FAMILY COUNSELING INTERVENTION FOR PRE-SERVICE SPEECH-LANGUAGE PATHOLOGISTS

by

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FAMILY COUNSELING INTERVENTION FOR PRE-SERVICE SPEECH-LANGUAGE PATHOLOGISTS

A Thesis for the Degree Master of Science

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ABSTRACT

The purpose of this study was to evaluate the effectiveness of a short-duration, pre-service training program on the counseling knowledge of speech-language pathology (SLP) students and their motivation to counsel. Fifty students in a Communication Sciences and Disorders department participated in this study: thirty undergraduate and twenty graduate students. The participants were randomized into two groups, an intervention group and a control group. Each participant completed a pre-and post-test to measure (a) emotion identification, (b) emotion approach, and (c) jargon free responses to pre-recorded counseling situations. All participants completed an emotional intelligence scale, a motivation scale, and identified previous counseling experience. The intervention group completed a two-session (two hours each) counseling training and the control group received no intervention. Analysis of variance demonstrated that participants who completed four hours of counseling training significantly increased their emotion identification and emotion approach behaviors. There was not a significant difference between groups for jargon free responses due to near ceiling results on the pre-test across both groups. Thus, pre-service SLP students who explicitly learn counseling material will increase in knowledge and motivation to use emotion approach responses in clinical scenarios.

Keywords: communication disorders, counseling, pre-service training, students

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Intervention was based on principles from David Luternman's book, *Counseling Persons with Communication Disorders and Their Families.*

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INTRODUCTION

Counseling falls within the scope of practice of a speech-language pathologist (SLP; ASHA, 2016). The American Speech-Language-Hearing Association (ASHA) states that SLPs counsel patients, family members, and caregivers by providing education, guidance, and support during therapy. Specifically, "the role of the SLP in the counseling process includes interactions related to emotional reactions, thoughts, feelings, and behaviors that result from living with the communication disorder, feeding and swallowing disorder, or related disorders" (ASHA Scope of Practice in Speech-Language Pathology, 2016, para. 26). Although counseling is within SLP's scope of practice, professional preparation programs have been slow to directly train students in counseling (Friehe, Bloedow, & Hesse, 2004). Surprisingly, only nine out of the top fifty masters programs, as ranked by U.S. News and World Report 2017 (U.S. News & World report, 2017), require students to take a course who content is explicitly devoted to counseling. It is understandable that students and clinicians still report feeling unprepared or uncomfortable counseling persons with communication disorders and their families (Sekhon, J. K., Douglas, J., & Rose, M. L., 2015; Thistle & McNaughton, 2015). The purpose of this study was to evaluate the effectiveness of a short-duration, pre-service training program on the counseling knowledge of SLP students, defined as emotion identification and use of emotion approach behaviors, and SLP student's motivation to use counseling strategies within a clinical setting.

Need for counseling skills in speech-language pathology

Research and practitioner literature indicate that SLPs find themselves in situations where counseling knowledge and skills are needed in a variety of settings. In David Luterman's book, *Counseling Persons with Communication Disorders and Their Families,* Luterman states that

diverse groups of people living with communication disorders and their families tend to respond to catastrophic events in ways that entail loss and a change in identity. Although the display of the emotions is unique to each individual, and the content is unique to each disorder, the grieving process is similar (Luterman, 2008). SLPs will likely need to counsel persons with communication disorders and their families through their emotions and grief associated with communication or related disorders while providing services. For example, Blood and colleagues, (Blood, G. W., Boyle, M. P., Blood, I. M., & Nalesnik, G. R., 2010) addressed the need for counseling intervention for SLPs working with children who stutter. This study sent a survey regarding children who were bullied as a result of stuttering to 475 SLPs. The survey results indicated that SLPs considered physical and verbal bullying a serious issue. To the researchers' surprise, the majority of SLPs did not consider relational bullying a serious problem, regardless of whether or not stuttering was present (Blood et al., 2010). In this case, clinicians working with children who stutter needed information about emotions associated with stuttering. There was also a need to equip the clinicians with knowledge of counseling strategies used to address relational or emotional bullying related to communication disorders.

Counseling also occurs frequently with adults who have communication disorders, such as persons with aphasia secondary to a stroke. A study that administered a 26-item web-based survey to 111 SLPs found that SLPs observed a need for counseling for persons with aphasia but also reported feeling uncomfortable and unskilled in counseling. In addition to feeling unprepared, SLPs report using several avoidance behaviors when emotional issues arise in aphasia therapy (Sekhon, Douglas, & Rose, 2015). It is critical to support the therapeutic alliance by equipping SLPs with skills to recognize and press into emotions rather than avoid them during therapy.

Caregivers of persons with communication disorders (i.e. parents of children participating in early intervention) also experience a need for counseling. Friehe, Bloedow, and Hesse (2004) conducted a study addressing the role of counseling with families of children with communication disorders in early intervention services. The authors recognized the importance of SLPs in the facilitation of positive coping strategies. Therefore, SLPs working with the early intervention population need counseling knowledge and skills to adequately perform their job. Current research clearly conveys that persons with communication disorders and their family members experience ever-changing emotions as a result of a communication or related disorder. It is the SLP's responsibility to identify emotions and to create an environment where individuals can express emotions.

Pre-service training and counseling

Few studies have evaluated the effectiveness of pre-service programs on specific counseling skills of students. Caty, Kinsella & Doyle (2015) found that reflective practice as a counseling tool is used in pre-service programs, but is often poorly defined and does not include an explicit framework. Thistle and McNaughton (2015) found that brief direct training can change students' active listening skills. Some resources, such as David Luterman's book, *Counseling Persons with Communication Disorders and Their Families,* (2008) outline effective ways of teaching counseling skills to professionals working with persons with communication disorders and their families. Luterman (2008) explicitly identified the emotions associated with communication disorders to equip professionals with emotion approach strategies to support the therapeutic alliance in a clinical setting. However, no literature in the field of communication

sciences and disorders addresses the effectiveness of preparing pre-service professionals for emotion identification and approach behaviors, which are important components of counseling.

Although there is not a body of literature that focuses on the best way to teach counseling to pre-service SLPs, there is literature on how to effectively tailor teaching strategies to benefit adult learners. Dunst and Trivette (2009) performed a meta-analysis to synthesize adult learning approaches and techniques. From this meta-analysis, researchers formed an adult learning model, PALS (Participatory Adult Learning Strategy), to promote future effective adult learning opportunities. Researchers combined the most successful adult learning techniques from the meta-analysis which included real life application, pre-and post-class assessment, assessment of strengths and weaknesses, and learner input to create PALS. An ideal counseling training model for pre-service SLPs would include the principles found in PALS. Principles may include explicitly teaching content through a multimodality approach (i.e. lecture, videos, guest speakers), providing students with an opportunity to practice using the knowledge learned (i.e. role playing), and providing an opportunity to self-reflect and express personal input during and after the training.

