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Counseling for Psychosocial Stress Factors Associated with Hearing Loss

Emily McMaster

Ouachita Baptist University

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Counseling for Psychosocial Stress Factors Associated with Hearing Loss

Emily McMaster

Honors Senior Thesis, Ouachita Baptist University

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Abstract

Audiologists play a major role in helping people with hearing loss learn how to better communicate and how to connect to the world around them. The purpose of this project investigates the extent to which audiologists counsel their clients for the psychosocial stress factors caused by hearing loss, along with determining the extent in which patients with hearing loss feel they would benefit from counseling services implemented into their appointments. In addition to psychosocial stress factors, the thesis will analyze the extent to which clients are educated on their hearing loss and given practical ways to adjust to their loss based on their individual lifestyle. The study will analyze the main reasons why people do not seek consistent audiology counseling when diagnosed with a hearing loss that can potentially disrupt daily routines and/or cause emotional distress while trying to adjust to the change in their hearing status. Additionally, the project will compare responses from those with hearing loss to the responses regarding audiologists' perceptions, extent of training, and confidence level of counseling patients beyond completing a hearing test and programming amplification devices.

Preliminary findings based on the results of 52 completed surveys from those with hearing loss (clients) and 42 completed surveys from audiologists indicated positive correlation between the client's experience and the services provided by the audiologist. The majority of the responses about the education and adjustment strategies for hearing loss were consistent between the two groups. In regard to the counseling component, clients reported they did not feel they receive adequate counseling from the audiologist, and the audiologists indicated they did not receive adequate training in counseling.

Introduction

Audiologists perform hearing tests on clients, form a diagnosis, and then recommend an amplification device during a “typical” appointment for a client with hearing loss. This method is called the “medical model” because the diagnosis is made, the facts and results are provided to the client followed by options of various devices to compensate for the loss of hearing. The diagnosis of a hearing loss can be emotional for the client and/or their friends and family, and the provision of counseling services regarding this new diagnosis could help the client and family to be better prepared for the days ahead. Counseling services have increased significantly in recent years due to an emphasis on mental health for all aspects of life. In response to the growing open dialogue about addressing mental health concerns, a movement in the audiology profession has begun to move away from the “medical model” and implement a “client-centered model.” A client-centered model incorporates a psychosocial model into the “medical model” (Luterman, 2021). Despite the shift toward the “client centered model,” the *American Journal of Audiology* stated that 45% of audiologists do not feel prepared to counsel their client with their diagnosis English et al., 1999). According to Emmet & Francis (2015), there are 360 million people worldwide who have hearing loss, and in the United States, 12.7% of the population over 12 years old has hearing loss. However, the *International Journal of Audiology* stated that up to 40% of people who need hearing aids do not use them; 16% of 20–69-year-olds who need hearing aids do not wear them, and only 30% of people with hearing loss who are 70-years-old or above wear hearing aids (Dammeyer et al., 2017).

Those who have hearing loss and do not seek assistance from an audiologist or wear an amplification device are likely to struggle with communication problems. This may result in one or more of the following issues in addition to the hearing loss: social isolation, anxiety, depression, lower self-esteem, lower quality life in respect to family relationships, and/or higher frustration levels. Research by Emmet & Francis (2015) indicated that people with hearing loss

have 3.21 times higher odds of receiving a lower education (not finishing high school), 1.58 times higher odds of receiving low income (less than \$20,000/year), and 1.98 times higher odds of unemployment. Despite the consequences of not wearing amplification devices, many people with hearing loss choose to not wear them.

There may be multiple factors as to why people with hearing loss choose to not consistently visit the audiologist nor wear amplification devices. Financial constraints, negative social attitudes toward hearing loss, or refusal to accept the diagnosis may be a few of the reasons for the lack of commitment to follow-up appointments with the audiologist.

In 2020, Wheeler & Tharpe investigated what is known as “the hearing-aid-effect” which involves the negative image paired with hearing aids and the way it impacts the person’s image of himself. These researchers showed pictures of boys and girls, both with and without hearing aids, to a group of 4 children ages 6-11. In nearly all cases, the picture of the boy or the girl without hearing aids was chosen to be smarter, faster, and more likely to be chosen as the participant’s friend than the children shown with hearing aids. The hearing-aid-effect illustrates the negative attitude people, even children, have towards those with hearing aids. This negative attitude has a negative impact on the social interaction with others, as well as the self-esteem of the one who has the hearing loss. The hearing-aid-effect does not limit itself to an age group such as just children but continues into adulthood with the same insecurities and negative perceptions held by others that were experienced in childhood. Whether one chooses to wear hearing aids or not, the effect is still present. For those who choose to wear amplification devices, they experience the negative attitudes from their peers and society. And for those who choose to not wear amplification devices, they experience limited success in the workplace and/or in their social interactions.

It is the audiologist’s responsibility to teach patients about their hearing loss, inform them about the consequences of not wearing amplification devices, equip them with strategies to

navigate daily challenges, and consistently encourage them to voice their concerns regarding their hearing loss and advocate for themselves. Counseling beyond an information transfer should be an integral component to the services audiologists provide. But to provide that much needed service, the audiologists must receive adequate training to feel comfortable and competent counseling patients with needs beyond a programmed amplification device.

According to the *American Journal of Audiology* “a client-centered-model” focuses on the following components: completing a diagnostic test, informing the client about the diagnosis, selfless listening, dismissing the client for a short time to allow time to process the information, meeting with the client again to discuss the next steps for finding a solution for the diagnosis, and then scheduling a follow-up appointment (Luterman, 2021).

Audiology Counseling Programs offer another solution for implementing a “client-centered model” into audiology services. Creating a program that extends for several weeks allows the client to develop new skills over a span of time which encourages the skills to be utilized more frequently until they become a routine for the client in their natural environment. The client may be more likely to follow the audiologist’s recommendations and regularly attend the program if the first part of the program involves the audiologist learning about the client’s lifestyle, concerns, hobbies, and other components that make up the client’s character. According to Dr. K English, the key to a “client-centered model” is for the audiologist to listen more and speak less when the client is sharing their concerns and goals (English & Archbold, 2013).

Considering the recent transition from a “medical model” to a “client-centered model,” this student researcher designed this study with the purpose to investigate perceptions of both the client and the audiologist on the current presence of counseling in the field of audiology and the benefits of implementing these services. Additionally, the audiologists were given questions to

determine the amount of training in counseling they had received and how comfortable they felt to perform these services.

Methods

Participant Recruitment

A summary of the proposed research study was posted on various social media platforms asking that peers share the message to those who received care from an audiologist or who were a licensed audiologist. Clients and audiologists were contacted through email with further information about the purpose of the student researcher's study and to request participation in the student researcher's survey. A total of 42 audiologists and 52 clients voluntarily completed their respective surveys that were accessed through a link provided by the student researcher.

Survey Development. A survey comprised of 55 questions and statements was created for audiologists to complete. A separate 57 question and statement survey was created for clients with hearing loss to complete. The surveys consisted of both open response and multiple-choice components that were divided into four corresponding sections: demographics, educational practices, communication strategies, and psychosocial mental health/counseling. The survey statements and questions were designed to analyze the extent to which the clients were educated about their hearing loss, the variation of communication strategies, and the mental health aspects/counseling. The audiologist and the client surveys directly mirrored each other to analyze the perception differences between the audiologists and the clients. Implementation of the communication strategies, the need for counseling training and services in the field of audiology, and reasons why hearing loss can be directly associated with a range of psychosocial stressors were the main comparable objectives.

Institutional Review Board. This study was approved by the Institutional Review Board of Ouachita Baptist University. Participants were required by the Institutional Review Board to be 18 years of age or older.

Survey Implementation. Over the course of one month, at the beginning of the Spring 2022 semester, the student researcher emailed a summary of the research study and either a link to the audiologist survey or to the client survey. The audiologists and the clients read the following statement prior to filling out the survey:

The purpose of this study is to determine the extent to which audiologists counsel their clients for the psychosocial stress factors associated with hearing loss as well as to determine the adequacy of psychosocial counseling as perceived by patients with hearing loss. I am analyzing three parts of a potential audiology counseling service: 1. educating the client on their hearing loss 2. equipping the client with practical strategies 3. helping clients cope with mental health concerns.

The survey included the Cover Letter (APPENDIX A) for the research and the Informed Consent form (APPENDIX B) for the participants to read and agree to participation prior to completing the survey. Participants then completed a demographic section followed by a series of questions to gain background information regarding the audiologists' education and practice experience or the clients' history of hearing loss and use of amplification devices.

Results

The purpose of the study was twofold: to determine the extent in which audiologists counsel their clients for the psychosocial stress factors caused by hearing loss, and to determine the extent to which patients with hearing loss feel they would benefit from counseling services implemented into their appointments. In addition to psychosocial stress factors, the study analyzed the extent in which clients felt they were educated on their type of hearing loss and practical ways to adjust to their hearing loss based on their individual lifestyle. The study also asked for reasons why people did not seek consistent audiology counseling when diagnosed with a hearing loss when experiencing emotional distress trying to adjust to the loss. The study also compared client results with the audiologist's own perceptions of these concepts, extent of training, and confidence level of counseling patients beyond completing a hearing test and programming amplification devices.

It was hypothesized that the clients' and the audiologists' perceptions of the inclusion of education about the hearing loss, strategies to navigate the hearing loss, and support of psychosocial stressors caused by the hearing loss would agree. It was also hypothesized that a lack of balance in these three components is apparent during an audiology appointment, as well as a lack of professional training for counseling clients in an audiology setting. The following section will present the results of the study. Tables and graphs are included to assist with explanation and interpretation of the findings.

Participants

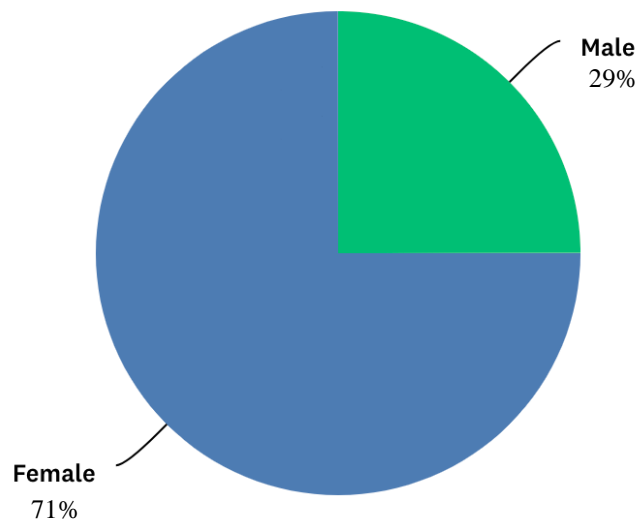
Participant Responses

The student researcher requested participation from 60 licensed audiologists and 75 clients. 42 audiologists (n = 42) and 52 clients (n = 52) agreed to participate and completed the survey.

