62.7	50.1	
Age Group			
18–24	12.2	7.9	
25–34	31.3	18.1	
35–44	21.7	17.5	
45–54	14.0	14.0	
55–64	11.5	18.7	
65–74	7.3	15.8	
75+	2.0	8.1	
Race/Ethnicity			
White, non-Hispanic	71.0	61.4	
Black, non-Hispanic	9.1	12.4	
Other, non-Hispanic	4.7	7.5	
Hispanic	13.5	17.3	
2+races, non-Hispanic	1.8	1.4	
Education			
< High School	7.8	9.8	
High school	20.6	29.3	
Some college	25.3	27.3	
≥ Bachelor's degree	46.3	33.6	
Household Income			
< \$25,000	10.0	13.2	
\$25,000 to \$49,999	14.0	17.3	
\$50,000 to \$74,999	12.4	16.9	
\$75,000 to \$99,999	16.2	12.8	
\$100,000 to \$149,999	19.6	17.7	
≥ \$150,000	27.8	22.1	
Metropolitan Area			
Non-Metro	12.0	13.5	
Metro	88.0	86.5	

Note. Weighted data are reported. A small number of individuals (n < 10) did not respond to certain items; therefore, the percentages do not add up to 100.

misophonia-specific materials (e.g., misophonia websites, book, articles), internet (e.g., google, youtube, wikipedia), and other.

This study was conducted in accordance with the Declaration of Helsinki and was approved by the University of Mississippi's institutional review board. All authors certify responsibility for this manuscript.

Data analyses

All data analyses were conducted using SPSS version 27.0 and included the aforementioned KnowledgePanel sample weights (Ipsos Public Affairs, n.d.). First, demographic and survey response frequencies were examined. Second, responses to misophonia recognition were characterized in terms of demographic characteristics. Third, multiple binary logistic regression analyses were conducted to examine the separate and unique roles of demographic characteristics in predicting recognition of misophonia. To examine the effects of demographic characteristics on recognition of misophonia, each demographic variable (age, gender, race/ethnicity, education, household income, metropolitan area) was entered separately into a binary logistic regression model. Then, all demographic variables were simultaneously entered into one binary logistic regression model. In these models, age was a continuous variable, gender and metropolitan status were binary variables, and race/ethnicity, education, and income were categorical variables. For each categorical variable, simple contrasts were conducted with the first reference group. Odds ratios (OR) and 95% confidence intervals (CI) are reported for the binary logistic regression models. Alpha was set to p < .05 and all results were 2-tailed. Finally, descriptive statistics were used to explore frequencies of the following items: personal experience with misophonia (self or other), interest in learning more about misophonia, understanding of misophonia, level of misophonia knowledge, and primary source of misophonia information.

Results

Misophonia Recognition

In this sample, 11.3% of individuals indicated that they had heard of misophonia (misophonia recognition). In Table 2, recognition of misophonia is characterized by demographic category. Binary logistic regression analyses revealed that several demographic factors were associated with recognition of misophonia (see Table 3). Younger age and female gender significantly increased the likelihood of misophonia recognition. Consistent with prediction, the likelihood of misophonia recognition was significantly higher among White individuals, individuals with at least a Bachelor's degree, and certain higher level income groups. With regard to income, individuals with a household income of $\$75,000 - \$99,000 \text{ or } \ge \$150,000 \text{ were more likely to rec-}$ ognize misophonia compared to individuals with a household income less than \$25,000. In the multivariate model, these factors continued to be significantly associated with



Table 3 Binary logistic regression examining demographic characteristics and misophonia recognition