The purpose of this study was to evaluate the effectiveness of a short-duration, pre-service training program on the counseling knowledge of SLP students, defined as emotion identification and use of emotion approach behaviors, and counseling motivation of SLP students. This study will help determine if explicitly teaching counseling content in a short-term seminar and providing an opportunity for students to practice counseling in a natural setting will increase students' counseling knowledge and motivation in clinical scenarios. Knowledge regarding the effectiveness of a short-duration counseling training will provide practical

information on the need for counseling and how to teach counseling content to pre-service SLPs in the future. The researchers addressed the following two research questions:

1. Will a short-term training increase student identification of emotions underlying common statements about communication disorders?
2. Will students increase their use of appropriate emotion-approach responses to statements about communication disorders?
3. Will students report more interest in counseling following the training?

METHODS

Participants

Fifty undergraduate and graduate level students in a Communication Sciences and Disorders department in a mid-sized, private mid-western university were recruited for this study. Researchers did not exclude individuals from participating based on age, socio-economic status, gender, race, or ethnicity. Participants were randomized to one of two groups: a control group or an intervention group. At the beginning of the study, participants in both groups completed an emotional intelligence scale (Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T. Golden, C. J., et al.1998), a counseling motivation scale (Carr, K., Schrodt, P., & Ledbetter, A. M. 2012), and answered two questions regarding previous counseling experience. See Table 1 for participant information.

Procedures

Participants in the control group completed a pre-test and post-test. Participants in the intervention group completed a pre-test, four hours of counseling training, and a post-test. Participants in the control group were offered an opportunity to participate in the counseling training after the study was complete.

Pre-Test and Post-Test Administration. The participants were required to participate in a pre-test and post-test to assess their use of emotion avoidance and emotion approach responses during clinical scenarios. The assessments were administered to all participants in a group format (i.e., all participants attended one session to complete the measure). During the pre-test, all participants completed an emotional intelligence scale (Schutte, N. S., Malouff, J. M., Hall, L.

E., Haggerty, D. J., Cooper, J. T. Golden, C. J., et al.1998), a motivation to counsel scale (Carr, K., Schrodt, P., & Ledbetter, A. M. 2012), responded to two questions regarding previous counseling experience, and provided ten written responses to pre-recorded videos. During the post-test, all participants completed a motivation to counsel scale (Carr, K., Schrodt, P., & Ledbetter, A. M. 2012) and provided ten written responses to pre-recorded videos.

Emotion Approach and Avoidance Assessment. Assessment of emotion identification and emotion approach behaviors occurred through participant-generated responses to prerecorded videos of adults who simulated the caregiver interview portion of a diagnostic communication evaluation. One scenario involved a parent of a child with a communication disorder and the other involved a spouse of an individual with a traumatic brain injury. During the video simulation, each adult provided five statements that participants were asked to respond to. Luterman (2008) identified five emotions particularly associated with communication disorders: denial (grief), inadequacy, fear, guilt, and vulnerability. Luterman (2008) also identified statements that are indicators of each emotion (i.e., "Can you tell me what to do? I'm the parent and you're the professional?" to indicate emotions of inadequacy). Each adult produced similar statements that represented each of these five emotions. The actors in the simulations also gave nonverbal indicators of emotion (i.e., fidgeting to indicate nervousness).

The pre-and post-test assessment required participants to provide a written response to statements that indicated each emotion. Participants responded to a total of ten statements (two statements per emotion) during the pre-test assessment and again during the post-test assessment. The researcher provided context to the video prior to administering the assessment to the participants. The parent and spouse made statements as the interview progressed and the participants provided a written response to each statement as if they were the clinician in the

interview scenario. In the post-test, the same actors were used for the post-test videos to communicate emotion statements, and those emotion statements remained similar from pre- to post-test. See appendix A for pre-and post-test script. To control for test re-test variability the researchers counterbalanced video presentations (i.e., the "parent" video was shown to 25 participants from the intervention and control group first and the "spouse" video was shown to the other participants first during the group assessment).

Emotion Approach and Avoidance Coding. All participants' responses were coded according to the following behavior criteria relative to knowledge of counseling and emotions associated with communication disorders. First, researchers wanted to determine whether the participant identified an emotion present in the statement. Identification of emotion included explicitly naming a related emotion in the response, rather than providing content information. In the case example, "Can you tell me what to do?", a participant could identify the emotion by saying, "It sounds like you're feeling unsure of yourself right now" and that was counted as an emotion identification response. A non-identification emotion response would include responding with content information such as, "I think you should begin therapy twice each week." The first author and research coder counted any emotion mentioned by a participant, not only the emotions targeted by the authors in the design of the assessment.

Second, we determined whether the participant used an effective emotion-approach behavior (e.g., counterquestion, paraphrasing, reframing, sharing self, affirmation) in response to the statement. Emotion-approach behaviors included those defined by Luterman (2008). In the case example, "What causes hearing loss?", a participant could provide an emotion approach response by using a counterquestion, "What all do you know about hearing loss?" rather than providing specific content information on how hearing is developed in utero.

Third, the coders evaluated whether the participant provided a response free from professional jargon. Skilled counseling involves minimal use of field-specific terminology without an explanation (Luterman, 2008). Possible examples of jargon may include use of acronyms such as "ASHA" or "TBI" or field specific terms such as "fast mapping." To evaluate jargon in responses, the first author, primary thesis mentor, and a third coder evaluated each response form for the presence of jargon.

Motivation Assessment. Participant motivation to counsel before and after counseling intervention was assessed via a general motivation scale (Carr, K., Schrodt, P., & Ledbetter, A. M. 2012). The scale included eight response items and participants were asked to rank their feelings about this training program on a scale from one to seven. Half of the items were inversed (i.e., motivated or unmotivated and not stimulated or stimulated) to control for unreliable participant responses. This motivation scale was administered to each participant during the initial baseline measure and the final baseline measure.

Counseling Training Intervention. The intervention was developed based on the book *Counseling Persons with Communication Disorders and Their Families* by David Luterman (2008). The first author selected the following themes to address in the counseling training: mindfulness, emotions associated with communication disorders, stages of grief associated with communication disorders, and possible responses to emotions regarding communication disorders.