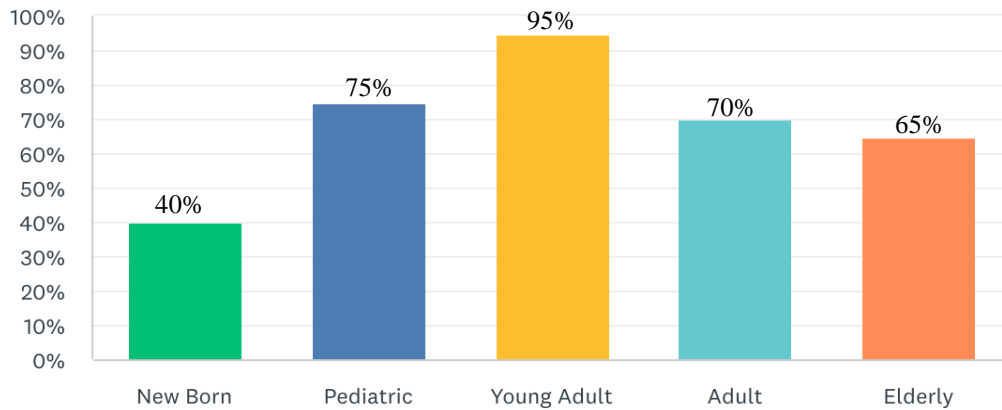
Basic Demographics

I. Audiologist Survey

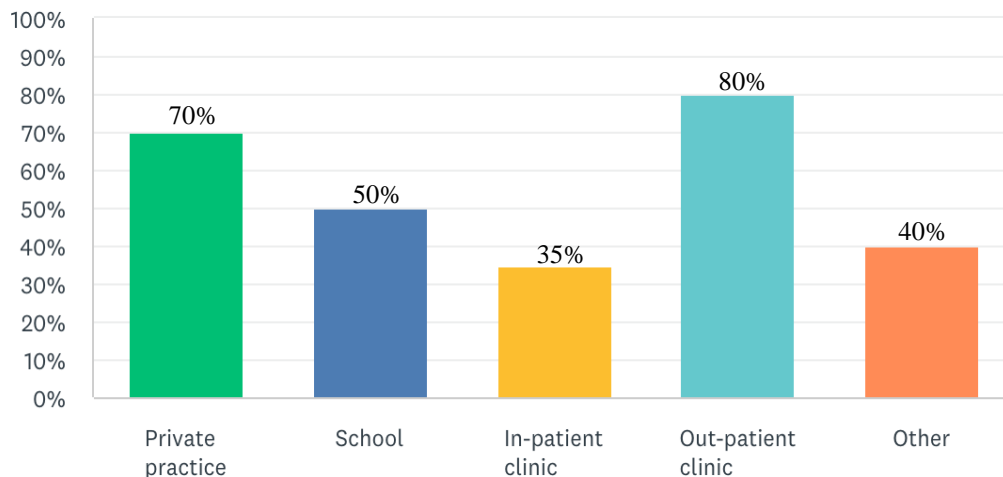
Of the 42 participants who completed the survey, 71% (n = 30) were females and 29% (n = 12) were male. All 42 of the audiologists indicated that they were actively practicing audiology and had received a doctorate level of education.



Audiologists reported they had experience working with the following age groups: Newborn 40% (n = 16), Pediatrics 75% (n = 30), Young Adult 95% (n = 38), Adult 70% (n = 28), Elderly 65% (n = 26). Participants were allowed to select all client populations that applied to them.

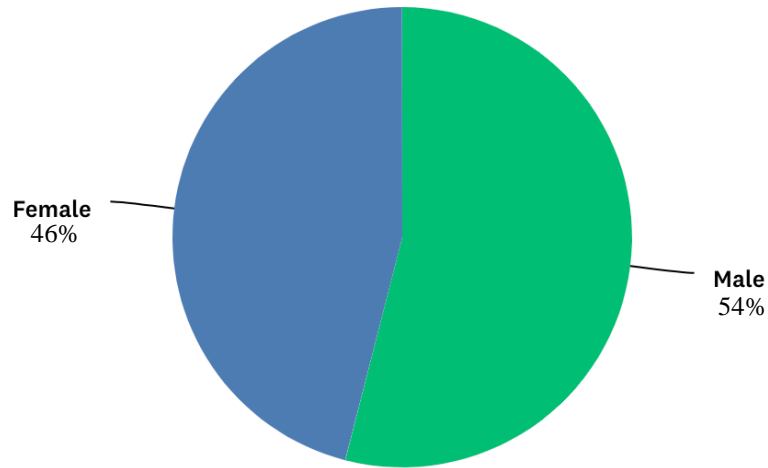


Regarding their professional work environment, participants had experience working in the following areas: Private Practice 70% (n = 28), School 50% (n = 20), In-patient clinic 35% (n = 14), Out-patient clinic 80% (n = 32), Other 40% (n = 16). Participants were allowed to select all work environments in which they had experience in. These percentages are provided in the figure below.

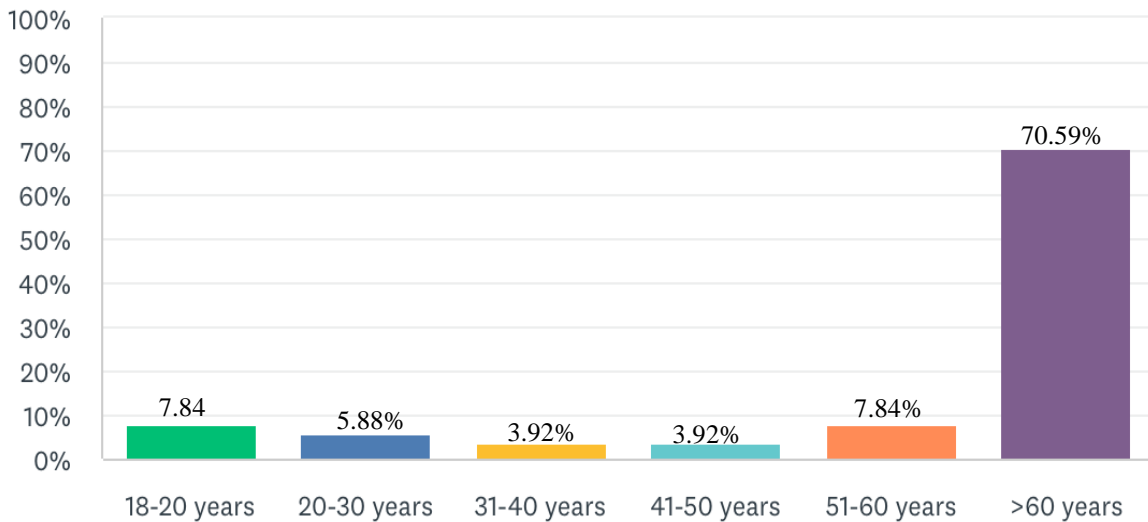


II. Client Survey

Of the 52 participants who completed the survey, 46% (n = 23) were females, 54% (n = 27) were male.

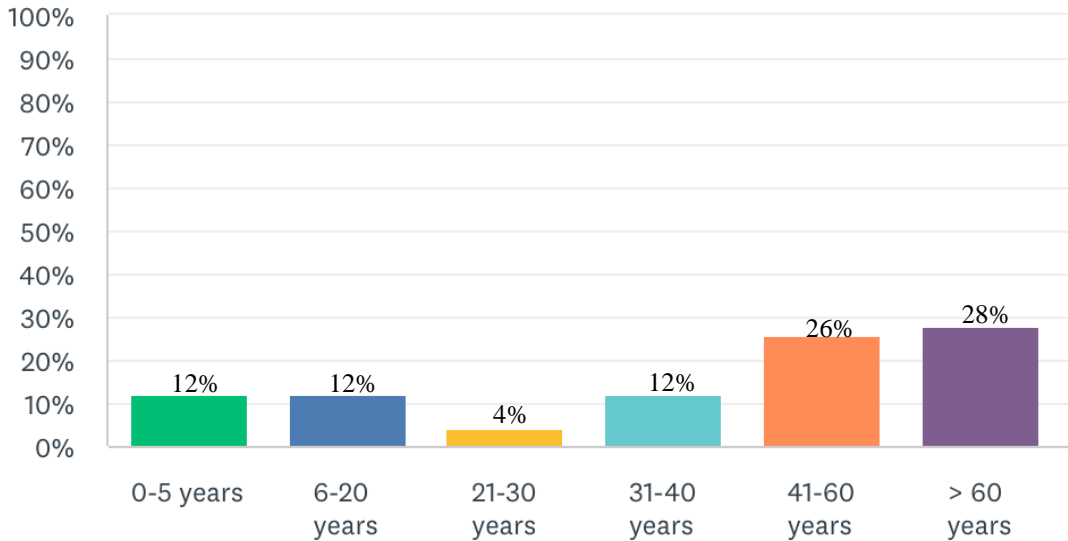


Participants were the following ages: 7.84% (n = 4) were 18-20 years-of-age; 5.88% (n = 3) were 20-30 years-of-age; 3.92% (n = 2) were 31-40 years-of-age; 3.92% (n = 2) were 41-50 years-of age; 7.84% (n = 4) were 51-60 years-of-age; and 70.59% (n = 36) were 61 years-of-age or older.

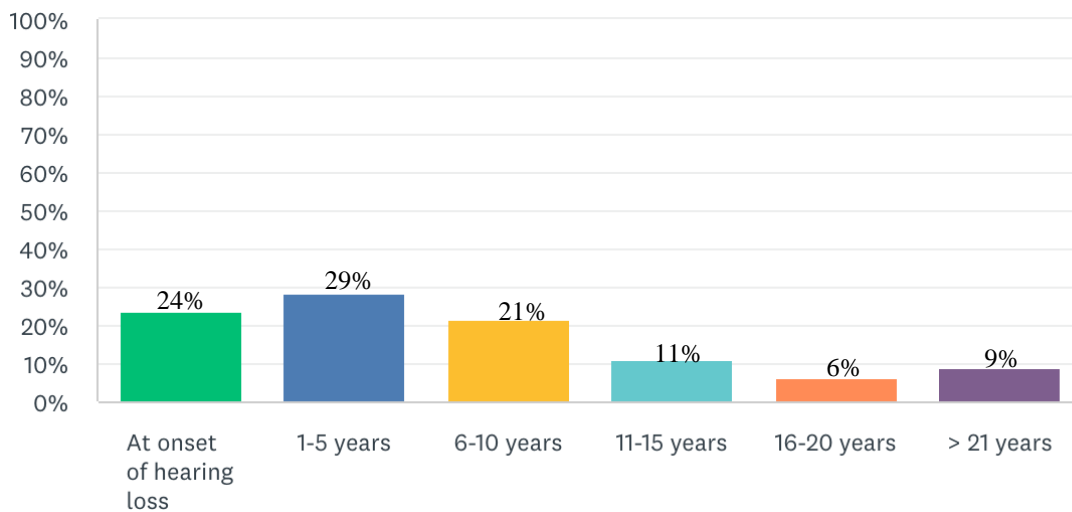


The participants responded to survey questions to gain information about their type of hearing loss, onset of hearing loss, amplification devices, and use of these devices in their everyday activities. Twenty-eight percent of the participants were diagnosed with a hearing loss after the age of 60. Of the 52 participants, 90% (n=46) wear amplification devices. Twenty-eight percent did not receive amplification devices for their hearing loss until 1-5 years.

Question: What age range was your hearing loss identified?