	Separate Models			Multivaria	Multivariate Model		
	OR	95% CI	p	OR	95% CI	p	
Gender	1.673	1.367-2.047	< 0.001	1.780	1.447-2.186	< 0.001	
Age	0.971	0.965 – 0.976	< 0.001	0.968	0.962 - 0.974	< 0.001	
Race/Ethnicity							
White, non-Hispanic	Reference		-	Reference	;	-	
Black, non-Hispanic	0.639	0.455 - 0.899	0.010	0.638	0.450 - 0.906	0.012	
Other, non-Hispanic	0.544	0.344-0.859	0.009	0.392	0.245 - 0.627	< 0.001	
Hispanic	0.676	0.507 – 0.902	0.008	0.686	0.507 – 0.928	0.015	
2+races, non-Hispanic	1.078	0.502 - 2.314	0.848	0.889	0.405 - 1.952	0.770	
Education							
< High School	Reference		-	Reference	;	-	
High school	0.887	0.591 - 1.333	0.565	0.942	0.615 - 1.441	0.782	
Some college	1.170	0.786 - 1.742	0.439	1.211	0.792 - 1.851	0.378	
≥ Bachelor's degree	1.745	1.197-2.544	0.004	1.638	1.072-2.502	0.022	
Household Income							
< \$25,000	Reference		-	Reference	;	-	
\$25K to \$49,999	1.058	0.709 – 0.638	0.783	1.054	0.697 - 1.594	0.804	
\$50K to \$74,999	0.961	0.638 - 1.448	0.849	0.946	0.617 - 1.451	0.800	
\$75K to \$99,999	1.670	1.128-2.471	0.010	1.573	1.037-2.384	0.033	
\$100K to \$149,999	1.449	0.993-2.113	0.054	1.288	0.854 - 1.942	0.227	
≥ \$150,000	1.646	1.151-2.356	0.006	1.417	0.949-2.117	0.088	
Metropolitan Area	1.154	0.854-1.558	0.351	1.103	0.804-1.513	0.543	

Note. Variables were coded as follows: Gender (0 = male; 1 = female), Metropolitan Area (0 = Non-Metropolitan, 1 = Metropolitan Area).

Table 4 Personal experience with misophonia (self or other) and interest in learning more about misophonia (N=4,005)

	% (<i>n</i>)
Identify as having misophonia	
Yes	7.5 (301)
No	92.1 (3687)
Know someone with misophonia	
Yes	13.2 (530)
No	86.5 (3464)
Interest in learning more about misophonia	
Very uninterested	30.3 (1212)
Somewhat uninterested	15.3 (614)
Neutral	32.1 (1287)
Somewhat interested	17.7 (709)
Very interested	4.4 (178)

Note. Weighted data are reported. A small number of individuals (n < 10) did not respond to certain items; therefore, the percentages do not add up to 100

misophonia recognition, with the exception of the income level \geq \$150,000 group. Contrary to prediction, metropolitan status was not associated with misophonia recognition in either model.

Personal experience and interest in Misophonia

See Table 4 for a summary of responses. Although only 11.3% of the sample had heard of the term misophonia, a total of 16.6% reported personal contact with someone with misophonia (13.2%) or identified as having misophonia (7.5%). Further examination of these results indicated a discrepancy between the number of participants who reported recognition of misophonia and personal contact with misophonia. Of participants who initially denied recognition of the term misophonia (n=3,547), 5.6% reported they identified as having misophonia and 10.3% reported knowing someone with misophonia. Thus, a total of 22.9% of the sample endorsed misophonia recognition or awareness of misophonia in their personal life after receiving information about misophonia. Lastly, in terms of interest level, 22.1% of the sample indicated they had at least some interest in learning more about misophonia or were neutral (32.1%).

Features of Misophonia Knowledge

Data on misophonia knowledge among individuals who recognized misophonia (n=451) are reported in Table 5. Of these individuals, 83.6% indicated that the consensus definition matched their understanding of misophonia.



Table 5 Level of understanding among participants who had heard of misophonia (n = 451)

	% (n)
Definition matched understanding of misophonia	
Yes	83.6 (377)
No	2.9 (13)
Somewhat	9.4 (42)
Did not have an understanding of misophonia	3.9 (18)
Level of familiarity or knowledge	
Not at all familiar	8.3 (38)
Slightly familiar	45.3 (205)
Somewhat familiar	28.3 (128)
Moderately familiar	13.9 (63)
Extremely familiar	3.9 (17)
Primary source of information	
Internet (e.g., Google, Youtube, Wikipedia)	32.3 (146)
Personal experiences (e.g., self or someone I know)	19.9 (90)
Media (e.g., news article, television, radio)	13.2 (60)
Health education (e.g., school, workshops)	11.4 (51)
Social media (e.g., Facebook, Instagram, Reddit, TikTok)	6.8 (30)
Misophonia-specific materials (e.g., misophonia websites, book, articles)	6.3 (28)
Other	5.0 (23)
Doctor or healthcare provider (e.g., audiologist, mental health)	4.7 (21)

Note. Weighted data are reported. A small number of individuals (n < 10) did not respond to certain items; therefore, the percentages do not add up to 100.

Varying degrees of familiarity or knowledge of misophonia were reported, with most participants reporting they were "slightly" familiar (45.3%) or "somewhat" familiar (28.3%). Regarding participants' primary source of information on misophonia, the most common source was the internet, such as Google or Wikipedia (32.3%), followed by personal experiences (19.9%), media outlets (13.2%; e.g., news article, radio), health education (11.4%; e.g., school), and social media (6.8%). Interestingly, a small portion of the sample identified misophonia-specific materials (6.3%; e.g., misophonia website) or health care professionals (4.7%) as the primary source of information.