The first author and primary mentor developed a protocol for teaching each of the topics. The structure of the counseling training was developed based on the principles from Participatory Adult Learning Strategy (PALS) (Dunst, 2009). The training included a multimodality approach to learning that included: content teaching, testimonial videos, family in-

person story sharing, opportunities to role-play emotion identification and "real-life" application, and a time of self-reflection.

The first author facilitated two intervention sessions over the course of two consecutive weeks, each session lasting two hours. Each participant received the intervention in a group setting at the university clinic and desks were arranged in a circle to promote effective discussion. During the first two-hour intervention session, the instructor focused on the topic of mindfulness, emotions associated with communication disorders, and stages of grief associated with communication disorders. The second two-hour intervention session addressed possible responses to family counseling: content, counterquestion, affect, reframing, sharing self, and affirmation. The majority of this session was spent with participants role-playing using emotion approach responses to common clinical scenarios.

Mindfulness was taught regarding mindfulness within one's self, of the situation, and mindfulness of others (Raab, 2014). The content was first taught through a PowerPoint presentation to establish concrete knowledge of the material. The researcher then played videos of popular television shows to provide examples of competent and incompetent mindfulness within various situations. Next, the researcher modeled mindfulness through a clinical example and participants were provided with an opportunity to role play using mindfulness in mock clinical scenarios. Lastly, the participants engaged in a time of self-reflection to consider times when their own mindfulness was successful and unsuccessful. Mindfulness was addressed to promote clinician self-awareness during therapy sessions.

The second topic addressed during the first counseling training session was the emotions associated with communication disorders. The emotions associated with communication disorders included: inadequacy, anger, guilt, vulnerability, and confusion. The definition and

explanation of these emotions were taught through a PowerPoint presentation. A video of a family testimonial was presented to provide a concrete example of emotions associated with communication disorders. Following the video, participants engaged in a group discussion regarding which emotions were present in the video. Next, the researcher modeled scenarios where each emotion may present itself within a clinical setting. The participants were then presented with an opportunity to role play identifying emotions in mock clinical settings. Lastly, participants were encouraged to share experiences where they had seen or expect to see emotions arise during therapy sessions.

The last topic addressed during the first counseling training was the four stages of grief. The stages of grief include: denial, resistance, affirmation, and integration. During this session, the researcher taught the content through a PowerPoint presentation and discussed examples of how each stage may manifest for families in the clinical setting. To end this session, the researcher provided participants with time to reflect on times when they were grieving and to describe their own grieving process.

The second counseling training addressed possible responses to family counsel: content, counterquestion, affect, reframing, sharing self, and affirmation. The researcher taught these strategies through a PowerPoint presentation. Next, a guest speaker came in to share her experience working with healthcare teams for her daughter's communication disorder. Following the family testimonial, the participants engaged in a discussion labeling emotions presented by the guest speaker and identifying interactions with healthcare teams that went well and did not go well. The group suggested ideas of how this family's experience could have improved if healthcare professionals were equipped with counseling knowledge. The researcher then modeled how to use each of these strategies and provided multiple opportunities for the

participants to role play. Each participant played the role of a clinician and a family member during the role-playing activity. The researcher used emotional clinical scenarios listed in David Luterman's book *Counseling Persons with Communication Disorders and Their Families* (2008) and sought common emotion examples that have arisen from current Speech-Language Pathologists. Lastly, the session ended with a time of self-reflection to address the participants' opinions of the counseling training sessions and the researcher and participants discussed how to apply the content from these courses to future clinical situations.

Reliability

Initially, the primary author coded 100% of the participants' responses on the pre-test and post-test measure. Then, an undergraduate research assistant, independent of this research study and unfamiliar with group assignment or hypotheses, in the department of Communication Sciences and Disorders re-coded data from 100% of participant responses across the pre-test and post-test measure. Reliability was calculated by using a point-by-point agreement. (Orlikoff, R. F., Schiavetti, N., & Metz, D. E. 2015).

Prior to coding, the research assistant was required to attend an in-person two-hour training to learn the coding system. The researcher provided a coding manual to the research assistant (see Appendix B for attached manual). For example, to code for emotion approach or emotion avoidance responses, the assistant was given the definition of each emotion approach strategy (counterquestion, affect, paraphrasing, self-sharing, and affirmation) and an example of how each strategy may be used in a response. The research assistant was required to collect data on a provided data collection sheet (see Appendix C for a sample data collection form).

Across pre-and post-test and across groups, reliability remained above 94% percent in case-by-case comparisons (96.5% agreement for emotion identification coding, 94.3% agreement for emotion-approach behavior coding, 98.5% agreement for coding of jargon-free responses).

RESULTS

The overall purpose of this study was to evaluate the effectiveness of a short-duration, pre-service training program on the counseling knowledge of SLP students, defined as emotion identification and use of emotion approach behaviors, and counseling motivation of SLP students. Each participant completed a pre-test prior to the intervention and a post-test following the intervention. To evaluate potential between-group differences (emotional intelligence, motivation for counseling pre-test, or experience with counseling in other coursework) that could affect response to intervention, *t-tests* were conducted. Emotional intelligence did not differ between groups ($t(48) = .82$, $p = .42$), and neither did pre-test motivation for counseling ($t(48) = .24$, $p = .81$) or the number of hours spent in other counseling training or practice (usually reported as discussing counseling in other coursework; $t(48) = .39$, $p = .70$).

The first research question addressed whether a short-term training would increase participant identification of emotions underlying common statements about communication disorders and if participants would increase in use of appropriate emotion-approach responses to real-life counseling scenarios. For each response, a mixed-design analysis of variance (ANOVA) was calculated with the number emotion identification responses used and the number of emotion approach strategies used as the dependent variables and counseling training as the independent variable. The mixed-design ANOVA for the average number of emotion identification responses by group on pre-and post-test indicated a main effect of time, $F(1,96) = 8.50$, $p = .004$ and a main effect of group, $F(1,96) = 6.45$, $p = .013$. There was also a significant interaction for time and group, $F(1,96) = 14.89$, $p = .000$. As Figure 1 demonstrates, the intervention group used more emotion identification responses ($M = 4.92$, $SD = 1.98$) than did the control group ($M = 2.4$, $SD = 1.85$). The post-intervention group difference was $d = 1.31$.

For the second dependent variable, number of emotion-approach responses used by participants, a second ANOVA was calculated. The ANOVA indicated a main effect of time, $F(1,96) = 22.79$, $p = .000$ and a main effect of group, $F(1,96) = 20.35$, $p = .000$. Again, there was a significant interaction for time and group, $F(1,96) = 82.81$, $p = .000$. Figure 2 shows that again, the intervention group used more emotion-approach responses ($M = 7.36$, $SD = 2.12$) than did the control group ($M = 3.36$, $SD = 2.55$). The post-intervention group difference was $d = 1.89$.