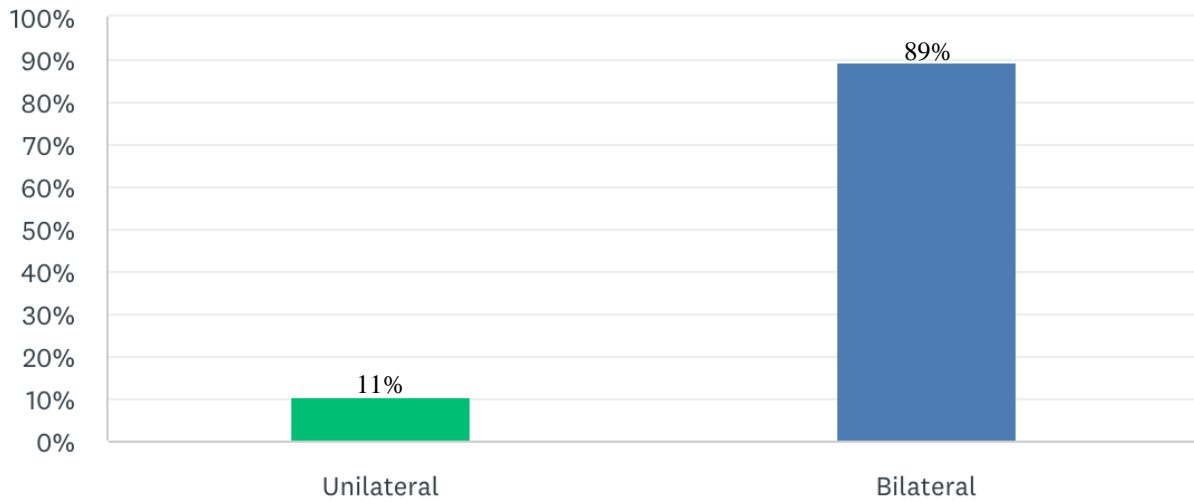


Question: How long after your hearing loss diagnoses did you begin to wear your amplification devices?

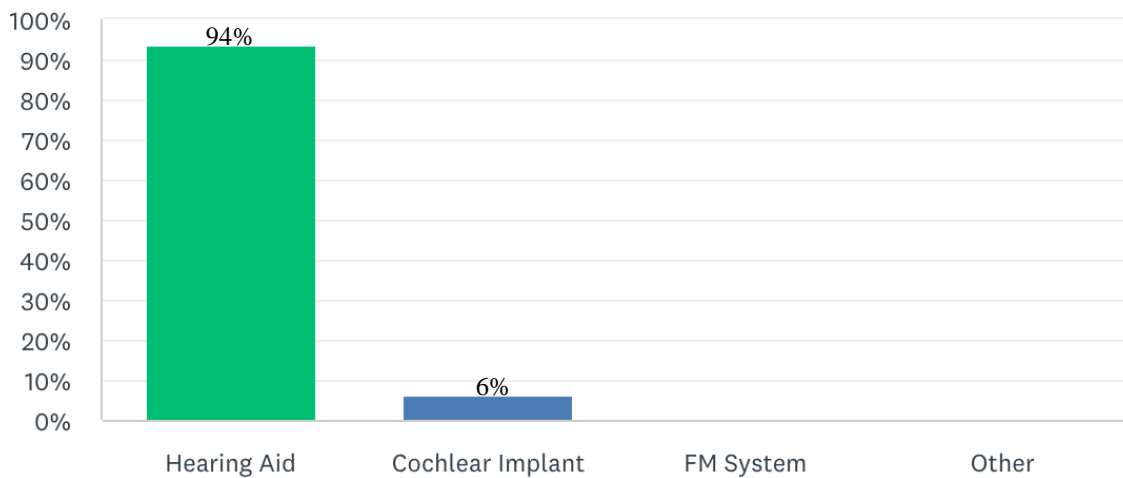


Regarding their type of hearing, 89% (n = 47) of the participants were diagnosed with a bilateral hearing loss and 11% (n = 5) were diagnosed with a unilateral hearing loss. Of the participants who wear amplification devices 94% wear hearing aids while 6% (n = 3) wear cochlear implants.

Question: Do you have a unilateral or bilateral hearing loss?

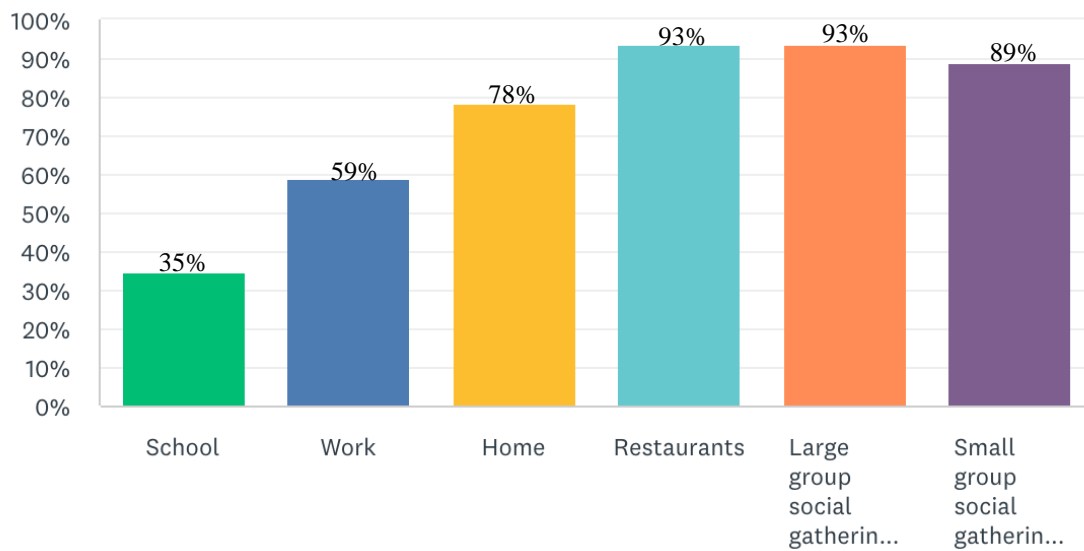


Question: What type of amplification device do you wear?



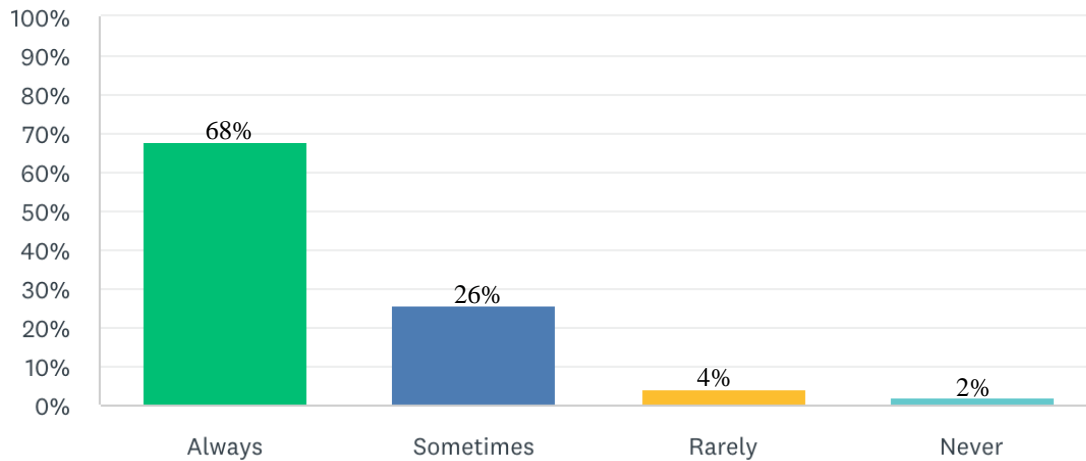
Participants were asked to choose all environments in which they wear their amplification devices. Large group social gatherings and restaurants were the environments that clients checked the most (93% or n = 43). Other environments included school, work, home, and small group social gatherings.

Question: In which environments do you wear your amplification device(s)? Check all that apply.



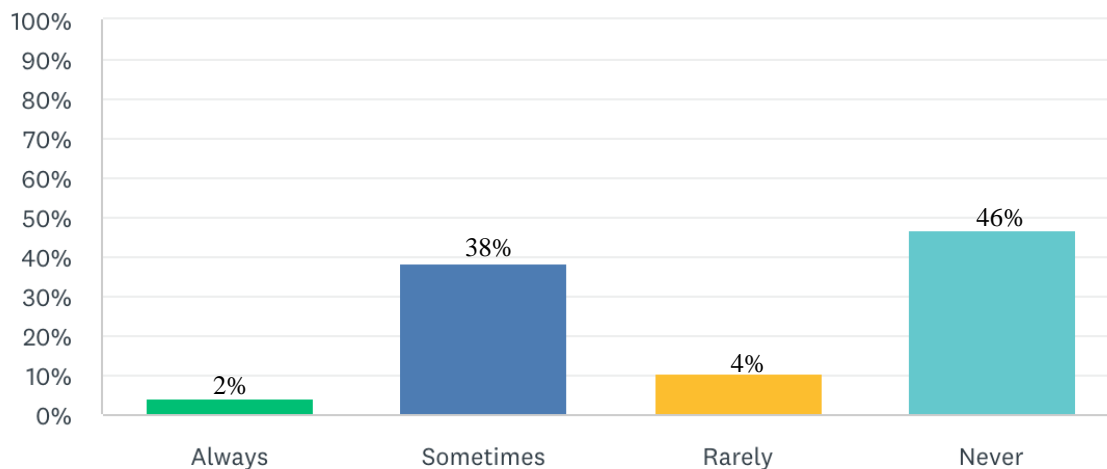
Clients were asked to evaluate how consistently they wear their amplification devices by selecting from the choices: *always*, *sometimes*, *rarely*, and *never*.

Questions: In your normal daily routine, how consistently do you wear your amplification device(s)?



Clients were also asked how reluctant they are to wear their amplification devices. Options included “*always*, *sometimes*, *rarely*, *never*.” Of the 46 participants who wear amplification devices, 46% (n = 22) indicated they were *never* reluctant to wear them, followed by 38% (n = 18) who claimed they were *sometimes* reluctant to wear them.

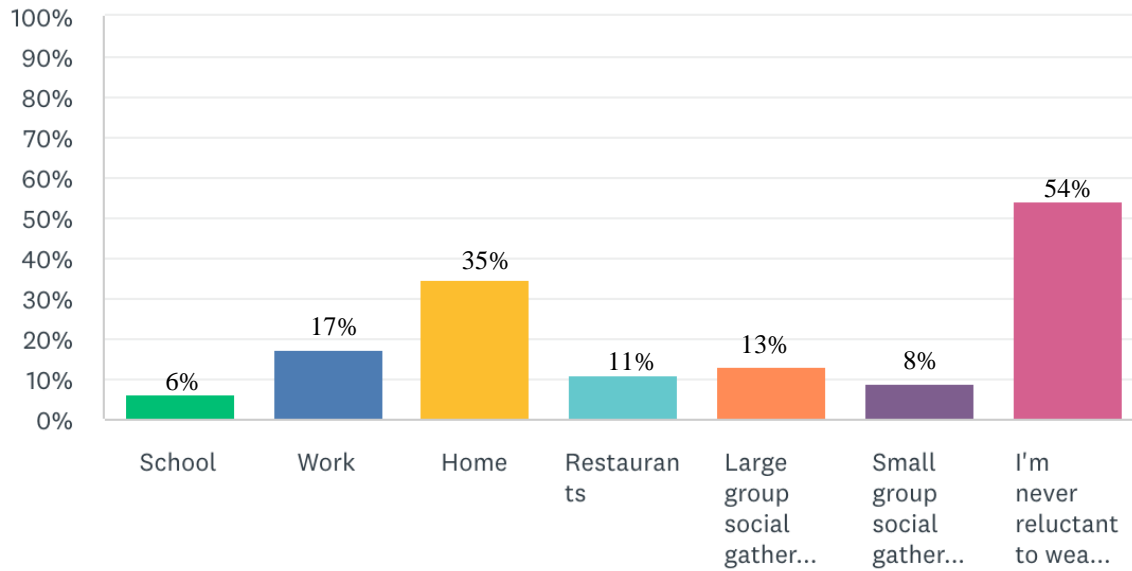
Question: In your normal daily routine, you are reluctant to wear your amplification device(s)?