Discussion

This is the first study to evaluate misophonia awareness and knowledge in a representative sample of adults in the U.S. The results provide an initial foundation for understanding the level of misophonia awareness and knowledge in the general population, which is a critical step for advancing research and facilitating the identification and treatment of individuals with misophonia.

Overall, a small portion of the full sample reported recognition of misophonia. Several demographic factors

were significantly associated with misophonia recognition, including gender, age, race/ethnicity, education level, and household income. In this study, there was a significantly higher likelihood of recognition of misophonia among individuals who were female, younger, White/non-Hispanic, or had a Bachelor's degree education or higher. Moreover, these factors continued to be significant predictors of misophonia recognition when simultaneously entered into the same model. Similar findings were observed by Stewart and colleagues (2019) in a study investigating recognition of obsessive-compulsive disorder (OCD). Specifically, participants more frequently endorsed that they had heard of OCD, if they were younger, White/Caucasian (vs. ethnic minority), had a college education, or had an income greater than \$60,000. However, unlike this study, higher levels of income were not uniformly predictive of misophonia recognition in the current study. In the full model, those in the middle household income category of \$75,000 - \$99,999, had a 57.3% greater likelihood of recognizing misophonia compared to the reference group (< \$25,000).

Unexpectedly, metropolitan status was not a significant predictor, which is inconsistent with research showing significantly lower recognition of mental health disorders (Huang et al., 2019) and limited access to health information (Chen et al., 2019) in rural areas. One possible explanation is that research shows that the internet and social media are common sources for health and medical information (Hesse et al., 2005), which improves access of information. However, quality of information warrants consideration as physicians are rated as the most trusted sources of information among patients (Hesse et al., 2005), and low health literacy has been associated with high rates of using social media or celebrity blogs/webpages for health information (Chen et al., 2018). Given that individuals in rural areas have less access to specialists (Chen et al., 2019), additional research is recommended to identify potential disparities in misophonia (mis)information between rural and urban areas.

Altogether, these data provide further support for the link between demographic characteristics and mental health awareness. In terms of implications, these findings suggest that awareness campaigns may need to deploy specific strategies to reach groups with lower recognition of misophonia, such as men, older adults, ethnic minority groups, high and low household incomes, and lower education levels. Previous research suggests these groups are often affected by health disparities, and factors such as public stigma and low mental health literacy are significant barriers to treatment (Kantor et al., 2017) across these sociodemographic groups, including minorities (Pérez-Flores & Cabassa, 2021) and older adults (Lavingia et al., 2020). Consequently, the next steps of increasing awareness should consider specific strategies for engaging these groups. For instance, partnering



with key community figures for the development of culturally-sensitive community-focused campaigns can increase knowledge and positive beliefs about mental health disorders and treatment options (Abotsie et al., 2020; Jorm, 2012). Additional work is needed to apply the literature base on increasing mental health awareness to misophonia.

In terms of our exploratory analyses, 13.2% of the full sample reported knowing someone with misophonia and 7.5% identified as having misophonia based on the definition of misophonia. These results are not diagnostic; however, they illustrate that upon receiving information about misophonia, a small portion of individuals connected these symptoms to someone in their life. This knowledge may represent an important first step as awareness of symptoms is a critical first step for receiving treatment (Jorm, 2012). Interestingly, there was a discrepancy between recognition of the term "misophonia" and personal contact with misophonia. Specifically, a small portion of individuals had not heard of the term misophonia, but identified as having misophonia or reported knowing someone with misophonia after receiving the definition of misophonia. One possible explanation for this result is that laypersons may be familiar with misophonia symptoms, but may not be familiar with the term misophonia or may not be able to distinguish symptoms from other syndromes with similar features, such as tinnitus, autism spectrum disorder, phonophobia, and hyperacusis. However, these results may suggest that merely providing the clinical definition facilitated increased awareness of misophonia. Additional research is needed to further elucidate layperson recognition of terminology and knowledge of the symptoms of misophonia and closely connected disorders (e.g., Furnham & Anthony, 2010; Jorm et al., 2006). For instance, in addition to assessing recognition, it may be beneficial to provide definitions and evaluate respondents' ability to identify and distinguish between disorders. With regard to interest in learning more about misophonia, a sizeable portion of the sample indicated some level of interest, suggesting that public awareness campaigns may be successful in outreach and increasing misophonia knowledge. Nevertheless, a portion of the sample indicated little or no interest in learning more about misophonia. Without additional information, it is difficult to interpret this lack of interest; however, it would not be expected that everyone in the general public would have a strong level of interest in obtaining additional information on misophonia. For instance, it is possible that these individuals were apathetic due to competing areas of interest and/or the absence of compelling information on the impact of misophonia at the societal and personal level (Von Wagner et al., 2009). Future research exploring determinants of interest in misophonia knowledge may be advantageous for understanding how to improve the dissemination of information.