For the third dependent variable, average number of jargon-free responses, the mixed-design ANOVA did not indicate a main effect of time, $F(1,96) = 4.09$, $p = .046$ or group, $F(1,96) = .034$, $p = .855$. This is likely due to the near-ceiling performance at pre-test for both groups. There was no interaction for time and group, $F(1,96) = .09$, $p = .583$. Figure 3 displays these results.

The second research question addressed whether participants will report more motivation to counsel following the training. participants completed a motivation scale (Carr, K., Schrodt, P., & Ledbetter, A. M. 2012) during the pre-and post-test. Items on the motivation scaled ranged from 1 to 7, one indicating the lowest interest/motivation to counsel through seven, representing the highest interest and motivation for counseling. The dependent variable for this analysis was calculated as change in motivation from pre-test to post-test. A t test was calculated to evaluate between-group differences in motivation change. Results indicated that the intervention group increased in motivation ($M = .31$, $SD = 1.01$) for counseling more than the control group ($M = -.28$, $SD = .84$; $t(48) = 3.17$, $p = .002$; $d = .64$).

DISCUSSION

The purpose of this study was to evaluate the effectiveness of a short-duration, pre-service training program on the counseling knowledge, defined as emotion identification and use of emotion approach behaviors, and counseling motivation of SLP students. The results of this study indicated that SLP students increased their use of emotion identification and emotion approach strategies when responding to real life counseling scenarios after receiving four hours of explicit counseling training. In addition, participants who completed the training increased their motivation to use counseling strategies within the clinical setting following the training. In terms of preparing SLPs to practice counseling in the professional world, it may be advantageous to explicitly teach pre-service SLPs counseling skills.

The first research question addressed whether a short-term training will increase student identification of emotions underlying common statements about communication disorders and if students will increase the use of appropriate emotion-approach responses to real-life counseling scenarios. Students who completed the training significantly increased their ability to name emotions that caregivers may be experiencing based on their responses to a simulated client interview. Clients and caregivers who experience the impact of communication disorders endure intense emotions that need to be recognized by the practitioners working with this population. Naming an emotion is a critical step to using an emotion approach response compared to an emotion avoidance response according to Luterman (2008). Therefore, it is important to note that students who received the training increased in this skill compared to those who did not receive the training.

Students who completed the training also significantly increased their ability to apply emotional approach strategies rather than emotion avoidance strategies when responding to

emotional situations. Luterman outlines five different emotion approach strategies that can be effectively used within emotionally driven conversations: counterquestion, affect, paraphrasing, sharing-self, and affirmation. Previous research indicates that clinicians are more prone to use emotion avoidance strategies and generally report feeling uncomfortable with emotion approach or counseling responses due to a lack of exposure and training in this area (Sekhon, Douglas, & Rose, 2015). It is not common for a speech-language pathology graduate program to explicitly teach a course whose content is solely devoted to training students on how to counsel within the clinical setting; this may contribute to emotion-avoidance behaviors in this professional group.

It is important to note the difference between the control and intervention group in relation to emotion approach strategy use. Students who completed the training demonstrated a consistent and versatile use of these different strategies whereas the control group may not have had the relevant knowledge and therefore did not demonstrate the ability to apply effective strategies when responding to an emotional situation. These findings are significant because research reports that SLPs identify a need for counseling skills within the field but also report feeling unprepared and find it more comfortable to use emotion avoidance behaviors (Sekhon et al., 2015; Thistle & McNaughton, 2015). It is important to consider that counseling families through the emotions associated with communication disorders is within the scope of practice for an SLP. These findings demonstrate that that explicitly training students in counseling skills will increase their level of counseling competency within clinical scenarios and ideally into the clinical setting.

The second research question addressed whether students will report more motivation to counsel following the training. Individuals require motivation or confidence to consistently carry out a practice such as counseling within the clinical setting of speech-language pathology.

Students require an opportunity to explicitly learn and practice counseling content to increase in the skillset (Quail, Brundage, Spitalnick, Allen, & Beilby, 2016). It is also hypothesized that individuals will be more motivated to use skills that they feel confident and prepared for. Students who participated in this study completed a motivation scale prior to the intervention and after the intervention. Results indicated that students were more motivated to use counseling strategies and to press into emotions within the clinical setting after receiving explicit training on how to counsel more than students who did not receive the training. These findings further support the critical need for training SLP students on how to respond during emotional situations.

This is the first research article to address the need to unequivocally train speech pathology students to use emotion approach behaviors in the clinical setting compared to emotion avoidance behaviors. Previous studies have looked at training speech pathologists to use reflective practices and active listening skills; however, the study did not address students explicitly (Thistle & McNaughton, 2015). This study elicited a significant change in speech pathology students' use of emotion approach responses after a short-duration counseling course. Students completed only four hours in explicit counseling training compared to the typical sixteen-week course schedule and students still made a 112% increase in their tendency to use emotion approach behaviors after the training. It is important to note that significant change can be made with a student training model that does not require the extensive time of a traditional university model for training a skill.

This training was based on adult learning theory, PALS, that challenges instructors to use a multimodality approach to learning by including adults in the learning process. This training incorporated content learning, family testimonials, group discussions, role playing, and self-

reflection to provide students with the opportunities to take ownership of their learning process. It is possible that the students who completed this counseling training increased their ability to use emotion approach responses because of the adult learning strategies. It is likely that teaching students practical counseling skills supplement to content teaching led to a greater change in student behaviors across a relatively short amount of time.

Research Implications

This study included limitations that provide us an avenue for future research directions. First, further studies should investigate student performance after a longer counseling training program (i.e., over the course of a semester). It is likely that students would benefit from repetition of counseling material and more opportunities to practice using emotion approach strategies that cannot be accommodated in a four-hour training. It is important to note that previous research indicated that embedding counseling material within courses did not generalize or carry over to overall student counseling knowledge. Another future study should test generalization of counseling skills further out from the explicit training. Researchers could assess at six weeks, three months, and six months post training to further explore generalization trends.

Other studies may consider exploring the results of a short-term counseling training that places participants in "real-life" interview scenarios to assess skill carry over. Our study asked students to provide a written response to a videoed simulated interview scenario. Students had time to think about their response whereas an in-person simulated interview scenario would require an immediate, raw response from the participants. In a future study, a researcher could recruit an actor to serve as a parent during an initial evaluation parent interview. A typical initial parent interview lasts on average ten to fifteen minutes. Participants could sign up for a ten-minute slot to respond as a clinician during a parent interview with the actor. The actor would

simulate common emotions that people experience when they have a child with a communication disorder. The students would be required to respond in real time to the situation and the researchers could code each simulated interview for emotion approach and emotion avoidance behaviors. Placing students in a "real life" situation to use counseling skills will provide researchers an accurate understanding of the students' level of counseling knowledge and will provide a concrete opportunity for students to practice counseling.