Finally, participants were then asked to choose all environments in which they are reluctant to wear their amplification devices.

Question: In which environments are you reluctant to wear your amplification device(s)?

Check all that apply.



Data Analysis

Survey statements for the audiologist were divided into three main categories that are considered focus points to implementing “client-centered care:” 1. teaching the client about the hearing loss, 2. providing the client with practical strategies to navigate the individual’s challenges with hearing loss, and 3. inquiring about the psychosocial stressors the client may have with their hearing loss. The audiologists were also surveyed about their training for counseling in audiology, their perceptions on the need for counseling, and their opinion on requiring more training for counseling in audiology. The clients were asked about their willingness or desire to attend educational classes and/or counseling services for their hearing loss. Finally, at the end of the surveys, both the clients and the audiologists were asked which of these categories were the most relevant in their appointments.

Survey Results

A 57-item survey was developed for the audiologists and a 55-item survey was developed for the clients with hearing loss. Included in these questions were eight that pertained to educational strategies and teaching methods during an audiology appointment; nine that related to the strategies audiologists use when sharing with the client about navigating their individual concerns with the hearing loss; and eight that pertained to the audiologists’ attempts to help the client cope with any psychosocial stress factors caused by the hearing loss. Each set of statements and questions analyzed the differences between the perceptions of the client and the audiologist regarding each category.

The multiple response questions in each survey included *yes/no* answer choices or a range of options pertaining to the specific topic in the question. A portion of the statements on the survey had the following choices: *strongly agree, agree, disagree, or strongly disagree*. A different portion of the statements on the survey had the following choices: *always, sometimes,*

rarely never. The answer choice of “neutral” was not included in order to encourage participants to think through the questions and respond with answers more closely aligned with their beliefs.

The scores were analyzed to find the highest percentage that corresponded with either a positive perception of the statement or a negative perception of the statement. Below you will find each survey statement with one of the following:

- a. A corresponding disagree total (strongly disagree scores + disagree scores) or agree totals (strongly agree score + agree scores).
- b. A corresponding occurrence score of either “always + sometimes” or “rarely + never”
- c. A corresponding score of either “yes” or “no.”
- d. A corresponding score for multiple components that relate to the statement topic (statement 4 under “Psychosocial factors.”)
- e. A corresponding comfort level score of either “very comfortable + comfortable” or “very uncomfortable + uncomfortable.”

Teaching Methods:

Statement 1:

CLIENT: You understand what the audiologist is testing throughout a hearing test.

AUDIOLOGIST: You inform your client what you are testing during a hearing test.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	90%	100%
Rarely + Never	10%	0%

Statement 2:

CLIENT: Your audiologist explains why they are completing each part of the hearing test.

AUDIOLOGIST: You explain to your client why you are completing each part of the hearing test.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	88%	90%
Rarely + Never	12%	10%

Statement 3:

CLIENT: You know what type of hearing loss you have.

AUDIOLOGIST: You teach your client what type of hearing loss they have.

Yes/No	Clients	Audiologists
Yes	75%	95%
No	25%	5%

Statement 4:

CLIENT: If yes, do you know why it is this type of hearing loss?

AUDIOLOGIST: If yes, do you teach them why it is this type of hearing loss?

Yes/No	Clients	Audiologists
Yes	61%	67%
No	14%	23%
N/A	25%	10%

Statement 5:

CLIENT: After each hearing test/visit, you are given a copy of your audiogram.

AUDIOLOGIST: You give your client a copy of their audiogram.

Yes/No	Clients	Audiologists
Yes	42%	80%
No	58%	20%

Statement 6:

CLIENT: You can read and understand your audiogram without assistance.

AUDIOLOGIST: You teach your client how to read their audiogram.

Yes/No	Clients	Audiologists
Yes	34%	90%
No	66%	10%

Statement 7:

CLIENT: Your audiologist teaches you how to manipulate your amplification devices to best suit you in multiple environments.

AUDIOLOGIST: You teach your client how to manipulate their amplification device in different settings.

Yes/No	Clients	Audiologists
Yes	94%	95%
No	6%	5%

Statement 8:

CLIENT: If given the option to attend a one-time class led by an audiologist to learn the basics of your hearing loss, how to read audiograms, and review the best amplification options for your hearing loss - would you attend this class?

AUDIOLOGIST: Would you find it beneficial to teach a class to your clients to help them to learn the basics of their hearing loss, how to read audiograms, and to go over the best amplification options for their hearing loss?

Yes/No	Clients	Audiologists
Yes	56%	48%
No	44%	52%

Overall, regarding the eight teaching method questions and statements, the results indicated a positive correlation between the perceptions of the audiologists and the clients. One noticeable deficiency was that only 75% of clients knew what type of hearing loss they had while 95% of the audiologists claimed they did inform the client about his or her type of hearing loss. Forty-two percent of clients indicated they were given a copy of their audiogram after their hearing test while 80% of the audiologists claimed that they gave their clients a copy of the audiogram. In connection to this finding, only 34% of the clients understood how to read the audiogram while 90% of the audiologists claimed they did teach their client how to read the audiogram. Overall, the perceptions were positively correlated regarding the education about the hearing test, amplification device options, and how to manipulate these devices. A total of 56% of the clients indicated they would attend a class to learn more about their hearing loss and amplification devices. This supports my hypothesis that implementing more teaching methods into an audiology appointment would be a welcomed addition according to the responses by the clients surveyed.

Strategies:

Statement 1:

CLIENT: Your audiologist asks you open-ended questions about your concerns for your hearing loss and your amplification devices.

AUDIOLOGIST: You ask your client open-ended questions about their concerns for their hearing loss and their amplification devices.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	84%	100%
Rarely + Never	16%	0%

Statement 2:

CLIENT: Your audiologist asks you open-ended questions about the challenges you face on a daily basis in regards to your hearing loss.

AUDIOLOGIST: You ask your client open-ended questions about the challenges they face on a daily basis in regard to their hearing loss.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	86%	100%
Rarely + Never	14%	0%

Statement 3:

CLIENT: Your audiologist gives you multiple strategies to navigate daily challenges concerning your hearing loss (Not including amplification devices. This could include how to soundproof your home, positioning yourself to view a speaker's face, etc.).

AUDIOLOGIST: You give your client multiple strategies to navigate daily challenges concerning their hearing loss (Not including amplification devices. This could include how to advocate for themselves, soundproofing their homes, etc.).

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	50%	67%
Rarely + Never	50%	33%

Statement 4:

CLIENT: Your audiologist explains different amplification device options and why they would best fit your lifestyle.

AUDIOLOGIST: You explain the different amplification device options and why they would best fit each of your clients' lifestyles.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	84%	95%
Rarely + Never	16%	5%

Statement 5:

CLIENT: Your audiologist provides information regarding how your hearing loss may impact interactions/relationships with your family and friends.

AUDIOLOGIST: You ask your clients what their concerns are in regard to their hearing loss impacting their family dynamic.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	60%	71%
Rarely + Never	40%	29%

Statement 6:

CLIENT: Your family has opportunities to ask your audiologist questions concerning your hearing loss.

AUDIOLOGIST: You provide services for the clients' family to address their concerns and inform them the best ways to support the client.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	60%	66%
Rarely + Never	40%	34%

Statement 7:

CLIENT: Your audiologist counsels you with ways you can advocate for yourself in situations where you cannot hear.

AUDIOLOGIST: You advise and equip your client to advocate for themselves in situations where they cannot hear.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	52%	100%
Rarely + Never	48%	0%

Statement 8:

CLIENT: You voice your concern to your audiologist about hearing well and interacting with others in a social event setting.

AUDIOLOGIST: You ask your client to voice their concerns with hearing well and interacting with others in a social setting.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	81%	100%
Rarely + Never	19%	0%

Statement 9:

CLIENT: You voice your concern to your audiologist about hearing well and interacting with others at your work and school.

AUDIOLOGIST: You ask your client to voice their concerns with hearing well and interacting with others at their work and school.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	71%	100%
Rarely + Never	29%	0%

Overall, regarding the eight strategy questions and statements, the results indicated a positive correlation between the perceptions of the audiologists and of the clients. However, there was less of a positive correlation in this category than the teaching methods category. One noticeable deficiency was that only 52% of the clients claimed that their audiologist counseled them with ways they could advocate for themselves in situations where they could not hear. One hundred percent of the audiologists claimed that they did provide these strategies. There was also a deficiency in the perceptions that clients voice their communication concerns in work, school, and other social settings and that audiologists ask open-ended questions about these concerns. Overall, both groups claimed that there were not many opportunities for clients to talk about how their hearing loss impacted their family and friend relationships nor were there many opportunities for families and friends to interact with the audiologist. Only 60% of clients claimed that their families and friends had opportunities to ask questions during an appointment and only 60% of the clients claimed the audiologist provided information for how the hearing loss could impact relationship dynamics.

Psychosocial Factors

Statement 1:

CLIENT: Your audiologist asks you open-ended questions about how your hearing loss impacts your mental health.

AUDIOLOGIST: You ask your client open-ended questions concerning their mental health.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	36%	60%
Rarely + Never	54%	40%

Statement 2:

CLIENT: Hearing loss has negatively impacted your self-esteem and confidence in social settings.

AUDIOLOGIST: You ask your client how hearing loss has negatively impacted their self-esteem and confidence in social settings.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	54%	66%
Rarely + Never	46%	34%

Statement 3:

CLIENT: Your hearing loss has made you more anxious when communicating with others or when in a crowded social setting.

AUDIOLOGIST: You ask your client if their hearing loss has made them more anxious when communicating with others or when in a crowded social setting.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	64%	80%
Rarely + Never	36%	20%

Statement 4:

CLIENT: What is the main reason that you feel anxious in a social setting as a person with hearing loss?

AUDIOLOGIST: What do you think is the main reason someone with hearing loss would feel anxious in a social setting?

Reasons	Clients	Audiologists
They cannot hear others well	64%	100%
They do not want other to notice their amplification devices	10%	0%
They do not know how to manipulate my amplification devices for specific environments.	4%	0%
They struggle with anxiety in general.	8%	0%
They do not feel anxious with hearing loss	40%	0%

Statement 5:

CLIENT: You tell your audiologist about mental stressors as related to your hearing loss.

AUDIOLOGIST: You ask your client to voice their mental stressors from the hearing loss.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	46%	75%
Rarely + Never	54%	25%

Statement 6:

CLIENT: You talk to your audiologist about social stressors as related to your hearing loss.

AUDIOLOGIST: You ask your client to voice their social stressors from the hearing loss.

Combined Occurrence Scores	Clients	Audiologists
Always + Sometimes	50%	75%
Rarely + Never	50%	25%

Statement 7:

CLIENT: If given the option to be a member of a support group with other clients adapting to a hearing loss would you attend?