The final aim of this study was the examination of features of misophonia among individuals who recognized misophonia. These results revealed that understanding of misophonia was largely consistent with current scientific and clinical conceptualization. Further, the majority of participants reported moderate levels of misophonia knowledge. As a next step, questionnaires evaluating knowledge of misophonia symptoms, causes, and treatment options may be helpful for shedding light on gaps in information and potential misconceptions associated with misophonia that could be clarified through awareness campaigns. Regarding primary sources of misophonia information, individuals commonly identified the internet, personal experience, media, and health education. This is consistent with recent studies showing that many individuals receive medical information from online sources (Hesse et al., 2005). Although social media can provide an easily accessible and cost-efficient platform for health information (Zhou et al., 2018), it is also associated with greater propagation of health misinformation (Suarez-Lledo & Alvarez-Galvez, 2021) and may perpetuate stigmatizing attitudes (Devendorf et al., 2020). Efforts to improve misophonia awareness should carefully consider how information is disseminated through different sources. For instance, increasing healthcare providers' knowledge and communication of misophonia with patients may be a critical next step given that misophonia is a relatively new condition and greater trust is associated with health information provided by physicians (Hesse et al., 2005). Consequently, it is important for stakeholders to take an active role in distributing accurate misophonia information (e.g., Devendorf et al., 2020), particularly in these early phases of dissemination.

Despite the novel contributions of this study, several limitations warrant mention. First, the findings are thought to represent adults in the U.S.; however, different patterns of misophonia awareness would likely be observed in other countries (Yu et al., 2020). In addition, these data represent current awareness and knowledge of misophonia; however, replication and extension of this study in the next 5-10 years would be helpful for understanding the continued expansion of misophonia knowledge. Second, despite the large, representative sample, certain group level inferences may have been limited by the small portion of individuals reporting misophonia recognition and knowledge. Third, although participants received a definition of misophonia to inform responses to subsequent questions, it is possible that participants may have conflated misophonia with other sound sensitivities (e.g., hyperacusis). Lastly, this study was restricted by the small number of survey items, which limits the scope of the data. For instance, the item assessing interest in learning more about misophonia was not contextualized, nor was the importance or value of learning about



misophonia provided to the respondent. Future studies incorporating comprehensive surveys, vignettes, and interviews are needed to more thoroughly understand public perceptions of misophonia, particularly as information on misophonia continues to grow.

Through past research, the importance and value of awareness, and its effect on positive societal outcomes for mental health issues, have become readily apparent (e.g., Entwistle et al., 1998). The current study provides evidence that awareness of misophonia is currently low in the general population; vet, knowledge appeared to be accurate among the small portion of individuals who have heard of misophonia. Furthermore, these findings identify certain demographic groups that are less likely to be familiar with misophonia and may need to be targeted in healthcare settings and through community-based campaigns. Studies have shown focusing on public health campaigns, outreach endeavors, and public policy increases awareness and acts as a viable option for educating both the general population (Dumesnil & Verger, 2009; Van Asbroeck et al., 2021) and at-risk populations (Matsubayashi et al., 2014; Shah et al., 2020). Consequently, such efforts may serve as potential next steps for improving knowledge of misophonia among the general population, at-risk communities, and potential providers. Cumulatively, the results are critical for understanding current levels of public awareness and are important for informing the next stages of advocacy for misophonia.

Author contributions LJD: Conceptualization, Methodology, Investigation; Writing – Original Draft; Writing – Reviewing & Editing, Project Administration, Funding Acquisition, Supervision. MJS: Conceptualization; Writing – Original Draft; Writing – Reviewing & Editing. HLC: Conceptualization; Methodology; Writing – Reviewing & Editing. MMP: Writing – Original Draft; Writing – Reviewing & Editing. All authors contributed to and have approved the final manuscript.

Data Availability Data and materials from this study will be made available upon reasonable request.

Declarations

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Conflict of interest None.

Ethical Standards The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The University of Mississippi's institutional review board approved this study.

Consent to participate Consent was implicit in the completion and return of the survey.

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