To address generalization, future studies may consider embedding counseling material within classes to teach the content consistently throughout coursework. Counseling applies to all topics within speech-language pathology (i.e. aphasia, dysphagia, pragmatics, speech sound disorders, etc.) and would be appropriate to discuss in a variety of courses. It is important to note that previous studies have concluded that embedding counseling materials within courses does not carry over into a general skillset to counsel. However, if counseling was consistently addressed in each class that speech-language pathology students took compared to only some, it is possible that the skillset to counsel would generalize.

Counseling persons through emotions associated with communication disorders is within the scope of practice of a speech-language pathologist and is the responsibility of the professional. However, pre-service speech-language pathologists need to be equipped with the skillset to meet the complex emotional needs of families that they will work with. This study concluded that participants made significant progress in their ability to use emotion approach responses after a short-term training course whose content is solely devoted to counseling. Participants also increased their motivation to use counseling within the clinical setting after they received explicit training on how to counsel families through common emotions. Universities and employers should consider providing their speech-language pathology students or current

speech-language pathologists with explicit training on how to meet the emotional needs of those they work with.

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Figure 1. Emotion Identification Responses on Pre-and Post-Test

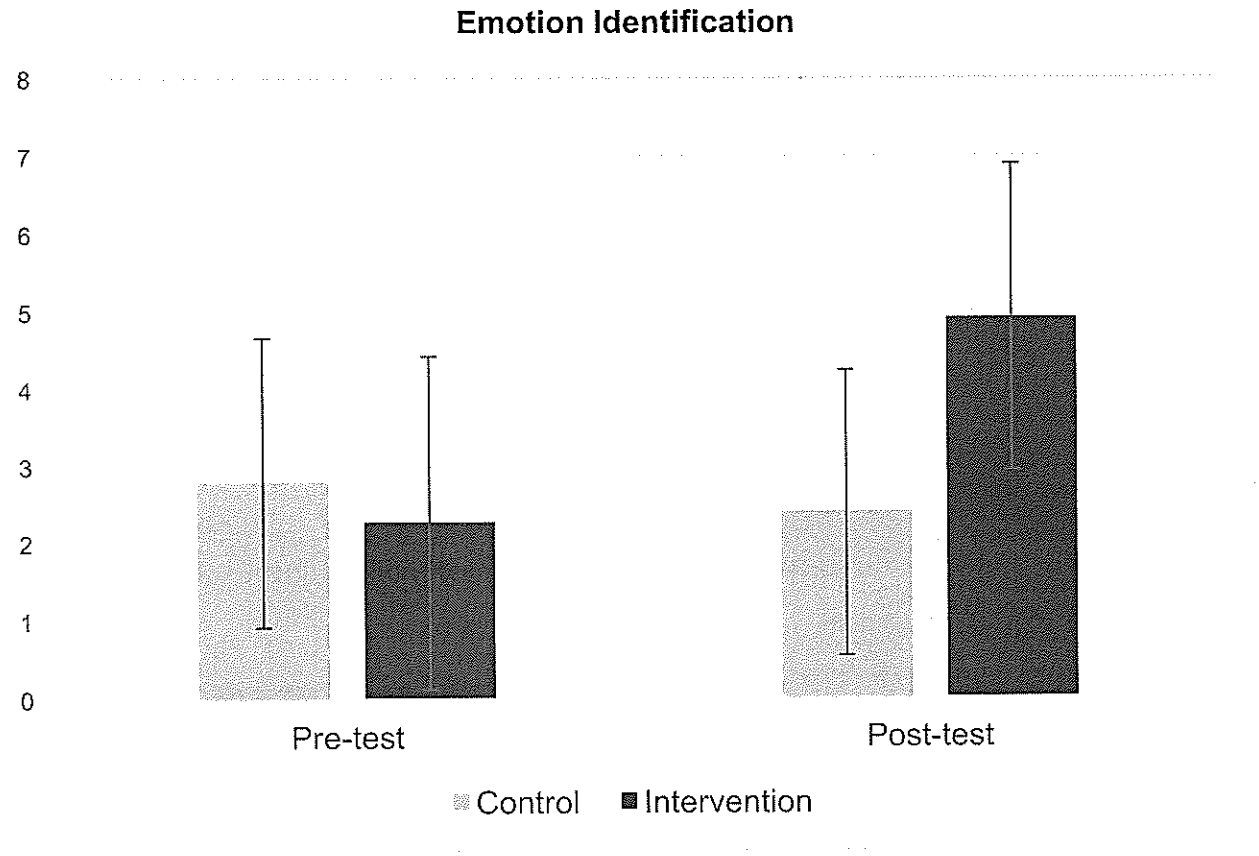

Figure 2. Emotion Approach Responses on Pre-and Post-Test

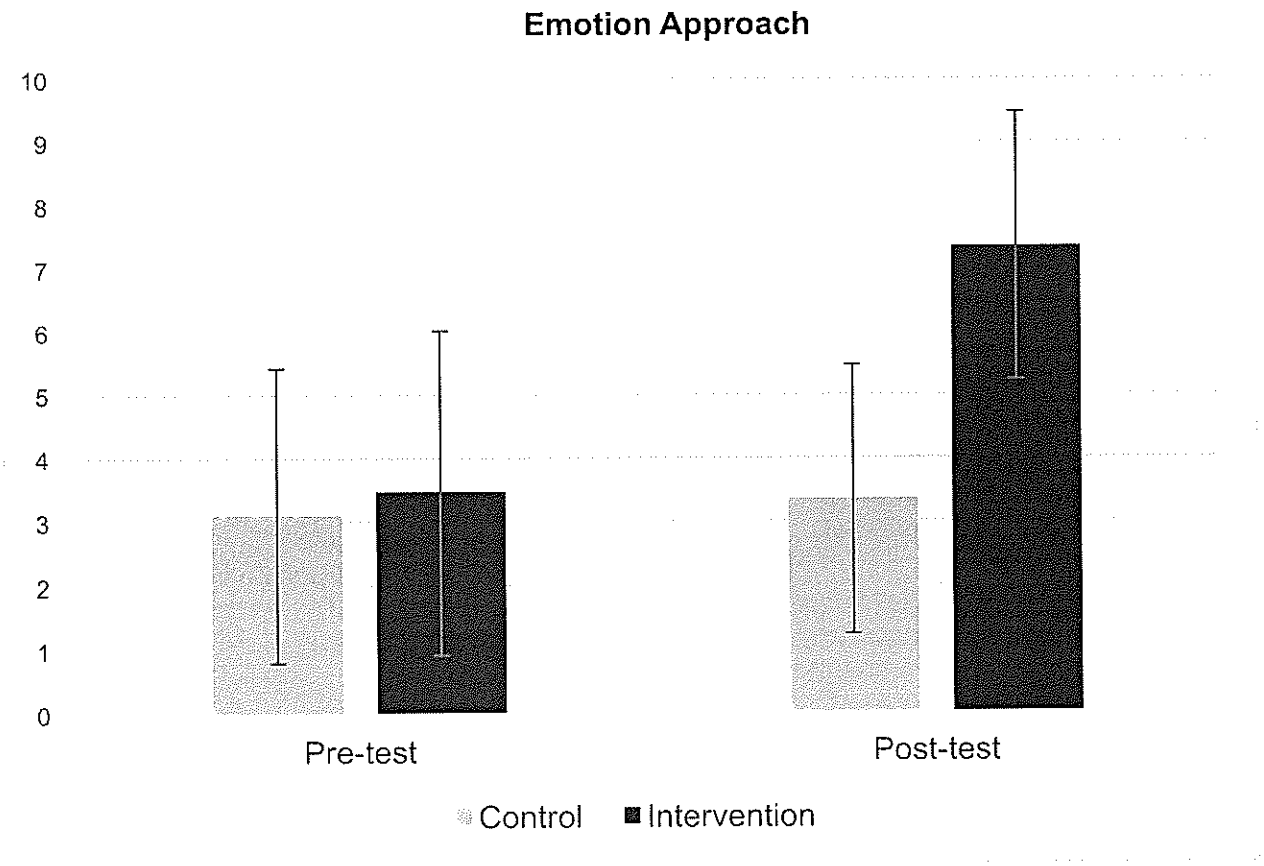

Figure 3. Jargon Free Responses on Pre-and Post-Test

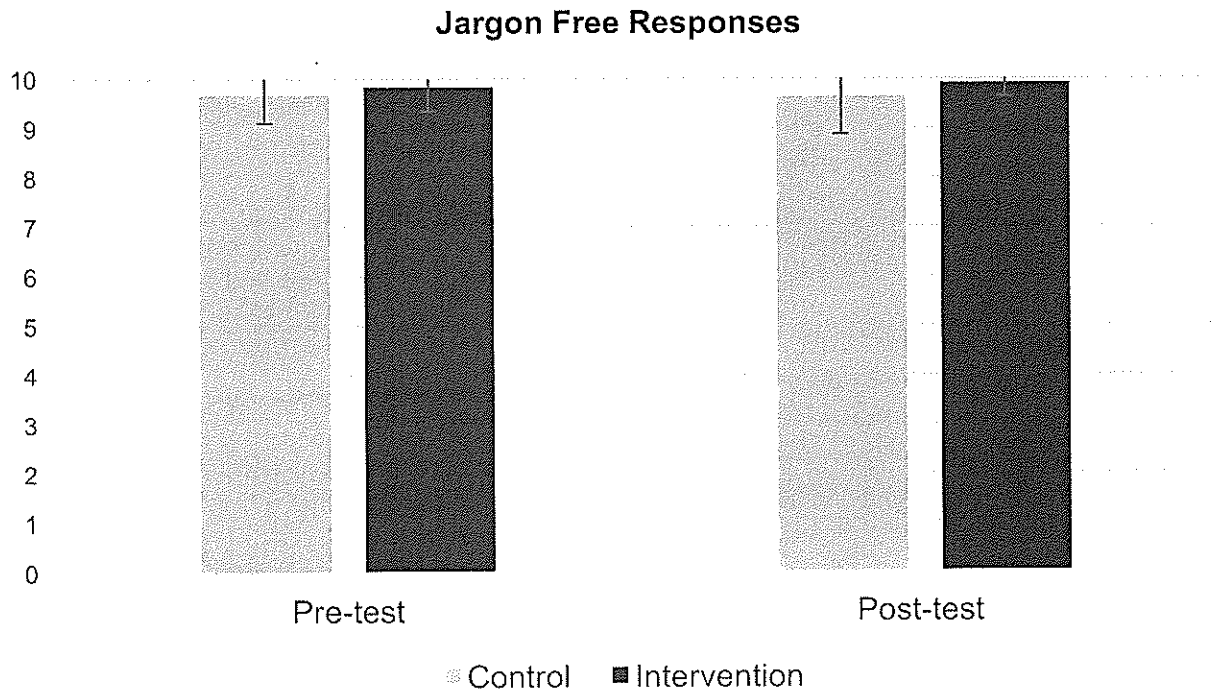