AUDIOLOGIST: The clinic at which you currently work offers a support group program for clients and/or their family members?

Yes/No	Clients	Audiologists
Yes	34%	14%
No	66%	86%

Statement 8:

CLIENT: You feel comfortable confiding with your audiologist concerning your mental health as it relates to your hearing loss.

AUDIOLOGIST:

1. How comfortable do you feel talking to your client about their mental health and emotions?
2. How comfortable do you feel counseling your clients for their diagnosis?

Combined Comfort Levels	Clients	Audiologists #1	Audiologists #2
Very Comfortable + Comfortable	78%	58%	100%
Uncomfortable and Very Uncomfortable	22%	42%	0%

Overall, regarding the eight psychosocial factors questions and statements, the results indicated a positive correlation between the perceptions of the audiologists and the clients. However, there was a key factor that both groups indicated as a weakness was the time or opportunity to have discussions with each other. The majority of client perceptions were that the audiologist did not ask them open ended questions concerning their mental health, self-esteem, anxieties, or social stressors that related to their hearing loss. Although most audiologists claimed they did incorporate these questions, the highest percentages were still averaged to be closer to 50%. Only 14% of the audiologists reported their clinical setting provided a support group for clients. A final key finding from this section was that 100% of the audiologists reported that they felt comfortable talking to the client about the diagnosis, but only 58% indicated they felt comfortable talking to their clients about their mental health and emotions.

Audiologists' Perceptions and Training In Counseling

1. Patient-centered care is at the core of your practice. (Figure 1)
2. Do you think patient-centered care includes counseling services in the clinic? (Figure 2)

Figure 1

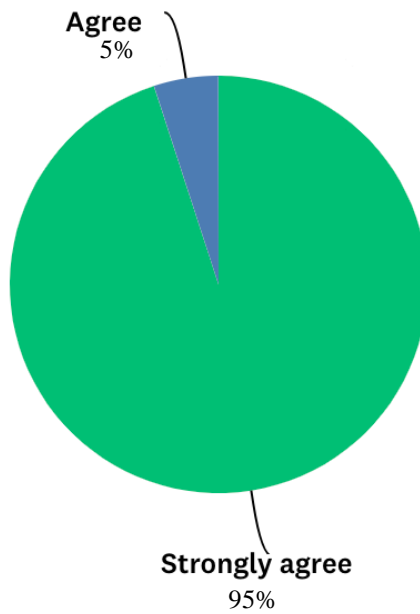
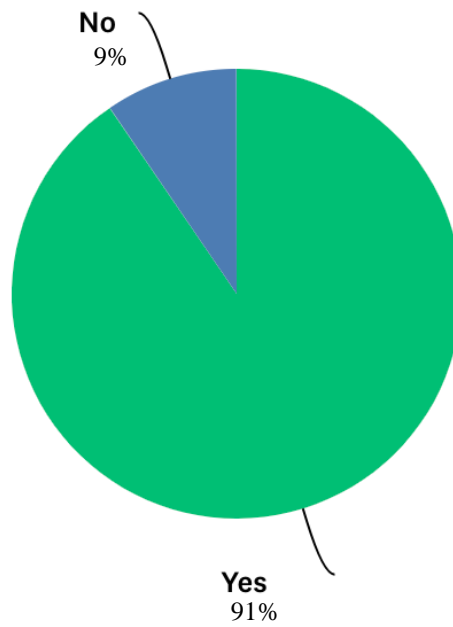


Figure 2



3. Counseling beyond an information transfer should be an integral component to the services an audiologist provides. (Figure 3)
4. Do you think counseling services are necessary in an audiology clinic? (Figure 4)
5. Audiologists are responsible for giving advice and counseling clients' families on how to best solve the problems associated with hearing loss. (Figure 5)

Figure 3

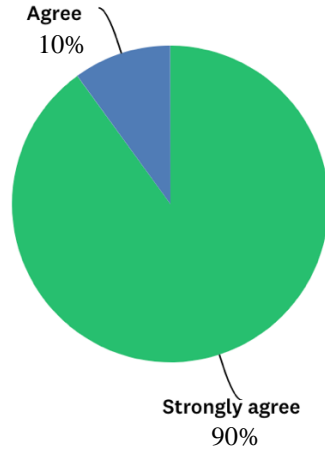


Figure 4

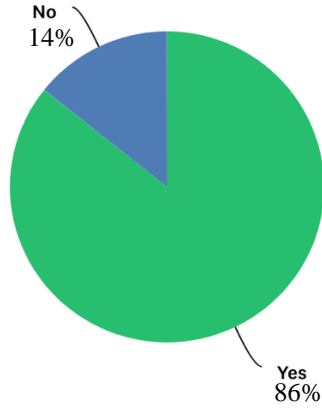
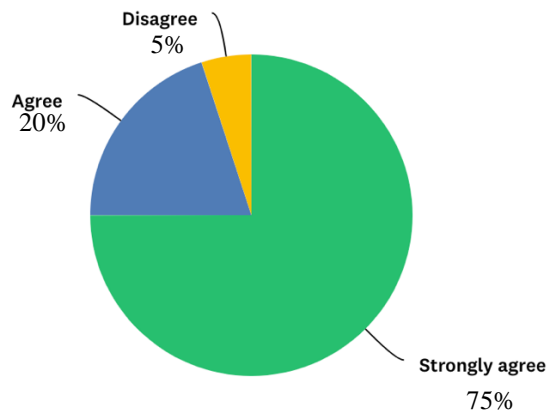


Figure 5



6. Did you take a Counseling in Audiology course in graduate school? (Figure 5)
7. If yes, was it required? (Figure 6)
8. Do you think Counseling in Audiology courses should be required in graduate schools? (Figure 7)

Figure 5

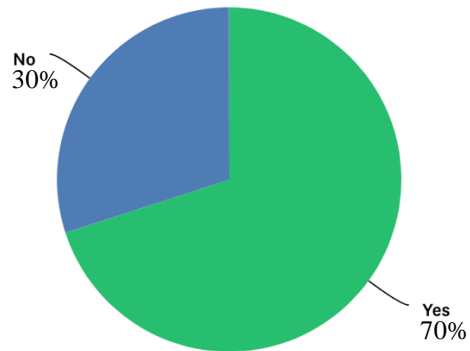


Figure 6

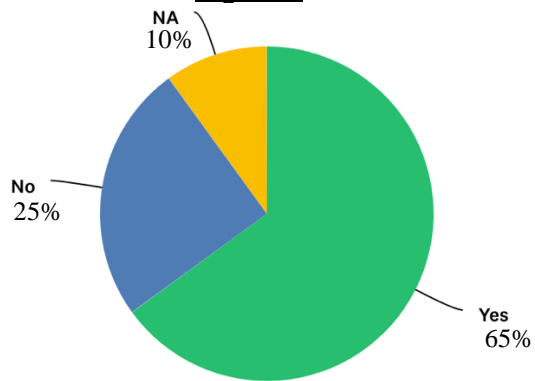
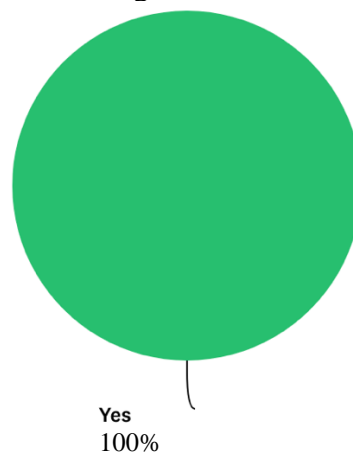


Figure 7



9. Have you ever received Professional Development in Counseling in Audiology? (Figure 8)
10. If yes, was it required? (Figure 9)
11. Do you think Professional Development in Counseling in Audiology should be required for Audiologists while they are working? (Figure 10)

Figure 8

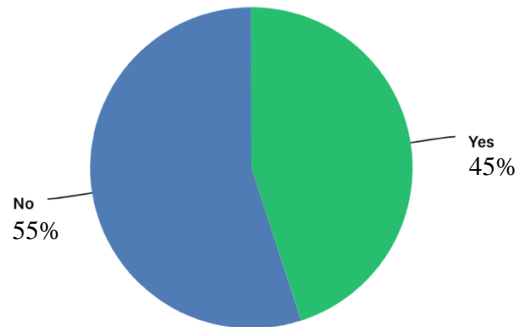


Figure 9

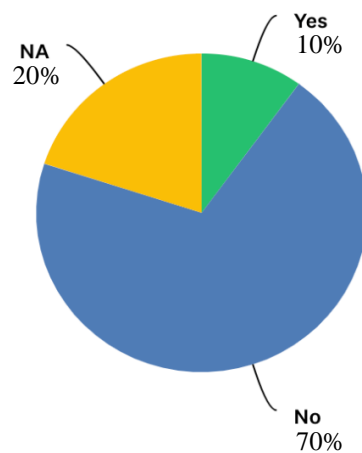
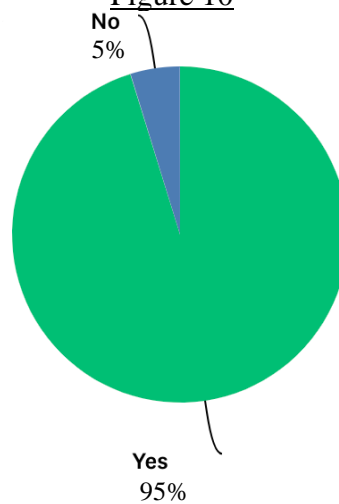


Figure 10



Overall, 95% (n = 40) audiologists claimed that patient-centered care is at the core of their practice. Ninety percent of the audiologists agreed that patient-centered care includes counseling services. They also agreed that counseling beyond an information transfer is a key component to the services they provide. Eighty-five percent audiologists do think that counseling services are necessary in the audiology clinic. These numbers support the claim that there is a need for counseling services as seen by a licensed audiologist. However, only 70% (n = 28) had taken Counseling in Audiology course in graduate school and out of those 70% only 65% (n = 13) were required to take the course. Fifty-five percent of the audiologists had never received professional development in counseling in audiology. Along with this, only 10% (n = 4) of those who had taken a Professional Development class in Counseling in Audiology were required to take it. These statistics further illustrate the lack of counseling training for the audiology profession. To finalize this claim, 100% (n = 42) audiologists stated that a counseling course in graduate school should be required, and 95% (n = 40) audiologists stated that receiving professional development for counseling should be required.

Audiologist and Client

Statement 1:

CLIENT: If given the option to receive counseling services in the audiology clinic to address mental health, your concerns about hearing loss, and to learn more strategies to navigate your hearing loss daily - would you attend these services?

AUDIOLOGIST: Do you think offering counseling services in the Audiology clinic would be beneficial for clients?

Yes/No	Clients	Audiologists
Yes	34%	90%
No	66%	10%

Statement 2:

CLIENT: Which of the aspects of counseling in audiology do you think is the **most** evident during your audiology appointments?

AUDIOLOGIST: Which of the aspects of counseling in audiology do you think is the **most** evident during your appointments with your patients?

Options	Clients	Audiologists
Education about the hearing loss	52%	38%
Strategies for navigating the hearing loss	46%	57%
Hearing loss impacting mental health	2%	5%

Statement 3:

CLIENT: Which of the aspects of counseling in audiology do you think is the **least** evident during your audiology appointments?

AUDIOLOGIST: Which of the aspects of counseling in audiology do you think is the **least** evident during your appointments with your patients?

