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Jalin K. Finai
Utah State University

Karen Munoz
Utah State University

Clarissa W. Ong
Utah State University

Grayson M. Butcher
Utah State University

Lauri Nelson
Utah State University

Michael P. Twohig
Utah State University

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Performance Feedback to Increase Use of Counseling Skills

Jalin K. Finai, B.S.,¹ Karen Muñoz, Ed.D.,² Clarissa W. Ong, B.A.,³
Grayson M. Butcher, B.A.,⁴ Lauri Nelson, Ph.D.,² and
Michael P. Twohig, Ph.D.³

ABSTRACT

Counseling is a critical component of audiological care and when implemented purposefully can yield multiple benefits for patients. Professional guidelines indicate that counseling is within the scope of practice for audiologists, yet research has shown that audiologists feel unprepared and are not comfortable providing adjustment counseling. This may be due to inadequate counseling training in audiology graduate programs. To identify ways to address this counseling training gap, this study examined the use of performance feedback to increase counseling skills among audiology graduate students. In this study, participants ($n = 5$) were recorded during clinical session encounters, and recordings were coded for time spent counseling. A licensed clinical psychologist reviewed the recordings and provided individual performance feedback to participants over the course of the study. Time spent counseling increased by the end of the study, although improvement varied across participants. Results suggest that performance feedback can be used as a method to increase counseling skills in audiology students. However, factors, such as participant motivation, feedback timing, and prerequisite counseling skills, may influence response to feedback. More research is needed on ways to maximize gains from feedback, as well as other methods to improve counseling skills in audiology students.

KEYWORDS: Counseling, audiology, performance feedback

Learning Outcomes: As a result of this activity, the participant will be able to (1) describe how performance feedback can be implemented in audiology graduate programs and (2) list the main variables that influence individuals' response to performance feedback.

¹Utah State University, Logan, Utah; ²Department of Communicative Disorders and Deaf Education, Utah State University, Logan, Utah; ³Department of Psychology, Utah State University, Logan, Utah; ⁴Department of Behavior Analysis, University of North Texas, Denton, Texas.

Address for correspondence: Jalin K. Finai, B.S., Utah State University, 2620 Old Main Hill, Logan, UT 84322 (e-mail: jalin.kaulana.finai@aggiemail.usu.edu).

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Counseling practices within audiology are described to address both informational and adjustment concerns of patients and their families.^{1,2} Informational counseling entails educating patients on an array of topics, such as the nature and degree of hearing loss, as well as technical information regarding hearing aids and other hearing assistive technology. Adjustment counseling focuses on addressing psychosocial concerns and emotions related to hearing loss, such as stress, anger, sadness, and grief.² Addressing both informational and adjustment counseling is necessary to effectively meet the needs of patients and their families.² Although the necessity and benefits of providing both informational and adjustment counseling have been established, audiologists are better prepared and spend more time addressing technical information than addressing adjustment or emotional concerns associated with hearing loss.³⁻⁶

Hearing loss can have a significant negative impact on communication and quality of life.^{7,8} If not appropriately managed, children with hearing loss are at a much greater risk for delays in communication, language, and literacy development.⁹⁻¹¹ Patients and families also anticipate challenges learning how to live with hearing loss and to manage it effectively on a daily basis. As such, receiving a diagnosis of hearing loss may evoke emotional and psychosocial concerns, including sadness, disappointment, fear, and worry.^{7,8,12-14} How audiologists respond to these concerns influences patient adherence and satisfaction.^{12,15} For example, acknowledging and responding to patients' psychosocial concerns by eliciting and validating their concerns and inquiring about their expectations can lead to an increased likelihood of adherence to rehabilitation recommendations.^{12,16} Effective counseling leads to enhanced understanding, acceptance, and adjustment to hearing loss.¹⁷ It also can lead to adherence with treatment recommendations, enhanced benefit from treatment, and satisfaction with treatment.^{2,18} Therefore, counseling practices play a critical role in helping patients and their families manage hearing loss effectively.

PATIENT-CENTERED CARE

A patient-centered approach is recognized as an indicator of quality of care and has become a

standard component of health care.¹⁹ A patient- or family-centered approach reflects the shift from a biomedical model to a biopsychosocial model in the delivery of health care services over the past few decades.²⁰ Whereas a biomedical model is physician centered and focuses on problems and symptoms,¹⁵ a biopsychosocial model views the patient as a whole and recognizes the importance of the patient's social, psychological, and physical well-being.²¹

Patient-centered interactions promote patient involvement and individualized care.^{22,23} When using patient-centered communication, health care providers are better able to understand patient needs and perspectives, which then enables them to provide patients with the information and support they need to engage in the intervention process.²² Active patient participation, in turn, leads to improved self-management, shared decision making, and adherence.^{3,23,24}

Neglecting the human dynamics of hearing loss (i.e., what it is like to be a person experiencing hearing loss) can result in poor acceptance of hearing devices and low levels of patient satisfaction.¹⁵ Training counseling skills in audiology would support a shift to patient-centered care and would better allow audiologists to address social, psychological, and physical concerns related to hearing loss. This is because training in counseling provides audiologists with the skills necessary to address psychosocial concerns associated with hearing loss, including interpersonal and communication skills. Addressing these concerns may lead to better clinical and life outcomes. Thus, audiologists—the professionals most qualified to counsel those with difficulties relating to hearing problems—need to be equipped with counseling skills.¹⁷

COUNSELING IN AUDIOLOGY

Even though counseling is recognized as important in audiology, no specific guidelines for counseling instruction are provided to Au.D. graduate training programs. The lack of counseling-related guidelines and evidence-based training produces wide variability of counseling skills among graduate students. Yet, counseling competencies, like other skills, require intentional and structured instruction for effective knowledge and skill acquisition. For example, foundational

Figure 1 Time spent providing counseling across sessions for each participant (P) before and after intervention. Dashed line indicates point of intervention.

knowledge from coursework provides a theoretical context for the role counseling plays in patients' acceptance and adherence. However, not all Au.D. programs offer a counseling course. In a recent study, Whicker et al found that 13 of the 53 Au.D. programs surveyed did not offer a counseling course.²⁵

Studies have investigated outcomes from online courses and workshops, revealing improvement in counseling attitudes and/or abilities after course completion based on audiologists' self-report.^{6,16,26} However, self-perception of improvement may not translate into actual changes in counseling behavior. In a longitudinal study, Muñoz et al found that improvement in self-perceived counseling skills from pretraining to 6 months post-training was not related to changes in specific counseling behaviors.⁶

Inadequate counseling preparation and supervision in audiology graduate programs may explain deficits in counseling skills among profes-

sional audiologists. Indeed, converging evidence suggests that audiology students receive less training in counseling than is necessary and feel unprepared in the area of counseling.^{4,27-29} Studies have revealed that audiologists do not use skills to assess emotional issues and often miss opportunities to address patients' emotional concerns.^{6,12,30} Another study that looked at communication patterns during the history-taking phase, an important part of a patient-centered consultation, found that audiologists interrupted the patients during their initial talk and also initiated the appointment by asking closed questions, leading to verbal dominance by the audiologist. These findings indicate that communication skills of audiologists are not in line with patient-centered communication principles.³

Limited research has been conducted on counseling skills training in audiology. One study evaluated counseling course effectiveness using a pre- and postcourse case-based questionnaire to identify student responses to psychosocial aspects of hearing loss.³⁰ Other studies have investigated the effectiveness of using standardized patient encounters to practice counseling skills.^{31,32} All of these studies demonstrated student receptiveness to counseling instruction; however, no research has examined the type or degree of instructional support students need to apply counseling skills in session. Such research is particularly important for maintenance of counseling practices. Research into effective methods that support the implementation of counseling skills in clinical practice is important because it can guide development of counseling instruction guidelines for Au.D. graduate programs. The purpose of the current study was to explore graduate students' response to performance feedback on their counseling behavior in clinical practicum sessions.

METHODS

All study methods were reviewed and approved by the Utah State University Institutional Review Board. The present study used a multiple baseline design, which has research advantages over a simple case series. A multiple baseline design allows demonstration of replication across participants when changes are only seen after the intervention has been administered, not before. It also staggers when the intervention occurs such

that changes are observed in certain participants prior to initiating the intervention with later participants. This controls for passage of time, other external events that might affect the dependent variable, or the possible effects of observation or participation in the study. These are commonly used designs when a small number of participants are available for a study.³³

Participants and Setting

To protect confidentiality, general participant information is provided. Our sample comprised a relatively equal mix of male and female subjects who were mostly second-year audiology graduate students. Participants 1 to 3 of the sample had received counseling training (i.e., counseling course, workshop, discussion group). The study was conducted during hearing device monitoring appointments at the Utah State University Adult Audiology Clinic and Utah State University Pediatric Audiology Clinic.