TABLE 1. Participant Information by Group

Group	# Undergraduate Students	# Graduate Students	Change in Motivation Scale Score (Pre-Post)	Average Emotional Intelligence Score
Intervention n=25	15	10	.305	3.96
Control n=25	15	10	-.28	4.05

APPENDIX A

Pre-and Post-Test Script

10 questions on each test: 5 parent and 5 spouse
Two different adults: a mother who has a child with a communication disorder and a wife whose husband has a communication disorder
C: Clinician A: Adult

Introduction to students: Today you are going to pretend that you are meeting a family for the first time to evaluate the child/adult. You will be taking a case history from the family. I am going to play clips of an adult talking during the interview. I will pause the video to allow you to respond as if you were the clinician in this scenario. The first video will be a parent who has a child with a communication disorder.

Pre-Test Video: Parent
Clinician will walk parent into the room to start the interview

C: Hello Mrs. X, thank you so much for coming in today. Why don't we start by you talking to me about why you are here today.
A: My pediatrician said we had to come; I don't think we need to be here. (Nonverbals: arms crossed, blunt tone, contempt facial expression) **(Grief/denial)**
Pause video
Allow students to respond

C: Okay, so today we are going to go through some evaluations. Our goal is to get a picture of your child to help make a plan. Tell me about what a day looks like for your family?
A: I get X up, make X breakfast, get ready for work, drop X off at daycare, and then my husband and I go to work. I pick X up from daycare and then go home and try to get things together for the night. X has a hard time at night, she cries a lot and always seems frustrated. I don't know what I'm doing wrong. I'm her mom, I should be able to comfort her. Is there something you can tell me to do? (Nonverbals: Sigh, exhausted demeanor/slouched posture, worried facial expression) **(Inadequacy)**
Pause video
Allow students to respond