Options	Clients	Audiologists
Education about the hearing loss	13%	10%
Strategies for navigating the hearing loss	14%	80%
Hearing loss impacting mental health	73%	80%

Conclusion

Two surveys examined the extent to which audiologists counsel their clients for the psychosocial stress factors caused by hearing loss. They also examined the extent to which patients with hearing loss felt they would benefit from counseling services implemented into their appointments. In addition to psychosocial stress factors, the study analyzed the extent in which clients felt they were educated on their type of hearing loss and practical ways to adjust to their hearing loss based on their individual lifestyle. The study also compared client results with the audiologist's own perceptions of these concepts, extent of training, and confidence level of counseling patients beyond completing a hearing test and programming amplification devices.

Overall, audiologists did not offer counseling services in their clinics; however, 90% (n = 38) do believe they should be offered in the clinic because of the benefits to their clients. On the other hand, only 34% (n = 18) clients claimed they would attend a counseling service. Despite this lower percent, 56% (n = 29) clients did say they would attend a class to learn more about their hearing loss, amplification devices, and daily strategies. Clients and audiologists agreed that counseling services for mental health associated with hearing loss is the least prominent service offered out of the three aspects. One deficient in perceptions between the clients and the audiologists were the prominence levels of education and strategies in the clinic. Fifty-two percent (n = 27) of the clients believed education about their hearing loss was the most prominent aspect of counseling in their appointments. However, most audiologists (57% n = 24) believed strategies for navigating the hearing loss is the most prominent aspect of counseling during their appointments.

The results from the two surveys support my hypothesis that there is a lack of balance between the three components of counseling in audiology. They also support my hypothesis that there is not enough professional training for counseling in audiology. However, the results did not support my hypothesis that the clients' and the audiologists' perceptions would positively

correlate concerning the inclusion of education about the hearing loss, strategies to navigate the hearing loss, and support of psychosocial stressors caused by the hearing loss.

Discussion

This study suggests that there is a need for more training programs for counseling in audiology, and that there is a need to implement more counseling services for clients. Although the survey found that there are many components of counseling in audiology that are present in appointments, there are also many components that could be strengthened. Counseling in today's culture tends to be associated only with mental health issues. However, this research extends counseling services to include educating clients and equipping them with daily strategies to navigate a hearing loss. Most clients do not claim they need counseling for mental health because of their hearing loss, but the majority did claim they would attend education classes. They desired more strategies and options for their hearing loss and amplification device(s). It is important for audiologists to receive training in the following areas: 1. "client-centered" models by asking open-ended questions, 2. being an active listener and encouraging the client to voice their concerns, 3. providing the client opportunities to receive additional education, various strategies, and help with their mental health.

Limitations

Application of these results is limited due to the small sample size (n = 94) and to the lack of equal representation among ages, gender, and number of years either practicing audiology or receiving audiology services. The student researcher would have preferred equal number of participants among each of these classifications.

Another limitation is the audiologist participants and the client participants were not directly related to each other. There was not a specific group of audiologists nor clients that completed the survey, but rather participants were randomly chosen and voluntarily completed the survey. Due to the survey being anonymous, it cannot be determined if the clients receive services from any of the audiologists who completed the survey. Therefore, the perceptions of the audiologists and the perceptions of the clients were not based on the exact same experiences.

Further Research

Parents of children with hearing loss face additional stress factors from everyday normal challenges. This is especially true if the hearing loss is not anticipated or if there is no family history of hearing loss.

1. Future research could explore the benefits and prevalence of audiology counseling services for parents of children who were born with hearing loss or developed a hearing loss at a young age.
2. Further research could include creating a counseling program that audiologists could implement in their workplace.
3. Future research could also expand this study to include other/additional diagnoses in the field of audiology such as vertigo and tinnitus.

Personal Connection

At the age of five years old, I was diagnosed with an unexpected hearing loss. Despite the frequent visits to audiologists, I refused to wear hearing aids and receive help until I was sixteen years old. This experience has shaped me into the person I am today and has given me a heart for the audiology profession. However, I have not always been drawn to this career field. The audiology clinic was home to many of my frustrated moments when taking a hearing test, a reminder of the limitations I faced, and my constant refusal to try hearing aids. If you would have told me even one year ago that I would be on my way to attending a Doctor of Audiology program, I would have denied it.

I can attest that hearing loss requires more than quick fix hearing technologies and annual check-ins at the audiologist. If I could go back in time, the first thing I would do is to tell my younger self to say yes to the hearing aids and voice my concerns to my audiologist. I was convinced that the technologies would only draw negative attention to myself. Although this is the typical reaction from our culture, the benefits of receiving help for hearing loss and hearing disorders far outweigh the fear of judgment, lack of confidence in social settings, and excessive energy it takes to focus on sounds. It took a long time, but eventually it clicked that I did not have to carry around the weight of hearing loss and the psychosocial stressors that come with it.

I can relate to a wide range of clients. I was the child that did not understand hearing loss but knew I did not want to look different from my peers. I was the teenager or young adult that faced anxiety in social settings, remained frustrated at myself for trying to focus yet still failed to hear, and refused to admit I needed help because I could continue to make do without hearing aids. I can also relate to the adults or elderly who develop hearing loss and put up a fight when told to wear their hearing aids. However, I can also speak volumes that seeking help and going through the process changes your life only for the best.

When I got hearing aids my sophomore year of high school, I thought that it would be an easy transition and I would be better at communicating with other people. Turns out it takes several months to adapt to the new way I was hearing sound. I had to learn how to program the hearing aids to match my environment on my phone along with learning how to take care of them. Fast forward to my junior year at Ouachita Baptist University when I took two audiology courses as a requirement for my major. I had no intention in pursuing this career field, but throughout that year I loved gaining a better understanding of the science behind sound and the human ear. I appreciated understanding why I had a hearing loss. The next time I visited the audiologist for a hearing test, I knew what was being tested and why it was being tested because I had learned that in my class. In the summer of 2021, I had a great experience working with a counselor and I became more open-minded to the impact of mental health. Senior year started and I began to work on graduate school applications, but I still was not set on a career choice. I noticed that some audiology schools required a Counseling in Audiology course and others did not. As I revisited my thesis for the Carl Goodson Honors Program, I focused my research on counseling programs and education courses for clients in audiology and found that there are not many of these programs. However, I knew the benefits of being equipped with daily strategies, being taught why I had a hearing loss, the purpose behind the hearing tests, and professional counseling to help with my mental health as needed.

The field of audiology is an opportunity to connect with, to encourage, and to help people with hearing loss, hearing disorders, tinnitus, and dizziness reach their highest potential. It is more than providing a diagnosis, programming a piece of technology, or referring the client to another specialist. It is teaching them about the diagnosis, listening to their concerns, and walking them through the best options for their lifestyle. The client faces a daily choice to utilize the amplification system they have been given and to face the daily obstacles that come with it. It will be a privilege to continue my educational training in this field to become the audiologist that

can relate to the clients, provide the best option for them, and walk with them through the process of adjusting to amplification devices. I am very thankful that I was able to complete research with the Carl Goodson Honors Program to give me a vision of my goal in my future profession.

APPENDIX A: Survey Cover Letter

Survey Cover Letter

Thank you for voluntarily participating in this undergraduate research project to determine the extent in which audiologists counsel their clients for the psychosocial stress factors caused by hearing loss along with determine the extent in which hearing loss patients feel they would benefit from counseling services implemented into their appointments.

The survey should take no longer than 15 minutes and completed responses will remain confidential. Results will be compiled and presented in aggregate form. Responses will not be reported on in individual format. As partial fulfillment of the OBU honors program, I will present the survey results in a published thesis that will be presented at OBU Scholar's Day in Spring 2022.

Dr. Nancy Hardman, CCC-SLP is the faculty advisor of this project.

Thank you for your time,

Emily McMaster – Senior CMDS student

Ouachita Baptist University

NOTE: This research has been approved by the Institutional Review Board (IRB) of Ouachita Baptist University.

APPENDIX B: Informed Consent Form

Informed Consent Agreement

Project Title: *Counseling for Psychosocial Stress Factors Associated with Hearing Loss.*

Please read this consent agreement carefully before you decide to participate in the study.

The purpose of the study is to determine the extent to which audiologists counsel their clients for the psychosocial stress factors associated with hearing loss as well to determine the adequacy of psychosocial counseling as perceived by patients with hearing loss. You will spend approximately 20 minutes completing the survey; there are no known risks for participating in this research project.

The information you provide in the study will be handled confidentially, and your data will be identified by an anonymous code number instead of your name. Your name will not be used in any report. Your participation in the study is completely voluntary, and you have the right to decide not to complete the survey.

Results will be compiled and presented only in aggregate form- responses will be reported in individual format. The results from our current research will be compared to published research as found in professional journals.

As partial fulfillment of the Ouachita Baptist University Honors program, the student researcher will present the survey results in a professional poster session at the annual Scholar's Day held on the campus of Ouachita Baptist University. Additionally, results will be included in the researcher's Honor's Thesis.

Dr. Nancy Hardman, CCC-SLP is the faculty sponsor of this project.

If you have questions or concerns about the study please contact:
Emily McMaster
Communications Sciences & Disorders
OBU Box 3541
410 Ouachita Street OBU
Arkadelphia, AR 71998-0001
Faculty Advisor:
Dr. Nancy J. Hardman, CCC-SLP

You may contact the following person regarding your rights in this study:
Jeanie Curry, IRB Chair
OBU Box 3671
410 Ouachita Street
Arkadelphia, AR 71998-0001
Telephone: (870)245-5248

I have read and understand this document and have had the opportunity to have my questions answered. I agree to participate in the research study described above. I also certify that I am 18 years of age or older.

Completion of the survey indicates my agreement to participate in this study.

NOTE: The research has been approved by the Institutional Review Board (IRB) #____of Ouachita Baptist University

APPENDIX C: Institutional Review Board Human Subjects Application

Ouachita Baptist University
Institutional Review Board
Human Subjects Review Application Cover Sheet

Submission Date: February 15.2022

Project Title: *Counseling for Psychosocial Stress Factors Associated with Hearing Loss.*

Project Personnel

<u>Name</u>	<u>Dept.</u>	<u>School</u>	<u>Faculty, staff, student</u>
Principle Investigators			
Emily McMaster	CMDS	Natural Sciences	Student

PI contact information:

e-mail- McM66538@OBU.EDU telephone 870-648-9488 campus box- 66538

Suggested project classification: Exempt X Nonexempt

Estimate of risk to subjects: None X Low Moderate High

Proposed Project Dates: 02/22/2022 – 03/31/2022

Estimated number of participants: 50

Funding Agencies or Research Sponsors: Dr. Nancy J. Hardman, CCC-SLP

Submission Status:

 X New Project
 Renewal or Continuation
 Change in Procedure for Previously Approved Project
 Annual Review
 Resubmission

Action of the Research Committee

Project Number _____ Approve _____
Approve with minor revision _____ Defer for revisions _____ Disapprove _____

Human Subjects Application Checklist

Detailed project description

Selection of subjects

Method of recruitment & selection

Audiologists will be contacted via email &/or phone to ask if they would be interested in participating in the survey. A pool of names of persons with hearing loss will be compiled from referrals by researcher's family, friends, and personal audiologist. Additionally, some participants may be acquired through a FaceBook post to a support group for those with hearing loss. Prior to referring to this researcher, potential participants will be asked of their interest in completing the survey – if they agree, potential participants will send this student researcher contact information to which survey can be sent.