Procedures

Participants received individualized educational intervention and performance feedback for counseling skill development from a psychology faculty member. The intervention was a brief didactic training that focused on the importance of assessing and addressing thoughts, feelings, or bodily sensations that might interfere with adherence to the audiology protocol, using skills such as validation, goal setting, and action planning. The participants were taught to assess around these variables using open-ended questions and validation. Participants were taught to assess around psychological variables at the beginning and end of sessions and to look for instances when psychological issues arose during the technological phase of the session. The dependent variable measured was time spent using counseling skills. This includes addressing issues concerning personal adjustment and/or emotions experienced by the patient and family members.

There were two phases of the study: baseline and active training on counseling skills. Baseline measurement entailed recording a minimum of three sessions with stable mean, variability, and trend. After a stable baseline was obtained, phase II was an educational inter-

vention on assessment of emotions and goal setting/action planning as well as performance feedback after each observed session. All observed sessions were audio-recorded. A member of the research team listened to the sessions to score for occurrence of target variables.

Each statement made by a participant during an observation session was determined to be related to assessment of a technological issue, assessment of an emotional issue, small talk, or goal setting/action planning. Each utterance was coded and recorded on a data sheet.

The counseling educational intervention involved individualized feedback with the student to address counseling skills the student needed to implement to assess patients' emotions and challenges related to their hearing loss and management of their hearing devices and to facilitate goal setting/action planning to address the reported challenges.

Performance feedback included a conversation each week between recorded sessions with the student to address skills implemented related to the counseling targets and missed opportunities. The conversations were supportive and addressed student questions and/or concerns in implementing the counseling components within audiology sessions. In each feedback session, a portion of a session was reviewed and feedback was given on appropriate actions by the audiologist.

Analyses

Consistent with analysis of single-subject designs, descriptive statistics were used to report percentage of change over time within subject, for the time each participant spent counseling (i.e., addressing emotional and goal setting/action planning components) within their conversations with patients during their hearing device appointments.

RESULTS

Participant 1

Preintervention, participant 1 spent an average of 1.67 minutes (standard deviation [SD] = 0.58) on counseling. Participant 1 was the only participant who engaged in counseling at every appointment, both pre- and postintervention.

Postintervention, the average time spent counseling increased to 3.17 minutes ($SD = 1.44$).

Participant 2

Participant 2 spent an average of 1.00 minute ($SD = 1.00$) providing counseling in appointments preintervention. In the first appointment postintervention, counseling time was maintained at preintervention levels. However, in the following appointment, an increase in time spent providing counseling was observed. The average time spent providing adjustment counseling postintervention was 3.00 minutes ($SD = 1.63$).

Participant 3

Participant 3 had the lowest average amount of time spent counseling preintervention with a mean of 0.17 minutes ($SD = 0.29$). Postintervention, the average time spent counseling in appointments increased to 2.67 minutes ($SD = 0.58$). Participant 3 showed the greatest improvement with an increase of 2.50 minutes in average time spent counseling.

Participant 4

Preintervention, participant 4 spent an average of 0.67 minutes ($SD = 0.41$) providing counseling in appointments. Postintervention, average counseling time increased to 1.00 minute ($SD = 0.00$). Participant 4 showed the least amount of increase in average time spent counseling; 0.33 minutes.

Participant 5

Participant 5 spent an average of 0.67 minutes ($SD = 0.75$) providing counseling in appointments preintervention. Postintervention, the average time spent counseling increased to 1.75 minutes ($SD = 1.06$).

Summary

On average, participants spent 0.69 minutes ($SD = 0.73$) providing counseling in appointments preintervention. Results showed that there was an increase in average time spent counseling of 1.81 minutes with a postintervention average of

2.50 minutes ($SD = 1.25$). In addition, all participants engaged in counseling for some amount of time postintervention, whereas preintervention, 80% of participants had at least one appointment in which no counseling occurred.

In summary, all five participants showed an increase in average time spent counseling in appointments (see Fig. 1). Participants 1, 2, and 3 showed a better response to the intervention than participants 4 and 5. Participants 4 and 5 started with lesser amounts of time spent counseling and maintained lesser amounts postintervention with a slight increase from preintervention.

DISCUSSION

The present findings indicate that performance feedback may be an effective method for teaching counseling skills to audiology graduate students. Although there was variability in participants' response to the intervention, all participants showed an overall average increase of 1.8 minutes in time spent counseling. An improvement of 1.8 minutes represents an 82% increase in counseling behavior compared with the baseline amount of time spent assessing and addressing psychological variables. Furthermore, an observational study that looked at audiologists' communication behavior during regular hearing device management appointments found that they spent an average 2.2 minutes assessing and addressing psychological variables.⁶ Although other studies have demonstrated self-reported improvement following intervention,^{6,16,26} this study contributes to the extant literature by using an objective measure of counseling behavior.

The variability in intervention response can be attributed to several factors. First, participants might not have viewed counseling as an essential part of audiology and were thus not invested in the study. If clinicians do not view counseling as a critical component, they may be less willing to implement any suggested change. Future studies may benefit from assessing participant motivation and addressing deficits in this area. Additionally, use of the term *counseling* may be a factor in how students respond. Audiologists can and should use counseling skills to engage effectively with patients. Audiologists, however, are not professional counselors and their communication with patients is related to audiological

services. It may be helpful to discuss counseling skills in the context of comprehensive communication with patients.

Second, participants might not have possessed the prerequisite counseling skills needed to make gains from the intervention. Without any prior knowledge of counseling, it might have been more difficult for participants to apply skills, such as emotion recognition and validation, given that it is not always easy to recognize and respond appropriately to emotional concerns. In support of this explanation, the participants who had received previous counseling training (i.e., a required course in the Au.D. program, participation in a counseling workshop, and/or participation in working group discussions focused on counseling in audiology) showed the largest improvements. Thus, their prior knowledge of counseling skills may have enhanced their ability to improve their counseling skills when provided with performance feedback.

Third, the timing of feedback was inconsistent. Ideally, participants would have received their performance feedback within a few days of the recorded appointment to maximize application of knowledge and skills. However, due to scheduling conflicts, this was not possible. In particular, feedback timing may have influenced practice of skills for participant 1. When the period between feedback and recorded sessions was fewer than 5 days, an increase in counseling time was observed. However, the time lapse between the feedback session and recorded session 6 was 15 days, and a decrease in counseling time was observed. It is possible that participant 1 did not retain the recommendations discussed in the feedback session after an unsupervised gap of more than 2 weeks. Conversely, a time lapse of nine days between a feedback session and recorded session for participants 2 and 3 still resulted in an increase in counseling time. Future studies should code feedback timing as an independent variable to determine its importance.

This study provides an objective measure of the extent to which counseling skills taught in an instructional setting transfer to a practical clinical setting, as well as possible directions for increasing application of counseling skills. As this study has shown, performance feedback can be an effective

method for clinical supervisors to use when training students' counseling skills. However, feedback timing, baseline motivation, and variability in previous counseling training may influence how responsive students are to the feedback. Moreover, a psychology faculty member provided instruction in the present study, whereas audiologists are most likely to play the role of clinical instructors in practice and will need to have the knowledge of counseling skills and evidence-based methods for helping the students improve these skills. Thus, another factor worth examining is the effectiveness of counseling feedback provided by audiology clinical instructors. Future studies should look at the structure of feedback (e.g., number of sessions, frequency) needed for counseling skills to be implemented and maintained. Such information can be used to develop a counseling curriculum that will better prepare audiology graduate students for patient-centered care. For example, addressing low motivation to implement counseling practices, including counseling instruction as a program requirement, and establishing counseling instruction as an integral—rather than an adjunct—part of the curriculum may increase engagement in and response to counseling training.

To improve patient adherence and satisfaction through patient-centered care, graduate students need to have evidence-based training in counseling skills. In other health care professions, training in communication skills and intentional counseling has shown improvement in communication skills as well as increased confidence in the emotional areas of care.^{34,35} It is reasonable to expect that training in these areas for audiologists would have similar results. With proper training and supervision of these skills, audiology students should be better equipped to address emotional concerns, provide the support that is needed for patient self-management, and improve patient outcomes.

Limitations

First, the study sample was small ($n = 5$), self-selected, and homogeneous (e.g., 100% white, ages ranged from 22 to 27), limiting generalizability. In addition, participants were enrolled in an audiology graduate program that may be considered more counseling focused than most

audiology graduate programs., making it difficult to generalize our results to other audiology graduate programs as well. Second, we did not solicit participants for feedback during the study. Qualitative data in the form of participant feedback could have provided a clearer picture of the variables that helped or hindered practice of counseling behaviors in session. Furthermore, such data could be used to troubleshoot intervention implementation as well as make modifications to increase acceptability. Finally, no follow-up observations were conducted, which precluded assessment of maintenance of gains.

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