C: What would you and your family hope to get out of therapy.
A: Well I notice that a lot of my friend's kids are already saying a lot of words and interacting with each other. Is my daughter going to make friends? (Nonverbals: Avoid eye contact, worried facial expression, restless hands) **(Vulnerability)**

C: Another part of this evaluation will include giving your child some standardized tests. These will help us see where she is at compared to other children her age.
A: Sorry, before we talk about that, I was just wondering how long you have been out of school? (young clinician) (Nonverbals: judgmental facial expression, condescending/frustrated tone) **(Anger/fear)**

C: I know this process can be overwhelming, is there anything else I can answer for you right now?
A: I have always wondered; do you know what causes children to talk later than others? (Nonverbals: avoid eye contact, worried facial expression, restless hands) **(Guilt)**
Pause Video
Allow students to respond

Post-Test Video: Parent
Clinician will walk parent into the room to start the interview

C: It's great to meet you Mrs. X, my name is X. Let's start with you telling me what brings you in today.
A: My mother said we had to come; she is the one who is worried. I don't think we need to be here, everything has been easy at home. (Nonverbals: arms crossed, blunt tone, contempt facial expression) **(Grief/denial)**
Pause Video
Allow students to respond

C: Okay so today we are going to go through a couple of evaluations. Our goal is to get a good picture of your child to help us make a plan. Do you mind telling me about some of the routines your family has?
A: On the weekdays, I get X up, make X breakfast, get ready for work, drop X off at daycare, and then my husband and I go to work. I pick X up from daycare and then go home and try to get things together for the night. X is always happier at daycare than when we get home. She seems so frustrated at home. I am her mom; I should make her happy. don't know what I'm doing wrong, is there something you can tell me to do? (Nonverbals: Sigh, exhausted demeanor/slouched posture, worried facial expression) **(Inadequacy)**
Pause video
Allow students to respond

C: What are your main concerns about XX's communication?
A: What is school going to look like for my child? Is she going act different than the other children and have a hard time making friends? (Nonverbals: Avoid eye contact, worried facial expression, restless hands) **(Vulnerability)**
Pause Video
Allow students to respond

C: Another part of this evaluation will include giving your child some standardized tests. These will help us see where she is at compared to other children her age.
A: Do you mind telling me how long you have been doing this? No offense, but I'm not sure I want my daughter working with someone who is new to this. (young clinician) (Nonverbals: judgmental facial expression, condescending/frustrated tone) **(Anger/fear)**

C: Do you have any other questions for me that I could answer for you right now?

A: Well, I ran a lot when I was pregnant. Could that be why we're having this trouble? (avoid eye contact, worried facial expression, restless hands) **(Guilt)**
Pause Video
Allow students to respond

Pre-Test Video: Spouse
Clinician will walk client and spouse into the room and start the interview

C: Hello Mr. and Mrs. XX thank you for coming in today. Why don't we start by talking about what brings you in today.
A: Thank you, XX had a stroke 1 year ago and we are just ready for him to be normal again. He is ready to start talking. (Nonverbals: Energetic tone, excited facial expression) **(Grief/denial)**
Pause Video
Allow students to respond

C: What has made you both decide to reach out for therapy now? You mentioned that the stroke happened a year ago.
A: That has been one of our biggest frustrations through all of this. Our insurance company has made it impossible to do anything and everything takes so long to process and get approved. (Nonverbals: Deep breathing/sighs, frustrated facial expression, fast speaking rate) **(Anger/fear)**
Pause Video
Allow students to respond

C: I know this process can be overwhelming. Can I answer any questions at this point?
A: Well, I know that he wants to talk again and I need to do more for him; I should be doing more. He probably hasn't started talking again because I just haven't had time to really work with him like I should. (Nonverbals: Avoid eye contact, sad facial expression, low speaking volume) **(Guilt)**
Pause Video
Allow students to respond

C: What is your husband's biggest challenge on a daily basis?
A: I feel like he gets frustrated when I don't understand him. I am his wife. I know him and should be able to know what he needs and wants. It's like I make things even harder for him. (Nonverbals: Shaky voice quality, sad facial expression) **(Inadequacy)**
Pause Video
Allow students to respond

C: How has her stroke affected you both socially?
A: X is embarrassed about not being able to talk. It would be a lot of work and hard for X to be in a situation like that. We haven't reconnected with any of our friends since the stroke. (Nonverbals: Avoid eye contact, sighs, sad facial expression, puts hand on husband's shoulder) **(Vulnerability)**
Pause Video
Allow students to respond
Post-Test Video: Spouse

Clinician will walk parent into the room to start the interview

C: Hello Mr. and Mrs. XX thank you for coming in today. Why don't we start by talking about what brings you in today.
A: Thank you, XX suffered from a traumatic brain injury 1 year ago and we are just ready for him to get back to being himself. He is so ready to start talking. (Nonverbals: Energetic tone, excited facial expression) **(Grief/denial)**
Pause Video
Allow students to respond

C: What has made you both decide to reach out for therapy now? You mentioned that the brain injury happened a year ago.
A: That has been such an ordeal. Our insurance company makes it impossible to get help. Everything takes so long. (Nonverbals: Deep breathing/sighs, frustrated facial expression, fast speaking rate) **(Anger/fear)**
Pause Video
Allow students to respond

C: I know this process can be overwhelming. Can I answer any questions at this point?
A: Well, I know that he wants to talk again. I work a lot, so it's hard to do the things I know we should do to make him better. I should be doing more. (Nonverbals: Avoid eye contact, sad facial expression, low speaking volume) **(Guilt)**
Pause Video
Allow students to respond

C: What is your husbands biggest challenge on a daily basis?
A: I feel like he gets frustrated when I don't understand him. But it's my fault, even though he can't use words, I am his wife and I should be able to know what he needs and wants. Am I making this harder? (Nonverbals: Shaky voice quality, sad facial expression) **(Inadequacy)**
Pause Video
Allow students to respond

C: How has her stroke affected you both socially?
A: X is ashamed about not being able to talk. It would be stressful for X to be in a situation like that. We haven't told a lot of people about his brain injury. (Nonverbals: Avoid eye contact, sighs, sad facial expression) **(Vulnerability)**

APPENDIX B

Coding Manual

Family Counseling Intervention for Pre-Service Speech Language Pathologists

Texas Christian University

Coding for:

- Identification of emotion
- Emotion approach/emotion avoidance response
- Use of jargon within responses

Identification of emotion:

Read each response and identify if the clinician named the speaker's emotion.