Recruitment advertisements or script

Student has sent a message to peers and family members inquiring if they have contact with a working or retired Audiologist. They were also asked if they have contact with persons with hearing loss. Family & friends are asked to contact potential participants about their interest in completing the survey – if they agree, the student contact information will be given to the potential participants.

Student researcher will email professors of Audiology Doctorate Programs to inform them of the proposed survey and will ask them to send an interest email to possible participants providing them with student researcher's contact information. For those interested, they will email the student researcher.

Student has set up an appointment with two Audiologist to gather input and feedback regarding the survey questions and the purpose of the study.

Demographics- Ages and gender, etc.

Participants

1. Male or Female
2. Age- Participants with hearing loss who are at least 18 years of age.
3. Audiologists &/or Participants may be residents of Arkansas, Texas, or Louisiana.
4. Audiologists- number of years, location of practice, and client ages.
 - a. Private practice, in-patient clinic, outpatient clinic.
 - b. Pediatrics, adults, or both.
5. Audiologists- Previous completed course work or training specifically to counseling within the practice.
 - a. If yes, type of experience
 - b. If yes, length of training
6. Participants with hearing loss - participation in previous or current counseling services - if yes, was your hearing loss a factor in the decision to see a counselor

Compensation N/A

Compensation conditions and schedule of payment

Participants will receive no compensation for completing the survey.

Location and duration of experiment

Surveys will be sent via email – February 22.2022 – March 31.2022.

Investigator’s relationship to subjects

Potential participants may be peers or healthcare professionals known to the student researcher – but identifying information will not be provided on the survey to keep responses confidential.

Alternatives to participation

Participation is voluntary

Purpose of Study

To determine the extent to which audiologists counsel their clients for the psychosocial stress factors associated with hearing loss as well to determine the adequacy of psychosocial counseling as perceived by patients with hearing loss.

Research Procedures

Physical/Behavioral aspects

None, other than the survey

Deception or Coercion

There is no intentional deception or coercion

Debriefing opportunities

Participants will be given the option of viewing results by attending the poster session presentations at Ouachita Baptist University’s Annual Scholar’s Day.

Survey/Assessment Instrument(s)

The survey will consist of 50 number of questions. The questions are open response, rate of agreement given options from a range of strongly disagree to strongly agree, rate of frequency from a range of never to always, rate of comfort from a range of uncomfortable-comfortable, and yes/no questions. The survey will be completed online and should take no longer than 20 minutes to complete.

Required policy statements

Benefits to the individual and to the university and to humanity

To provide knowledge and opportunities that may raise awareness of the need for patient-centered counseling services in audiology.

Risks to the participant

No known risks

Comparison of risks and benefits

NA

Procedures for minimizing risk

NA

Procedures for maintaining confidentiality of data

Student researcher will have no knowledge of who completes the surveys as the responses through Google Survey are anonymous & the option to participate is optional.

Procedures for final disposition of data

As a requirement for an honors thesis, the student researcher will participate in Scholar's Day in the Spring of 2022 to present data and findings to those who attend.

Conflict of interest statement

No known conflict of interest.

Elements of Informed Consent Included:

X Informed Consent Form

NA Parental permission form

NA Assent form for minors ages 7-17

NA Justification for waiver of consent or signed consent

X Cover letter for mail surveys

NA Telephone script for telephone surveys

NA Information sheet

NA Videotape/audiotape release form

APPENDIX D: Audiologist Survey

Survey Statements and Questions: Audiologists Survey

Audiologist Demographic Questions

1. What is your gender?
 - a. Male
 - b. Female
2. Level of Education
 - a. Doctor of Audiology
 - c. Other _____
3. Are you currently working or retired?
 - a. Working
 - b. Not working
 - c. Retired
4. How many years have you worked as an Audiologist?
 - a. 0-5
 - b. 5-10
 - c. 10-15
 - d. 15-20
 - e. 20-25
 - f. 25 +
5. Check any workplace that applies to your previous and/or current location.
 - a. Private practice
 - b. School
 - c. In-patient clinic
 - d. Out-patient clinic
 - e. Other
6. What age group of clients do you see? Select all that apply.
 - a. Newborn
 - b. Pediatric
 - c. Young Adult
 - d. Adult
 - e. Elderly

Background Informaton

1. Did you take a Counseling in Audiology course in graduate school?
 - a. Yes
 - b. No
2. If yes, was it required?
 - a. Yes
 - b. No
3. Have you ever received Professional Development in Counseling in Audiology?
 - a. Yes
 - b. No
4. If yes, was it required?
 - a. Yes
 - b. No
5. If yes to #4, How long was the training?
 - a. Less than one month
 - b. 1-3 Months
 - c. 4-6 months
 - d. > 6 months
6. Patient-centered care is at the core of your practice.
 - a. strongly disagree
 - b. disagree
 - c. agree
 - d. strongly agree
7. Counseling beyond an information transfer should be an integral component to the services an audiologist provides.
 - a. strongly disagree
 - b. disagree
 - c. agree
 - d. strongly agree
8. Audiologists are responsible for giving advice and counseling clients' families on how to best solve the problems associated with hearing loss.
 - a. strongly disagree
 - b. disagree
 - c. agree
 - d. strongly agree
9. On average, how many times do you see an individual client?
 - a. 1-3 times
 - b. 4-6 times
 - c. 6-8 times
 - d. >8 times

The purpose of this study is to determine the extent to which audiologists counsel their clients for the psychosocial stress factors associated with hearing loss as well to determine the adequacy of psychosocial counseling as perceived by patients with hearing loss. I am analyzing three parts of a potential audiology counseling service: educating the client on their hearing loss, equipping the client with practical strategies, and helping clients cope with mental health concerns.

Section 1: Think about your role as an audiologist in your typical work setting. As you respond to the following section, consider how you inform your clients about their hearing loss and their amplification devices.

1. You inform your client what you are testing during a hearing test.
a. Never b. Rarely c. Often d. Always
2. You explain to your client why you are completing each part of the hearing test.
a. Never b. Rarely c. Often d. Always
3. You teach your client what type of hearing loss they have.
a. Yes b. No
4. If yes, do you teach them why it is this type of hearing loss?
a. Yes b. No
5. You give your client a copy of their audiogram.
a. Yes b. No
6. You teach your client how to read their audiogram.
a. Yes b. No
7. You teach your client how to manipulate their amplification device in different settings.
a. Yes b. No
8. Would you find it beneficial to teach a class for your clients for them to learn the basics of their hearing loss, how to read audiograms, and go over the best amplification options for their hearing loss?
a. Yes b. No

Section 2: Think about your role as an audiologist in your typical work setting. As you respond to the following section, consider how you equips your clients with various strategies to navigate any daily concerns that they may have in regard to their hearing loss.

1. You ask your client open-ended questions about their concerns for their hearing loss and their amplification devices.
a. Never b. Rarely c. Sometimes d. Always
2. You ask your client open-ended questions about the challenges they face on a daily basis in regard to their hearing loss.
a. Never b. Rarely c. Sometimes d. Always
3. You give your client multiple strategies to navigate daily challenges concerning their hearing loss (Not including amplification devices. This could include how to advocate for themselves, soundproofing their homes, etc.).
a. Never b. Rarely c. Sometimes d. Always

4. You explain the different amplification device options and why they would best fit each of your clients' lifestyles.
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Always
5. You ask your clients what their concerns are in regard to their hearing loss impacting their family dynamic.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
6. You provide services for the clients' family to address their concerns and inform them the best ways to support the client.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
7. You advise and equip your client to advocate for themselves in situations where they cannot hear.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
8. You ask your client to voice their concerns with hearing well and interacting with others in a social setting.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
9. You ask your client to voice their concerns with hearing well and interacting with others at their work and school.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always

Section 3: Think about your role as an audiologist in your typical work setting. As you respond to the following section, consider how you help your client cope with psychosocial stress factors that relate to their hearing loss.

1. You ask your client open-ended questions concerning their mental health.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
2. You ask your client how hearing loss has negatively impacted their self-esteem and confidence in social settings.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
3. You ask your client if their hearing loss has made them more anxious when communicating with others or when in a crowded social setting.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
4. What do you think is the main reason someone with hearing loss would feel anxious in a social setting?
 - a. They cannot hear others well.
 - b. They do not want others to notice their amplifications devices
 - c. They do not know how to manipulate my amplification devices for specific environments
 - d. They struggle with anxiety in general
5. Your client tells you about psychosocial stressors that could be related to their hearing loss.
 - a. Never
 - b. Rarely
 - c. Often
 - d. Always
6. You ask your client to voice their mental stressors from the hearing loss.
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Always
7. You ask your client to voice their social stressors from the hearing loss.
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Always

8. The clinic at which you currently work offers a support group program for clients and/or their family members?
 - a. Yes
 - b. No
9. How comfortable do you feel counseling your clients for their diagnosis?
 - a. Uncomfortable
 - b. Neutral
 - c. Comfortable
 - d. Very Comfortable
10. How comfortable do you feel talking to your client about their mental health and emotions?
 - a. Uncomfortable
 - b. Neutral
 - c. Comfortable
 - d. Very Comfortable

Consider each of the previous sections when answering the following questions.

1. Do you think patient-centered care includes counseling services in the clinic?
 - a. Yes
 - b. No
2. Do you think counseling services are necessary in an audiology clinic?
 - a. Yes
 - b. No
3. Do you think Counseling in Audiology courses should be required in graduate schools?
 - a. Yes
 - b. No
4. Do you think Professional Development in Counseling in Audiology should be required for Audiologists while they are working?
 - a. Yes
 - b. No
5. Do you think offering counseling services in the Audiology clinic would be beneficial for clients?
 - a. Yes
 - b. No
6. Which of the aspects of counseling in audiology do you think is the most evident during your appointments with your patients?
 - a. Education about the hearing loss
 - b. Strategies for navigating the hearing loss
 - c. Hearing loss impacting mental health
7. Which of the aspects of counseling in audiology do you think is the least evident during your appointments with your patients?
 - a. Education about the hearing loss
 - b. Strategies for navigating the hearing loss
 - c. Hearing loss impacting mental health

APPENDIX E: Client Survey

Survey Statements and Questions: Clients

Demographic Questions:

1. What is your gender?
 - c. Male
 - b. Female
2. What is your age? (Do not complete survey if younger than 16 years old)
 - a. 16-20
 - c. 31-40
 - e. 51-60
 - b. 20-30
 - d. 41-50
 - f. > 60
3. What state are you from?
4. Do you have a unilateral or bilateral hearing loss?
 - a. Unilateral
 - b. Bilateral
5. Were you born with a hearing loss?
 - a. Yes
 - b. No
6. If no, in what age range was your hearing loss identified?
 - a. 0-5 years
 - c. 21-30 years
 - e. 41-60 years
 - b. 6-20 years
 - d. 31-40 years
 - f. > 60 years
6. Do you wear an amplification device?
 - a. Yes
 - b. No
7. If yes, what type of amplification device do you wear?
Drop down options: hearing aid, cochlear implant, FM system, Other
8. Do you wear an amplification device for one ear or for both ears?
 - a. One ear
 - b. both ears
9. How long after your hearing loss diagnosis did you begin to wear your amplification device(s)?
 - a. At onset of hearing loss
 - c. 6-10 years
 - d. 16-20 years
 - b. 1-5 years
 - d. 11-15 years
 - f. >21 years
7. On average, how many times do you see an audiologist in one year?
 - a. Once
 - c. Three times
 - e. Five times or more
 - b. Twice
 - d. Four times
 - f. I do not go on a consistent annual basis

Client Background Information

1. In which environments do you wear your amplification device(s)? Check all that apply.
 - a. School
 - c. Home
 - e. Large group social gatherings (>10 people)
 - b. Work
 - d. Restaurants
 - f. Small group social gatherings (<10 people)
2. In your normal daily routine, how consistently you wear your amplification device(s)?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Always
3. In your normal daily routine, you are reluctant to wear your amplification device(s)...
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Always
4. In which environments are you reluctant to wear your amplification device(s)? Check all that apply.
 - a. School
 - c. Home
 - e. Large group social gatherings (>10)
 - b. Work
 - d. Restaurants
 - f. Small group social gatherings (>10)

- g. I am not reluctant to wear them in any of these settings
5. What is your main reason for being reluctant to wearing these devices?
(Open response)
 6. Did you buy an amplification device the first time it was recommended for you?
a. Yes b. No
 7. If no, what was your main concern for not buying amplification devices?
(Open response)

The purpose of this study is to determine the extent to which audiologists counsel their clients for the psychosocial stress factors associated with hearing loss as well to determine the adequacy of psychosocial counseling as perceived by patients with hearing loss. I am analyzing three parts of a potential audiology counseling service: educating the client on their hearing loss, equipping the client with practical strategies, and helping clients cope with mental health concerns.

Section 1: Think about your role in an audiology clinic as a person with hearing loss. As you respond to the following section, consider how your audiologists informs you about your hearing loss and your amplification devices.

1. You understand what the audiologist is testing throughout a hearing test.
a. Never b. Rarely c. Sometimes d. Always
2. Your audiologist explains what they are testing during a hearing test.
a. Never b. Rarely c. Sometimes d. Always
3. Your audiologist explains why they are completing each part of the hearing test.
a. Never b. Rarely c. Sometimes d. Always
4. You know what type of hearing loss you have.
a. Yes b. No
5. If yes, do you know why it is this type of hearing loss?
a. Yes b. No
6. You are given a copy of your audiogram.
a. Yes b. No
7. Your audiologist explains the audiogram to you.
a. Yes b. No
8. You can read your audiogram without assistance.
a. Yes b. No
9. Your audiologists teach you how to manipulate your amplifications to best suit you in multiple environments.
a. Yes b. No
10. If given the option to attend a one-time class led by an audiologist to learn the basics of your hearing loss, how to read audiograms, and go over the best amplification options for your hearing loss would you take it?
a. Yes b. No

Section 2: Think about your role in an audiology clinic as a person with hearing loss. As you respond to the following section, consider how your audiologists equips you with various strategies to navigate any daily concerns you have.

10. Your audiologist asks you open-ended questions about your concerns for your hearing loss and your amplification devices.
 a. Never b. Rarely c. Sometimes d. Always
11. Your audiologist asks you open-ended questions about the challenges you face on a daily basis in regard to your hearing loss.
 a. Never b. Rarely c. Sometimes d. Always
12. Your audiologist gives you multiple strategies to navigate daily challenges concerning your hearing loss (Not including amplification devices. This could include how to advocate for yourself, soundproofing your home, etc.).
 a. Never b. Rarely c. Sometimes d. Always
13. Your audiologist explains different amplification device options and why they would best fit your lifestyle.
 a. Never b. Rarely c. Sometimes d. Always
14. Your hearing loss impacts your family and friends' dynamic.
 a. Never b. Rarely c. Sometimes d. Always
15. Your family has opportunities to ask your audiologist questions concerning your hearing loss.
 a. Never b. Rarely c. Sometimes d. Always
16. You advocate for yourself in situations where you cannot hear.
 a. Never b. Rarely c. Sometimes d. Always
17. You voice your concern with hearing well and interacting with others in a social event setting to your audiologist.
 a. Never b. Rarely c. Sometimes d. Always
18. You voice your concern with hearing well and interacting with others at your work/school to your audiologist.
 a. Never b. Rarely c. Sometimes d. Always

Section 3: Think about your role in an audiology clinic as a person with hearing loss. As you respond to the following section, consider how your audiologists helps you cope with psychosocial stress factors that relate to your hearing loss.

11. You feel comfortable confiding with your audiologist concerning your mental health.
 a. strongly disagree b. disagree c. agree d. strongly agree
12. Hearing loss has negatively impacted your self-esteem and confidence in social settings.
 a. strongly disagree b. disagree c. agree d. strongly agree
 Why? (Drop Down/Choose all that apply- I cannot hear others well, I do not want others to notice my amplifications devices, I do not know how to manipulate my amplification devices for specific environments, I struggle with self-confidence in general)
13. Your hearing loss has made you more anxious when communicating with others or when in a crowded social setting.
 a. strongly disagree b. disagree c. agree d. strongly agree
 Why?

(Drop Down/Choose all that apply- I cannot hear others well, I do not want others to notice my amplification devices, I do not know how to manipulate my amplification devices for specific environments, I struggle with anxiety in general)

14. You voice your mental stressors to your audiologist.
a. Never b. Rarely c. Sometimes d. Always
15. You voice your social stressors to your audiologist.
a. Never b. Rarely c. Sometimes d. Always
16. Your audiologist asks you open-ended questions about how your hearing loss impacts your mental health.
a. Never b. Rarely c. Sometimes d. Always
17. Do you receive any sort of counseling services?
a. Yes b. No
18. If given the option to receive counseling services in the audiology clinic to address mental health, voice your concerns about hearing loss, and learn more strategies to navigate your hearing loss on the daily basis you would attend these services.
a. Yes b. No
19. If given the option to be placed in a support group with other clients adapting to a hearing loss, would you attend?
a. Yes b. No

Consider each of the previous sections when answering the following questions.

1. Which of the aspects of counseling in audiology do you think is the most evident during your audiology appointments?
a. Education about the hearing loss b. Strategies for navigating the hearing loss
c. Hearing loss impacting mental health
2. Which of the aspects of counseling in audiology do you think is the least evident during your audiology appointments?
a. Education about the hearing loss b. Strategies for navigating the hearing loss
c. Hearing loss impacting mental health

Fill in the Blank

I wish my audiologist had/would _____

REFERENCES

- Anderson, K. L. (2015). Access is the issue, not hearing loss: New policy clarification requires schools to ensure effective communication access. *Perspectives on Hearing and Hearing Disorders in Childhood*, 25(1), 24–36. <https://doi.org/10.1044/hhdc25.1.24>
- Bess, F. H., & Hornsby, B. W. (2014). The complexities of fatigue in children with hearing loss. *Perspectives on Hearing and Hearing Disorders in Childhood*, 24(2), 25–39. <https://doi.org/10.1044/hhdc24.2.25>
- Blank, A., Frush Holt, R., Pisoni, D. B., & Kronenberger, W. G. (2020). Associations between parenting Stress, LANGUAGE comprehension, and inhibitory control in children with hearing loss. *Journal of Speech, Language, and Hearing Research*, 63(1), 321–333. https://doi.org/10.1044/2019_jslhr-19-00230
- Dammeyer, J., Lehane, C., & Marschark, M. (2017). Use of technological aids and interpretation services among children and adults with hearing loss. *International Journal of Audiology*, 56(10), 740–748. <https://doi.org/10.1080/14992027.2017.1325970>
- Daar, L., & Grunblatt, H. (1998). An audiological fear reduction program for a child. *Language, Speech, and Hearing Services in Schools*, 29(1), 45–47. <https://doi.org/10.1044/0161-1461.2901.45>
- Emmett, S. D., & Francis, H. W. (2015). The socioeconomic impact of hearing loss in U.S. Adults. *Otology & Neurotology*, 36(3), 545–550. <https://doi.org/10.1097/mao.0000000000000562>
- English, K., & Archbold, S. (2013). Measuring the effectiveness of an audiological counseling program. *International Journal of Audiology*, 53(2), 115–120. <https://doi.org/10.3109/14992027.2013.837224>
- English, K., Mendel, L. L., Rojas, T., & Hornak, J. (1999). Counseling in audiology, or learning to listen. *American Journal of Audiology*, 8(1), 34–39. [https://doi.org/10.1044/1059-0889\(1999\)007](https://doi.org/10.1044/1059-0889(1999)007)
- Glade, R., Bowers, L., & Baldwin, C. (2018). Incorporating informational counseling in treatment for individuals with hearing loss and their families. *Perspectives of the ASHA Special Interest Groups*, 3(9), 13–26. <https://doi.org/10.1044/persp3.sig9.13>
- Grunblatt, H., & Daar, L. (1994). A support program. *Language, Speech, and Hearing Services in Schools*, 25(2), 112–114. <https://doi.org/10.1044/0161-1461.2502.112>

- Jackson, C. W., Wegner, J. R., & Turnbull, A. P. (2010). Family quality of life following early identification of deafness. *Language, Speech, and Hearing Services in Schools, 41*(2), 194–205. [https://doi.org/10.1044/0161-1461\(2009/07-0093\)](https://doi.org/10.1044/0161-1461(2009/07-0093))
- Luterman, D. (2020). On teaching counseling: Getting beyond informational counseling. *American Journal of Speech-Language Pathology, 29*(2), 903–908. https://doi.org/10.1044/2019_ajslp-19-00013
- Luterman, D. (2021). Counseling parents at the time of diagnosis: Moving toward client-centered practice. *American Journal of Audiology, 30*(1), 226–230. https://doi.org/10.1044/2020_aja-20-00122
- Meibos, A., Muñoz, K., & Twohig, M. (2019). Counseling competencies in audiology: A modified Delphi Study. *American Journal of Audiology, 28*(2), 285–299. https://doi.org/10.1044/2018_aja-18-0141
- Muñoz, K., Ong, C. W., Whicker, J., & Twohig, M. (2019). Promoting counseling skills in Audiology Clinical Supervisors: Considerations for Professional Development. *American Journal of Audiology, 28*(4), 1052–1058. https://doi.org/10.1044/2019_aja-19-0060
- Prendergast, S. G., Lartz, M. N., & Fiedler, B. C. (2002). Ages of diagnosis, amplification, and early intervention of infants and young children with hearing loss: Findings from parent interviews. *American Annals of the Deaf, 147*(1), 24–30. <https://doi.org/10.1353/aad.2012.0198>
- Searchfield, G. D., Kaur, M., & Martin, W. H. (2010). Hearing aids as an adjunct to counseling: Tinnitus patients who choose amplification do better than those that don't. *International Journal of Audiology, 49*(8), 574–579. <https://doi.org/10.3109/14992021003777267>
- Souza, P. E., & Hoyer, W. J. (1996). Age-related hearing loss: Implications for counseling. *Journal of Counseling & Development, 74*(6), 652–655. <https://doi.org/10.1002/j.1556-6676.1996.tb02306.x>
- Wheeler, L. R., & Tharpe, A. M. (2020). Young children's attitudes toward peers who wear hearing aids. *American Journal of Audiology, 29*(2), 110–119. https://doi.org/10.1044/2019_aja-19-00082
- Whicker, J. J. (2020). Strategies for increasing counseling competencies among audiology graduate clinicians: A viewpoint. *American Journal of Audiology, 29*(3), 528–532. https://doi.org/10.1044/2020_aja-20-00036

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