- When trying to decipher whether a word is an emotion ask yourself, "Can I feel___" to help identify whether the word is an emotion.
    - i.e. "I know this is a tough process." In this context, a person cannot "feel tough" therefore this would not be identifying an emotion.
    - i.e. "You must be concerned"- you can feel concerned, compared to "This must be hard"- you can't feel hard.
- The clinician's response needs to identify the speaker's emotion (in the videos this would be the grandma or wife's emotion) not someone they are talking about
    - i.e. "What does it look like when your husband is frustrated?" This response is identifying the husband's emotion not the wife's emotion. The same goes for naming the child's emotion, that is not identifying the speaker's emotion.

Emotion approach/emotion avoidance response:

Read each response and identify if the clinician used an emotion approach strategy.

- It is possible for the clinician to use an emotion approach even if he/she did not identify an emotion from the previous section.
- To decide if an emotion approach versus an emotion avoidance response is used ask yourself: is the response pressing into an emotion or is it changing topics, ignoring emotion, and moving the conversation along.
- Consider the response emotion avoidance if the clinician changes the conversation to a completely different topic than the family member was talking about. It is an emotion approach if the clinician is following the client's lead and pressing into the topic.

Emotion Approach Strategies: **Review PowerPoint for clarification of strategy meanings*

Content: This is a strategy but it is considered an emotion avoidance response. Do not count content when coding for emotion approach responses.

Counterquestion: This strategy can be confusing because not every question is a

counterquestion. A counterquestion's purpose is to reveal more of the speaker's stance or reason for asking a question.

- i.e. A mom asks a clinician what causes hearing loss and the clinician may respond with "What makes you ask that" or "What do you know about hearing loss?" This question challenges the family member to reveal his/her motive for asking the question.
- Statements or questions like, "Tell me more about his communication" or "What leads to is not a counterquestion.

Affect: Even if they paraphrase, ask yourself if the paraphrasing is an emotion approach. Assure that there an emotion being discussed. If the clinician paraphrases content for clarification it is not affect.

Reframing: This is when the clinician points out something positive in a challenging situation.

- i.e. The clinician may say, "Have you considered any support groups? I have heard amazing things about them and would be happy to research some with you."

Affirmation: A response that validates the family's feelings, their experience, or what they are going through.

- i.e. "That must be so frustrating."

Sharing Self: When the clinician shares a brief, personal experience related to what the family is going through.

- i.e. Challenges with insurance companies.

Jargon:
Ask yourself "Would my non SLP friend know what this word means" if your answer is no, then it is likely SLP jargon.

- i.e. Acronyms: TBI, ASHA, SLP, CCC, etc.
- Bell curve, diagnostic, pragmatics, semantics, phonology, etc.

Overall Tips:
Listen to the videos and identify what <u>you</u> think the family member is feeling and what approach <u>you</u> would use before reading what the clinician responded.

The emotion identification is easier to decipher compared to the emotion approach. The clinician either identifies an emotion i.e. "That must be overwhelming" or they didn't name an emotion. When asking yourself if they used a strategy consider the <u>entirety</u> of the response. Consider if the clinician's <u>intention</u> is to press into an emotion or to move the conversation along and avoid the emotion.
You can code more than one emotion response

- i.e. a response can be affirmation and sharing self

If the clinician phrases a hypothetical situation give no credit

*Make sure to code the right videos, parent/spouse pre/post-test - they are switched between the tests

Example Coding Template:

Participant Code: XX

Pre-test:

Item	Emotion Identification (Yes/No)	Emotion Approach (Yes/No)	Approach Strategy	Any jargon used
Parent 1	No	No		None
Parent 2	Yes	No		None
Parent 3	No	No		None
Parent 4	No	No		Yes
Parent 5	No	No		None
Spouse 1	No	No		None
Spouse 2	No	No		None
Spouse 3	No	No		None
Spouse 4	No	No		None
Spouse 5	Yes	Yes	Affirmation	None

Post-test:

Item	Emotion Identification (Yes/No)	Emotion Approach (Yes/No)	Approach Strategy	Any jargon used
Parent 1	No	Yes	Counterquestion	None
Parent 2	No	No		None
Parent 3	Yes	Yes	Affirmation	None
Parent 4	No	Yes	Counterquestion	None
Parent 5	Yes	Yes	Affirmation	None
Spouse 1	No	Yes	Affirmation	None
Spouse 2	No	Yes	Affect/Affirmation	None
Spouse 3	No	Yes	Affirmation	None

Spouse 4	Yes	Yes	Affirmation	None
Spouse 5	Yes	No		None

Totals:

Pre-Test

- Parent:
  - Emotion Identification: **1/5**
  - Emotion Approach/Strategy Used: **0/5**
  - Jargon Free Response: **5/5**
- Spouse:
  - Emotion Identification: **1/5**
  - Emotion Approach/Strategy Used: **1/5**
    - **#5 Affirmation**
  - Jargon Free Response: **4/5**
    - **#4 ASHA**

Post-Test

- Parent:
  - Emotion Identification: **2/5**
  - Emotion Approach/Strategy Used: **4/5**
    - **#1 Counterquestion**
    - **#3 Affirmation**
    - **#4 Counterquestion**
    - **#5 Affirmation**
  - Jargon Free Response: **5/5**
- Spouse:
  - Emotion Identification: **2/5**
  - Emotion Approach/Strategy Used: **4/5**
    - **#1 Affirmation**
    - **#2 Affect/Affirmation**
    - **#3 Affirmation**
    - **#4 Affirmation**
  - Jargon Free Response: **5/5**

APPENDIX C

Sample Data Coding Form

Participant Code:

Pre-test:

Item	Emotion Identification (Yes/No)	Emotion Approach (Yes/No)	Approach Strategy	Any jargon used
Parent 1				
Parent 2				
Parent 3				
Parent 4				
Parent 5				
Spouse 1				
Spouse 2				
Spouse 3				
Spouse 4				
Spouse 5				

Post-test:

Item	Emotion Identification (Yes/No)	Emotion Approach (Yes/No)	Approach Strategy	Any jargon used
Parent 1				
Parent 2				
Parent 3				
Parent 4				
Parent 5				
Spouse 1				
Spouse 2				
Spouse 3				
Spouse 4				

Spouse 5				

Totals:

Pre-Test

- Parent:
  - Emotion Identification:
  - Emotion Approach/Strategy Used:
  - Jargon Free Response:
- Spouse:
  - Emotion Identification:
  - Emotion Approach/Strategy Used:
  - Jargon Free Response:

Post-Test

- Parent:
  - Emotion Identification:
  - Emotion Approach/Strategy Used:
  - Jargon Free Response:
- Spouse:
  - Emotion Identification:
  - Emotion Approach/Strategy Used:
  - Jargon Free Response: