



Fostering Empathy in Communication Sciences and Disorders Through Interprofessional Simulation: Bridging the Gap Between Lecture and Practice

Cynthia A. Hovland
Cleveland State University, c.hovland@csuohio.edu

Carol Spears
Cleveland State University, c.spears@csuohio.edu

Melissa Volk
Cleveland State University, m.m.volk@csuohio.edu

DOI: 10.61403/2689-6443.1300

Follow this and additional works at: <https://ir.library.illinoisstate.edu/tlcsd>



Part of the [Speech Pathology and Audiology Commons](#)

Recommended Citation

Hovland, C. A., Spears, C., & Volk, M. (2024). Fostering Empathy in Communication Sciences and Disorders Through Interprofessional Simulation: Bridging the Gap Between Lecture and Practice. *Teaching and Learning in Communication Sciences & Disorders*, 8(1). DOI: <https://doi.org/10.61403/2689-6443.1300>

This Scholarship of Teaching and Learning Research is brought to you for free and open access by ISU ReD: Research and eData. It has been accepted for inclusion in Teaching and Learning in Communication Sciences & Disorders by an authorized editor of ISU ReD: Research and eData. For more information, please contact ISUREd@ilstu.edu.

Fostering Empathy in Communication Sciences and Disorders Through Interprofessional Simulation: Bridging the Gap Between Lecture and Practice

Abstract

This exploratory study sought to understand the experiences of CSD students participating in an interprofessional simulation focused on empathy development and how it could inform their future practice. This study used a non-random, purposive sample of 29 CSD students from one United States university who attended one of three Team STEPPS seminar training days that were offered during three separate semesters. Post-seminar surveys were completed, and conventional content analysis used to analyze data. Three primary themes, and corresponding subthemes emerged: (a) establish trust (build rapport; identify patient care goals; and encourage active participation); (b) facilitate collaborative plan of care (provide education; interprofessional communication; patient-centered care; boost morale; and put self in patient's shoes); and (c) navigate challenging conversations (disagreement between patient and family; grief with terminal diagnosis; and end-of-life conversations). Students also shared both their current and plans for future learning on empathy. Implications relating to interprofessional and CSD education are discussed and posited.

Keywords

CSD, Interprofessional education, empathy, SLP

Introduction

Assessing a client with a communication disorder diagnosis such as autism, aphasia, and others can have a multifaceted impact. There is often a lengthy and exhausting process the clients and family members experience to better understand the details of the diagnosis. There are also the attempts to manage the turbulent thoughts, ideas, and feelings that accompany their new reality (Lieberman, 2018). How professionals address the client facing this medical turmoil is a significant factor in the intervention process (Lieberman, 2018; Sylvan, 2019). These truths highlight the essential need for Speech and Language Pathologists (SLPs) to address the increasing needs of the client. Interactions with clients should include displays of empathetic concern in conjunction with providing information regarding the identified disorder among meeting other needs (Sylvan, 2019).

Luterman (2020) recognizes a significant need to include counseling as an integral part of the intervention process. The author furthers that the goal of this counseling is to empower clients and instill emotional stability. Beck and Verticchio (2014) identified counseling as the most effective way SLP's can guide their clients toward achieving lifelong goals. The American Speech-Language-Hearing Association (ASHA), the governing body for those in the fields of communication sciences and disorders, has deemed counseling as a required competency that is to be addressed in the educational curriculum for all students (American Speech-Language-Hearing Association [ASHA], n.d.a). An underlying foundational component of successful counseling is empathy (Bell, 2018). Carl Rogers (1957) also demonstrated the importance of empathy in helping to build the therapeutic relationship between the client and the clinician. Empathy helps to build the bridge allowing the client to see that the clinician understands their feelings and current situation. This provides the client with validation of their feelings surrounding their situation. Empathy also allows the clinician to communicate effectively with the patient allowing the clinician to show they care about the patient's outcomes (Bell, 2018; Lambert & Barley, 2001). Quesal (2010) identified empathy as "perhaps the most important *E* in evidence-based practice. (p. 1)" There is ultimately consensus among most researchers and ASHA that empathy is a necessary component to provide best practice during clinical services.

Although there is a consensus in the literature as well as with ASHA on the value of empathic interactions during clinical practice, the research reveals a lack of priority for empathy training for students in communication sciences and disorders programs. Few universities provide training dedicated to counseling, and in turn empathy, for Communication Sciences and Disorders (CSD) students (Beck & Verticchio, 2014; Doud et al., 2020; Lieberman, 2018). The lack of training on counseling and displaying empathetic concern occurs despite ASHA's position that counseling is "an integral part of clinical work" and should be used "in every clinical encounter" (ASHA, n.d.a p. 1). Beck and Verticchio (2014) describe the purpose of this counseling and ultimate end goal of training is to teach students how to use empathetic communication styles and approaches. The consequence of having minimum training in counseling is that students are not prepared to engage in empathetic communications while servicing clients post-graduation. Stepien and Baernstein (2006) found that teaching empathy through communication skills training demonstrated significant increases in empathy post-training. In addition, this increased empathy remained significant for the pre-professional up to three years post training.

To better explain the area of counseling that is most neglected, Beck and Verticchio (2014) explored two types of counseling used during clinical practice. The first type is informational counseling which involves providing the client with detailed information and adequate understanding of the cause, implications, and treatment options for a disorder. The undergraduate and graduate courses in communication sciences and disorders programs usually sufficiently equip students to effectively address the needs for informational counseling. The second type is personal adjustment counseling, implemented to assist clients in coping with the feelings and difficulties associated with the diagnosis and utilizes empathic interactions (Beck & Verticchio, 2014). Demonstration of skills in this area of practice require the use of care, compassion, and appropriate empathy during professional interactions with clients (Sylvan, 2019). Across the literature, empathy in counseling is shown to help with building client-clinician relationships, establishing trust which allows the client to self-disclose, increased compliance with therapy planning, and better health outcomes (Elliot, et al., 2011; Farrelly; 2012; Hojat et al.; 2013; Robinson, et al., 2008; Rogers et al., 2015). The specific skills needed to provide personal adjustment counseling are not always addressed across undergraduate and graduate CSD programs. Doud et al., (2020) found little consistency in the inclusion of counseling across many programs and a decrease in the number of programs that offer a stand-alone counseling course. In fact, counseling courses have been removed from the curriculum or marginalized due to constraints of the many academic and clinical requirements for a master's degree in CSD (Lieberman, 2018; 2020).

DiLollo and Favreau (2010) found that the skills needed to provide personal adjustment counseling are not discipline specific. For this area of counseling there is an overlap of content where the same skills are addressed for individuals from other helping professions such as nursing, physical therapy, occupational therapy, and social work. Further, interprofessional collaboration "...is the idea that skills and knowledge are to be shared across professions rather than to be protected and maintained as symbols of status, authority, and identity within one particular vocation" (Winfield et al., 2017, p. 66). These overlaps in training needed for students from multiple disciplines and the teachings of interprofessional education present a unique opportunity for viable and impactful empathy training.

Empathy in Healthcare. Improving empathy abilities/skills in healthcare is not only impacting better patient outcomes and the perceived quality of care by the patient but also the well-being and job satisfaction of the individual providing the services (Farrelly, 2012; Hojat et al., 2013; Rogers et al., 2015). Decety (2020) provides a comprehensive description of the components of empathy in healthcare practice. Clinicians need to be able to understand the patient's emotions, validate their feelings and understand the patient's motivations when setting up a treatment plan that is individualized to work towards best patient care outcomes and patient satisfaction in their treatment. Clinicians also need to be able to display the cognitive understanding that the client's motivations and emotions may be quite different than they feel theirs would be in the same situation. Having this understanding offers the clinician the ability to be able to deal with this cognitive dissonance in a way that demonstrates empathetic concern and understanding that is then able to be shown to each individual patient.

Decety (2020) continues to describe empathy that involves several components including affective, cognitive, motivation, and emotional regulation. The research demonstrates the importance of each of these components in a medical context (Lieberman, 2018; Luterman, 2020;

Quesal, 2010). Different neural mechanisms and psychological processes were identified concerning emotional empathy and true empathetic concern. Emotional empathy deals more with noticing the emotion, understanding the emotion, and processing the emotions. Empathetic concern, on the other hand, focuses on the motivation and maintenance of care behaviors. Decety (2020) goes on to further explain cognitive empathy in that it:

„refers to the capacity to intentionally adopt another person’s perspective to apprehend his or her subjective experience. It causes different emotional and motivational consequences: Focusing on another person’s feelings can lead to a stronger motivation to care (empathic concern), whereas explicitly adopting the other’s perspective induces empathic concern. (p. 3)

The understanding of cognitive empathy aligns with the ASHA required evidence-based practice for SLPs which includes three components to be considered: proven effective evidence, clinical experience, and client perspective (ASHA, n.d.c.). This is a critical distinction that those working in the helping profession should understand. They need to be able to focus on their patients’ feelings and perspective of their current situation to help with developing a treatment plan that is not only beneficial and helpful for addressing the individual’s deficits and needs but also constructing a treatment plan that a patient is more likely to follow (Elliot, et al., 2011; Robinson, et al., 2008). The SLPs clinical experience often dictates the rationale for type of intervention selected. Although this is a component of evidence-based practice, the patient is not privy to your knowledge base and will not understand and recognize the validity of your choice. The patient needs to be able to understand the “why” behind the treatment plan and the treatment plan needs to address the patient’s “why” for coming to therapy in the first place (Lieberman, 2018). Explaining to the patient the component of evidence-based practice of using research-based proven effective intervention strategies aides the patient’s understanding of why a specific intervention method was chosen and can reduce anxiety about the safety or effectiveness of the method. The clinician’s motivations and understanding of the patient’s deficits might not always align with the patient’s “why” for coming to therapy. The clinician should be able to convey empathetic concern in a supportive and collaborative communication with the patient, patient’s family, caregivers, and anyone involved in the patient’s medical treatment to achieve the best possible health outcome (Brown, et al., 2021; Decety. 2020; Moudatsou, et al., 2020).

Interprofessional Education and Empathy. ASHA (n.d.a) and existing literature continue to support the increased need for interprofessional education and interprofessional practice. Interprofessional education (IPE) is a teaching modality that higher education uses to help pre-professional speech-language pathologists learn how to demonstrate empathy while preparing for clinical practice. IPE helps students recognize their personal skills and strengths as individuals while simultaneously gaining an understanding of what other professions can offer in terms of expertise. It also allows students to decrease the possibility of developing prejudices or rivalries with other professions by allowing them to better understand others in a safe and supported learning environment (ASHA, 2023). This collaboration occurs in all practice domains and settings for speech-language pathologists (ASHA, 2016).

There is a significant amount of research that documents the importance of IPE and empathy in healthcare (Buchman & Henderson, 2019; Michalec et al., 2021), but research focused on empathy, interprofessional education, and speech language pathology is very limited. Eichorn and

colleagues (2021) conducted a quasi-experimental study that demonstrated that there is value from having feedback from simulated patients in that students appeared to learn more about the quality of their clinical interactions from these patients. It was also concluded that there is a need for additional training that highlights the importance of empathetic and clear communication to be used across interprofessional teams.

Empathy was once considered an in-born trait that could not be taught. Although empathy has biological underpinnings, Cherry (2022) reports that empathy is significantly influenced by social factors and experiences from which empathic qualities may be acquired. The author goes on to say there is a continuum of empathy capacity rather than an all-or-nothing quality. Students often are working to build on skills they presently possess by addressing areas that are lacking to gain increased empathy. Several studies describe effective methods for teaching empathy. Whicker (2020) reports success in improving empathy in students when teaching certain simulation design strategies and targeted feedback to students to build on existing skills and teach new skills; while Sylvan (2019) demonstrated successful teaching of empathy skills by having students respond to personal accounts of families impacted by disabilities. Providing students with mindfulness training is another practice that Beck and Verticchio (2014) proposed as a method of teaching to bolster qualities of empathy for students.

Research Questions. This research study addressed some of these literature research gaps by exploring the effectiveness/awareness of gaining empathy skills through interprofessional simulations and asked the following question: What did CSD students who completed the interprofessional STEPPS Program learn about empathy and did their perceived capacity for empathy expand through the simulation experience?

Methods

Team STEPPS. The Team STEPPS (Strategies and Tools to Enhance Performance and Patient Safety) Program is a model aimed at optimizing function among interprofessional health care teams to improve performance, collaboration, and communication between care providers. This model and training were used to both teach students about Team STEPPS interprofessional work and to focus on increasing awareness or empathy abilities by having students work together to identify interventions for a community-dwelling older adult facing a life-limiting illness (Clancy & Tornberg, 2007). The Team STEPPS seminar trainings included five components - online didactics, skills practice, simulated interprofessional team meeting, simulated patient and primary family caregiver assessment, and team care planning. The pre-simulation didactic portion of the educational training was developed collaboratively with educators and clinicians. It covered content relevant to assessment of a recent terminal diagnosis for an older adult patient.

Students began the in-person training with an Interprofessional team group poster session rotation during which they applied assessment knowledge under the supervision of faculty content experts. The rotation required students to attend each poster session (i.e., professionally-produced posters on nutrition, environmental safety, advanced directives, pain and opioids medications, functional issues, and caregiver stress) led by faculty content experts from each of the IP disciplines: Occupational Therapy (OT), Physical Therapy (PT), Social Work (SWK), Nursing, and Communication Sciences and Disorders (CSD). Next, students met in a discipline-specific

“huddle” led by a licensed professional from that discipline (OT, PT, SWK, Nursing or CSD) during which they were presented with discipline-specific examination information about the client/patient; no one profession received all assessment findings in their huddle. These poster sessions and huddles lasted between 30 and 45 minutes. Students then took these findings to the student IP team to which they had been assigned, and shared the discipline specific assessment findings that they discussed in their huddle. During this portion they also collaborated with their fellow student team members to develop an IP follow up plan of care for the simulated patient, under supervision.

Student teams collaborated with the family’s primary caregiver to present an interprofessional plan of care for the older adult with a terminal diagnosis. More specifically during the session, students formed interprofessional teams to discuss the case in small groups and to practice the interprofessional team care planning process. Next, the students collaborated with the primary caregiver, contributed to the plan of care in a collaboratively manner, with all of this work under supervision by the faculty. Finally, students engaged in a small group debriefing with the primary caregiver, and then joined the large group of students whereby each group reported out to the larger group their assessment, learning, and recommendations. Research on these trainings is ongoing and other empathy outcomes have been reported for different student groups (Hovland et al., 2021; Milliken et al., 2022).

Design. This qualitative study used a cross-sectional design for numerous groups of IP students to identify varying perspectives and aspects of their empathy skills. Each student group was unique for each semester to the Team STEPPS Program, and this paper is reporting on the outcomes for the students. A cross-sectional design uses a single measurement of data, which for this study occurred after the STEPPS Program training day each term (Yegidis et al., 2012). The data collection technique used a post-program survey asking open-ended questions to gather the experiences and opinions of the students.

Sample. This study used a non-random, purposive sample of graduate CSD students from one United States midwestern university (Yegidis et al., 2012). The students were recruited through email and in-class announcements and attended one of three offered Team STEPPS program simulation labs over the course of two academic years (Spring 2019, Fall 2019, or Spring 2020 semesters). The program is a one-day program and was offered at three different times to students during the semester to maximize participation. In total across the three sessions, 171 students attended one of the three simulation labs: nursing (n = 31), social work (n = 30), physical therapy (n = 36), communication sciences and disorders (n = 29), and occupational therapy (n = 45). The focus of this study, as noted, was on communication sciences and disorders (CSD) students who participated in the STEPPS training and completed the data collection. Of these 29 students, 100% were female, 93% white, 1% Asian, and approximately 1% Latina, with an average age of 24 years (range from 22 to 34 years).

University IRB approval was obtained prior to the Team STEPPS seminars initiation. Student participants provided written informed consent for participation (Hovland et al., 2021).

Data Collection. Data were collected using post-seminar written online surveys that were completed within 48 hours of the Team STEPPS simulation. These survey questions were

developed by the Team STEPPS team based on the past two years' experience running similar simulations. The students answered the following questions:

1. How important do you think empathy is when communicating with patients and/or family members in an interprofessional setting?
2. Tell us about your experiences in communicating with the patient or family at the interprofessional team meeting;
3. How did empathy play a role in your interaction/communication with the patient or family?
4. Tell us about your formal education in communicating empathetically to patients and families;
5. What would be helpful in strengthening your skill in communicating empathetically?

Analysis. Conventional content analysis was used to analyze the data from the open-ended questions. Content analysis is appropriate when seeking to understand a phenomenon where current knowledge is limited (Hsieh & Shannon, 2005). To focus the analysis, the data was organized by interview question and reviews of all responses for uniformity and variation (Miles & Huberman, 1994). The responses were read numerous times "...to achieve immersion and obtain a sense of the whole" (Hsieh & Shannon, 2005, p. 1279). Next, the data were read verbatim to search for and identify key concepts and to derive codes. To derive these codes, exact words were highlighted from the data that encapsulated significant ideas or concepts that were grounded in the research questions. Then, memoing was used in which notes were made of initial impressions, notions, and preliminary analysis of the text. Next, overarching labels for codes and, as the initial coding schema emerged, were separated into categories based on common associations. These formed categories were then organized and placed into meaningful clusters, combining similar themes. This resulted in ending up with the essential themes and subthemes that were relevant to the research inquiry. To allow for better organization and to easily attribute quotes to participants, NVivo (Hovland et al., 2021; Milliken et al., 2022).

To ensure analytic rigor and trustworthiness, three approaches were employed. First, themes and codes were peer debriefed by the two authors who are experienced in qualitative analysis. This debriefing included having the authors review, challenge, and cross check codes, memos, and excerpts of text/data to ensure that they accurately reflected the participants' experiences. Second, the primary investigator left an audit trail (i.e., memoing and interview transcripts). Because of the exploratory nature of this investigation, the audit trail was helpful in maintaining consistency of record keeping and review across the three semesters of data collection, helping with reliability. Finally, a research journal noting ideas, thoughts, and feelings was maintained by the primary investigator throughout the study to facilitate reflexivity (Miles & Huberman, 1994). This reflective work found the data to be consistent in student reporting experiences and will be useful in ongoing and future research with this student population (Hovland et al, 2021; Milliken et al., 2022).

Results

This study sought to understand if students could recognize, understand, and believe they could improve their empathic professional abilities through the Team STEPPS Interprofessional

simulation experience. In exploring the importance/role of empathy and how/can CSD students learn empathy, three primary themes and their corresponding subthemes were revealed.

Table 1

Themes and Subthemes: Exploring the Role of Empathy and How CSD Students Learn Empathy

Theme	Subthemes
Establish trust	Build connection Identify patient care goals Motivate active participation
Facilitate collaborative plan of care	Provide education Interprofessional communication Patient-centered care Spark hope/positivity Put self in patient’s shoes
Navigate challenging conversations	Disagreement between patient and family Grief with terminal diagnosis End-of-life conversations

Importance and Role of Empathy. The first topic explored CSD student insights of the importance and role of empathy when communicating in an interprofessional meeting with 29 students who highlighted that empathy is a “crucial skill” and the “driving force” in interacting with patients and family members. CSD students shared their perceptions of the role of empathy in communicating in an interprofessional team with patients and family members. Three primary themes were revealed: (a) *establish trust*; (b) *facilitate collaborative plan of care*; and (c) *navigate challenging situations*.

Establish Trust. In this first primary theme of *The Importance and Role of Empathy*, 29 (100%) of the CSD students emphasized how demonstrating empathy to a patient and family will facilitate communication and build connection leading to the provision of “the best healthcare possible.” As one CSD student shared, the importance of “... expressing empathy to the patient and their family members in order to create connections and build trust. Through empathy, one has the ability to calm the family’s anxiety and improve the patient’s outcome.” Three subthemes were identified: (a) *build rapport*; (b) *identify patient care goals*; and (c) *encourage active participation*.

Build rapport. In this first subtheme of *establish trust*, 19 (70%) of the CSD students shared how empathy can facilitate connection with a patient and family leading to them knowing the team is willing to listen and that they really care. CSD students shared how empathy is the “key driver” in making patients and family members feel welcome and heard. One student shared: “Empathy is a key skill to have in every relationship, especially in an interprofessional setting when communicating with a patient and their caregiver. Being empathetic means to understand and try to relate to someone’s feelings or experiences.” In addition: “Also, letting the patient know that

you are recognizing their concerns will help to build trust and form a relationship, thus allowing for better care to happen.” A CSD student shared the following:

I think showing empathy allows the patient and family member feel more comfortable and provides a certain connection or trust with one another. Sometimes there can be this stigma around medical professionals that we’re always so busy that we don’t have time to listen to our patients concerns but that’s not always true. Even if you may only have a short period of time with your patient, listening and showing empathy towards them can really make them feel heard and cared about.

[Empathy] allows the patient and his/her family and caregivers to feel a sense of community, friendship, and rapport...it gives them a way to personally address us and ask questions now and in the future. Without the personal introductions, we, as health professionals, may come across as insincere and that we are just there to speak our part and move on. The patient may not feel welcomed, like his/her care is our top interest, or he/she may feel like just another thing to do on our checklist.

Identify patient care goals. In this second subtheme of *establish trust*, 19 (70%) of the CSD students emphasized how demonstrating empathy will facilitate comfort and openness among patients and families regarding their own goals for care. CSD students shared the following:

The patients and family members may be more likely to open up to healthcare providers about their feelings, wants and needs when they feel that the healthcare providers truly care about them and how they feel in the situation. It is impossible to truly know how they are feeling, but, if the healthcare provider shows genuine interest, the patient may be more likely to trust the provider and stick to their course of treatment with much less resistance. The empathy from the healthcare provider lets the patient and family members know that they are truly taking their wants, needs, and goals into account when choosing a treatment method.

I think empathy is critical when you are dealing with patients and their family members. If the patient feels as though they are just one of many people you are treating and seeing within a given day, they aren’t going to trust you. They also will not be willing to share personal details with you about their lives and/or diagnosis. As healthcare professionals, we may know more about treatment methods and evidence-based practice, but the patient and the family know what is important to them and what values need to be met for them to feel like their needs are being provided for.

Encourage active participation. In this third subtheme of *establish trust*, 16 (59%) of CSD students highlighted how establishing trust through empathy will encourage and motivate patients and families “willingness to move forward with the plan of care” and will increase the likelihood of them following the teams suggested plan of care. Additionally, students noted the following:

Also, empathy is important when communicating with patients and/or family members in an interprofessional setting because it increases patient buy in and compliance with the treatment during therapy. This is because the patient feels that they were involved in the

decisions and that their wants, needs, and desires were understood and taken into account during the decision process. This will help the patient to feel valued and invested during the therapy process.

It is so important to make the families know you care about them. You want them to know that you're helping them because you genuinely want to improve their quality of life, not just because it is your job. Building this relationship of trust will likely improve the overall motivation of your patient as well.

Facilitate Collaborative Plan of Care. In this second primary theme of *the importance and role of empathy*, 27 (93%) of the CSD students described how empathy promotes collaboration among patients, family members, and health care professionals in creating a plan of care. Five subthemes were identified: (a) *provide education*; (b) *interprofessional communication*; (c) *patient-centered care*; (d) *boost morale*; and *I put self in patient's shoes*.

Provide education. In this first subtheme of *facilitate collaborative plan of care*, experienced by 15 (56%) of CSD students, they describe how empathy creates fertile ground for the team to provide education to patients and families as part of the team meeting "The professionals educated the patient with resources after listening to their wants. Once we had the interest of the patient, we were able to formally educate and explain why." Other CSD students shared the following:

I believe empathy played an important role when discussing some of the remedies with the patient while educating him about his oral care and how to reduce some of the pain caused by the mouth sores. During those moments, I was mindful to what I had to say and how to address the matter without hurting the patient's feelings.

I believe empathy is very important when communicating with patients and their family. Even though we are healthcare professionals, we need to look at the patient as a whole. We need to see it from a medical perspective but also a psychosocial perspective. The family needs to understand why I am doing what I am doing. In addition, by educating the families, they can use techniques and compensatory strategies at home that the speech-language pathologist uses during therapy.

Interprofessional communication. In this second subtheme of *facilitate collaborative plan of care*, experienced by 15 (56%) of CSD students, they share how empathy facilitates the understanding and learning of roles of other health professionals, validating the discipline-specific contributions of each member of the interprofessional team in meeting the health care needs and goals of patients. As one student noted, "(t)he most memorable part of that whole experience was seeing how impactful we could be as a team. Watching the transformation of perspectives in both the caregiver and the patient were awe inspiring." Another student shared the following:

Specifically, when working with other professionals from different disciplines, it is important to be respectful and aware of multiple opinions on various aspects of the patient's health. It is easy to become isolated within one's profession and to only focus on that aspect of the healthcare for the patient; however, the patient is a whole person and has to be treated

as such. Working as a team is beneficial to the health of the patient as a whole. It is also important to recognize that each member of the health care team has the capacity to consult with the others to create the most effective plan.

Patient-centered care. In this third subtheme of *facilitate collaborative plan of care*, experienced by 18 (67%) of CSD students, they described how empathy enabled the team to ensure the plan of care was centered directly on the patient. “[The patient and his daughter] appreciated that we were empathetic towards his condition as well as gave possible treatment/recommendations that were specific to his wants and needs.” Another student highlighted the following:

I learned that it is necessary and valuable to ask the caregivers what resources they need, what questions they have, and to make them feel as though they are a participant throughout the process. In situations such as the one presented in this simulation, it was important to approach the problem from the perspective of both the patient and the caregiver. Recognizing that the patient didn’t necessarily want treatment, and avoiding pressuring her into treatment, was important. Acknowledging and accepting both her feelings and the caregiver’s feelings were necessary to creating the best health care plan for the patient.

Boost morale. In this fourth subtheme of *facilitate collaborative plan of care*, experienced by 12 (44%) of the CSD students, they described how empathy in care planning often led to the patient ending the meeting in “better spirits” after realizing they could improve adverse physical symptoms, improve their feeling of well-being and ultimately continue to realize life goals and dreams. One student noted that during the meeting the patient “did express that he would be willing to do another round of chemo or try alternative medications and that triggered a sense of hope and positivity within the patient and the team.”

Another student shared the following:

When his head was down and he expressed that he wanted to give up on his life, I reminded him that there was still hope. I did this through explaining positives I saw, such as his remaining cognitively aware, his ability to walk, his good swallowing prognosis, and his strong support system. I also asked if there was anything in his life that motivated him to get better, such as his grandchild on the way, and his interests in traveling and volunteering at his community center and his church, as I had read about in his case history. Speaking of these things cheered the patient up.

Put self in patient’s shoes. In this fifth subtheme of *facilitating a collaborative plan of care*, 12 (44%) CSD students specifically stated that putting themselves in the patient’s shoes is central to using empathy in providing care for patients and families. One student said “(t)he ability to think from the patient and/or family members’ perspective and to put yourself in their shoes is crucial.”. Students also shared the following:

In graduate school and through my clinical experiences, I learned the importance of putting myself in someone else’s shoes. I learned that my job is not to judge a family or feel bad for them. My educational experiences have taught me that being able to understand a family and accept them for who they are is the only way that I would be able to help them.

Personally, I learned that each patient and their family is different; everyone comes from a different background and culture, which will impact the way that I should treat them.

I believe empathy is extremely important when communicating with patients and their families because we as healthcare professionals need to understand how a diagnosis affects a person. We need to be able to “place ourselves in their shoes” so to speak, in order to be able to connect with them. When we are able to really understand how a diagnosis affects a person and their loved ones, we are motivated to make sure they are receiving our best practice.

Navigate Challenging Conversations. In this third primary theme of *the importance and role of empathy*, 22 (76%) of the CSD students highlighted how empathy was “a critical component” in facilitating what can often be challenging circumstances and matters when patients and families are faced with difficult medical decisions regarding their terminal diagnosis, and care. Three subthemes were identified: (a) *disagreement between patient and family*; (b) *grief with terminal diagnosis*; and (c) *end-of-life conversations*.

Disagreement between patient and family. In this first subtheme of *navigate challenging conversations*, experienced by 13 (59%) of the CSD students, they described how differences in treatment preferences led to discord with the patient and their family caregiver in discussing a care plan. The students highlighted the role of empathy in these situations, illustrated by the following:

Empathy was the driving force in this specific interaction. Because of the unique situation that the patient and her son presented with, empathy had to be the foundation for the discussion. Our patient wanted to give up on chemotherapy and was in a lot of pain, she wasn’t eating or doing activities that bring her joy. She is cognitively aware and wanted to live out the rest of her time out in peace without “wasting anyone’s time,” as she said. However, her son was adamant about her going back to chemotherapy and taking her pain medications and living long enough to see her grandchildren.

...the son and the patient began arguing about the treatment plan. The team tried to address the most prominent concerns of both the patient and the son by jumping around to each discipline to explain what could be done in order to alleviate the concerns. The focus on the patient may have unintentionally made the son feel left out and like he had no say in the matter. The team should have been more understanding and empathetic when explaining to the son that his father had complete control over his treatment. The son was under the impression that because he is his father’s power of attorney that he was able to make medical decisions on behalf of his father. The son should have been more of a priority when the team was communicating their recommendations for treatment. Looking back, I understand that the son wasn’t being difficult, he was concerned for his father and wanted the best for him. The team should have been more empathetic when explaining treatment options to the son.

Grief with terminal diagnosis. In this second subtheme of *navigate challenging conversations*, experienced by 11 (50%) of the CSD students, they described how empathy was

“the most important thing” when witnessing the grief in patients and families coping with a life-limiting illness. They further noted that they must demonstrate empathy by engaging with patients in this grief even if it is outside of their comfort zone. Students shared the following:

In this specific situation, empathy played a critical role in my interaction with the patient and caregiver. This specific patient had a terminal disease, which made emotions heavy between them and the caregiver. During our particular conversation about the patient not wanting to continue treatment and the daughter wanting the patient to continue, a member of our team acknowledged their emotions and offered support in asking if they – both the patient and caregiver, wanted to talk to a grief counselor before making that heavy decision, to which they both agreed to.

I think empathy is the most important thing to communicate when speaking with a patient and his/her family. No patient or family member can listen to professional results and recommendations with a clear head before being counseled first. They may be receiving negative feedback or a diagnosis posing a major life change. The process of grief is a long series of emotions that must be addressed before being able to move forward. Our patients must know that we recognize their current struggle before they can believe that we are there to help them.

End-of-life conversations. The third subtheme of *navigate challenging conversations*, as experienced by 8 (30%) of the CSD students. In the following quote, they described how empathy is central in engaging in discussion with the patient, family and health care team about advanced directives, and treatment preferences at end-of-life.

There was one point when there was a disconnect between the team and the patient and his daughter when we started talking about end-of-life care. I think initially the team thought during the meeting we would be talking about end-of-life care and making him comfortable because he is a terminally ill patient...I think we were giving the patient good ideas and alternative ways for pain management so when end of life care was brought up, the patient and daughter became very upset. There was a better way that we as a team should have approached the conversation so there was not that disconnect, and negative emotions felt by the patient and his daughter. I need to be more comfortable communicating empathetically. I have a difficult time communicating with others when it is a difficult conversation.

I asked the patient their goals when it comes to feeding and their opinion on feeding tubes. I took what they said on board and gave them information in laymen terms. The patient and family member were receptive to what I had to say. I think attempting to empathize and sympathize is very important for such emotional and fragile circumstances.

Learning Empathy. The second area of empathy explored and addressed by all 29 CSD students looked at both how they have learned to practice empathy and what type of learning experiences could expand their knowledge on empathy. Two primary themes were revealed, including (a) *current training on empathy* and (b) *future learning of empathy*.

Current Training on Empathy. In this first primary theme of *learning empathy*, 27 (93%) of CSD students shared how they learned about empathy. Two subthemes were revealed, including (a) *classroom education* and (b) *current simulation*.

Classroom education. In this first subtheme of *current training on empathy*, experienced by 21 (78%) of CSD students described how they learned concepts of empathy through classroom lectures, discussions, and videos in their academic program. One student shared: “Having empathy allows us to respond appropriately to any situation that may arise. Empathy can be related to a helping behavior, so the client knows we want to help them when we show empathy.” Other CSD students shared the following:

As a speech language pathology graduate student, I have learned how important it is to be empathetic. We learn how to talk to patient’s families who suffer from strokes, traumatic brain injuries, and other life changing prognosis. To be able to adequately do this, you must be empathetic with the patient and their families. Counseling is also a big part of what speech pathologists do. In order to be a good counselor, I know I need to have empathy. It’s not just a one-on-one relationship (patient and professional); it’s bigger than that: family, patient, friends, community, and so on. Speech pathologists practice empathy every day, even as a student.

As a speech language pathology graduate student, I have learned how important it is to be empathetic. We learn how to talk to patient’s families who suffer from strokes, traumatic brain injuries, and other life changing prognosis. To be able to adequately do this, you must be empathetic with the patient and their families. Counseling is also a big part of what speech pathologists do. In order to be a good counselor, I know I need to have empathy. It’s not just a one-on-one relationship (patient and professional); it’s bigger than that: family, patient, friends, community, and so on. Speech pathologists practice empathy every day, even as a student.

Current simulation. In this second subtheme of *current training on empathy*, experienced by 22 (81%) of CSD students shared that participation in this interprofessional simulation was the primary way in which they learned how to use empathy when communicating with patients and families.

Future Learning of Empathy. In this second primary theme of *learning empathy*, 24 (89%) of CSD students identified how they could further learn about empathy. Three subthemes were revealed (a) *hands-on practice*; (b) *learning to listen*; and (c) *additional simulations*.

Hands-on Practice. In this first subtheme of the *future of learning empathy* 17 (71%), CSD students emphasized that hands-on practice is essential “The best way in any situation to strengthen our skills is to practice it.” Students shared the following:

I think the most beneficial thing would be exposure. To be exposed to different patients and clients, of different ages, different walks of life, different cultures, different scenarios. I believe that the best way for me to feel more confident and to strengthen my skill of empathetic communication would be from experiencing it firsthand and navigating through

it. There might be times that aren't as smooth as I would hope for them to be, but I know that I will learn from them and continue to learn to be better. Because professional empathy is such an important skill to have in any health professional environment.

The only way to truly practice these skills is to work with patients face to face and have them push you to be better and work harder. I have learned most of what I know through hands-on work with my clients, and I have enjoyed every minute of it. Even on the "bad days", I learn a great deal from all of my clients.

To strengthen my skill in communicating empathy, it is helpful for me to have hands-on experiences applying the information that I learn. I do much better applying the information when I can practice it in real life situations. Especially when learning this skill that involves direct person-to-person interaction, it is much better for me to live the experience as opposed to learning it in a classroom.

Learning to Listen. In this second subtheme of the *future of learning empathy*, 6 (26%) CSD students shared how focused teaching on listening skills would enhance their learning of empathy. Students shared the following:

In order to strengthen my skills in communicating empathetically, I need to practice listening skills in order to really hear what my patient is trying to tell me. It would also be helpful to always keep in mind that I will not always have the response that the patient may be looking for, but I can always show empathy and compassion for the patient, regardless.

I believe that becoming the best listener I can is going to impact my ability to be empathetic. It will improve how I react to the client and family concerns. It is also important as a clinician to put aside my own viewpoint and allow the client to express how they are feeling before anything, and I think this may be something I can focus on strengthening. I tend to give my stance on something when the person is not looking for an opinion of mine but rather to listen without replying with something that is caring or empathetic. I think that improving the skill of communicating with empathy will impact communication through the entire team.

Additional Simulations. In this third subtheme of the *future of learning empathy*, 6 (26%) of CSD students found the following important:

Having more of these activities placed in our other classes when we have to sit down and create a plan with the patient and other professionals would also be very helpful. I know that I need to work on my communication skills and show more empathy due to that personality questionnaire we took before, which is why those case study activities would be helpful. We have this program online where we communicate with patients and go through case studies. These have helped me tremendously because it taught me what types of questions to ask that aren't too blunt and insensitive.

To further strengthen my empathetic communication skills, I think an interprofessional event based solely on this topic would be helpful. I have become aware of the importance of empathetic communication but have not had formal training in implementing this skillset

in my everyday practice. I have a true desire to counsel my current and future clients, their families, and/or caregivers, but am afraid to say the wrong thing. A discipline-specific event may be helpful as well, but I believe that all health professions should have some common training on how to empathetically communicate in our respective practices.

Discussion

The purpose of this qualitative research study was to present evidence that determines what the CSD students who completed the interprofessional STEPPS Program learned about empathy and if their perceived capacity for empathy expanded through the simulation experience. Consequently, most of the data are reported descriptively staying faithful to the participant's response. The CSD students provided their input on the relevance and importance of learning an empathic approach when providing quality patient care. The findings support the offering of IPE simulation experiences in developing the skills CSD students need for empathic interactions with their patients and their patient's families. These simulation experiences provide an educational opportunity for students to help acquire the skills essential to successfully demonstrate empathetic concern, display understanding and validation of the patient's feelings/situation and communicate effectively with a warm and caring attitude (Decety, 2020). Empathetic concern is important not only for clinicians when building a working relationship with their clients but for improved health outcomes (Farrelly 2012, Hojat et al., 2013; Rogers et al., 2015).

While all the CSD students participating in the IPE simulation expressed an understanding of the importance and role of empathy in professional practice and saw it as a requirement for best practice, nearly eight out of ten reported they learned concepts of empathy through classroom lectures, discussions, and videos in their academic courses. Although a majority of the CSD students reported being exposed to empathy training, again, eight out of ten students shared that participation in the interprofessional simulation was the primary way in which they felt they learned best how to use empathy when communicating with patients and families. This finding indicates that the simulations fostered a more comprehensive understanding and allowed practice in the use of the concepts that promote empathic concern by establishing trust, facilitating a collaborative plan of care, and understanding the importance and role of empathy during difficult situations that may occur while treating patients.

The findings further show that the learning obtained during the simulation was more impactful on the CSD students by allowing them increased exposure and practice with providing a better sense on how to interact with clients. These findings align with Eichorn et al., (2021) who found empathy teaching embedded within the varied content courses in communication sciences and disorders programs. The findings also align with four of the five qualities Whicker (2020) found to be successful for empathy teaching: (a) use of standardized patients; (b) use of case scenarios; (c) use of computer-based simulation, and (d) use of targeted feedback.

The inherent value of the findings in this research is multilayered. One of the most compelling benefits of empathy training acquired during IPE simulations was that simulations utilize an engaged learning environment with opportunities to practice empathy skills. The students received a practical experience in which to build their empathy skills. The responses of the CSD students revealed that more than seven out of ten deemed hands-on practice as essential.

A second value found to teaching empathy using simulations is it allowed the students to practice skills in a safe learning environment free of the threat of repercussions/consequences. This is the place where mistakes can be safely made and inherently become a valuable learning tool. Students were uniquely given the experience of not only having feedback from their instructors but also from the simulated clients and their families. The students were better able to gain insight on the concepts and approaches to be used by learning from the unique perspective of mistakes that were made and how those mistakes and interactions made the simulated clients and their families feel; this was also found by Eichorn et al., (2021).

Another value of this type of training is it consolidates teaching by satisfying the ASHA IPE and empathy competency requirements (ASHA, n.d.b.). The curriculum for communication sciences and disorders programs is quite rigorous. One of the challenges in including dedicated courses is the logistic constraints on time and space for adding to the curriculum (Luterman, 2020). It may be important to do so, for the findings here highlight benefits to providing empathy training during IPE simulations. Students working together on multi-disciplinary teams obtained an increased awareness of the roles and responsibilities of other disciplines, better understood their personal communication strengths and weakness, and were given opportunities to refine communication and conflict management skills (Interprofessional Education Collaborative [IPEC], 2016). This research was able to demonstrate that IPE simulations can help pre-professional CSD students build and use empathetic concern when communicating with interprofessional team members and simulated patients and family members.

Considerations for Implementation

Educational activities to work on building empathy should focus on helping pre-professional clinicians develop the skills to learn about their own communication style and how it may differ from other's preferred communication style, how to navigate conflict, how to perceive other's perspectives of situations, and their potential feelings as well as spending time to self-reflect on increasing self-awareness of their own perceptions and biases (Stepien & Baernstein, 2006; Beck & Verticchio, 2014). Working on the development of these skills will help pre-professional clinicians learn to demonstrate empathetic concern, validate a patient's feelings and situation, while communicating in a warm and caring manner (Decety, 2020). There are several teaching models that can be used to work on developing the skills needed to demonstrate empathetic concern in communication. Some effective methods include experiential learning, role-playing, and simulated activities (Bell, 2018; Eichorn et al., 2021). This study found that there is significant value in having feedback provided from professionals in the field and using simulated patients and family members.

Study Limitations

Though the results of this study contribute to understanding the value of integrating IPE simulation into curriculum for CSD students, there are limitations. These findings pertain to only these 31 CSD students enrolled in a particular Midwestern university, allowing for no generalization of the results; in addition, the sample size is relatively small. The study design was a post-seminar survey, not allowing for additional follow up data collection, nor a longitudinal review of how this may be used in clinicals, rotations, or practice. Additional research across other health profession

graduate student populations would also further enhance our understanding in this area, as well as group comparison research designs. Thus, without these more advanced designs, it was not possible here to discern empathy learning the students brought into the program, and what was enhanced or learned during the IPE simulation. Lastly, survey construction can be improved with ongoing data collection, building the instrument's reliability and validity.

Conclusion

The overlap in the teaching of IPE and empathy skills may be why students found the experience to be worthwhile and believed the experience as impactful for learning. The research findings indicated that the empathy training provided during simulations with feedback from the patients/caregivers and instructors was more beneficial and offered the greatest impact on learning. Research on these educational experiences is important to continue as is the expansion of IPE curriculum for CSD students.

Disclosures

The authors have no financial nor nonfinancial relationships to disclose.

References

- American Speech-Language-Hearing Association. (2023). Code of ethics [Ethics]. <https://www.asha.org/policy>
- American Speech-Language-Hearing Association. (2016). Scope of practice in speech-language pathology [Scope of Practice]. www.asha.org/policy/
- American Speech Language and Hearing Association (ASHA). (n.d.a) Counseling for professional service delivery. <https://www.asha.org/practice-portal/professional-issues/counseling-for-professional-service-delivery/>
- American Speech-Language-Hearing Association (ASHA). (n.d.b) Interprofessional Education/Interprofessional Practice (IPE/IPP). <https://www.asha.org/practice/ipe-ipp/>
- American Speech-Language-hearing Association (ASHA), (n.d.c). Evidence-based Practice. <https://www.asha.org/research/ebp/>
- Beck, A & Verticchio, H, 2014. Counseling and mindfulness practice with graduate students in communication sciences and disorders. *Contemporary Issues in Communication Sciences and Disorders*, 41, 133-148. <https://doi.org/10.1044/cicsd.41.F.133>
- Bell, H. (2018). Creative interventions for teaching empathy in the counseling classroom. *Journal of Creativity in Mental Health*, 13(1), 106–120. <https://doi.org/10.1080/15401383.2017.1328295>
- Brown, J., Ackley, K. & Knollman-Porter, K. (2021). Collaborative Goal Setting: A Clinical Approach for Adults with Mild Traumatic Brain Injury. *American Journal of Speech-Language Pathology*, 30(6), 1–20. https://doi.org/10.1044/2021_ajslp-21-00078
- Buchman, S. & Henderson, D. (2019). Interprofessional empathy and communication competency development in healthcare profession's curriculum through immersive virtual reality experiences. *Journal of Interprofessional Education & Practice*, 15, 127-130.
- Cherry, K. (2022). *What to do if you or a loved one lack empathy*. <https://www.verywellmind.com/what-to-do-if-you-or-a-loved-one-lack-empathy-5199257>
- Clancy, C. & Tornberg, D. (2007). TeamSTEPPS: assuring optimal teamwork in clinical settings. *American Journal of Medical Quality*, 22(3), 214-7. <https://doi.org/10.1177/1062860607300616>
- Decety J. (2020). Empathy in medicine: What it is, and how much we really need It. *American Journal of Medicine*, 133(5), 561-566. <https://doi.org/10.1016/j.amjmed.2019.12.012>.
- DiLollo, A., Favreau, C. (2010). Person-centered care and speech and language therapy. *Seminars in Speech and Language*, 31(1), 90-96, <http://dx.doi.org/10.1055/s-0030-1252110>
- Doud, A, Hoepner, J, Holland, A. (2020). A survey of counseling curricula among accredited communication sciences and disorders graduate student programs. *American Journal of Speech-Language Pathology*, 29, 789-803. https://doi.org/10.1044/2020_AJSLP-19-00042
- Eichorn, N., Zarn, M., Moncrieff, D., Sposto, C., Lee, S., Hoffman, J., Levy, M. & Caplan. (2021). Original interprofessional simulations to train students in CSD and related Health professions in team-based healthcare. *Communication Disorders Quarterly*, 43(1), 23-31. <https://doi.org/10.1177/1525740120942127cdq.sagepub.com>
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). *Psychotherapy*, 48(1), 43–49. <https://doi.org/10.1037/a0022187>

- Farrelly, L. (2012). *Measuring empathy in healthcare staff in relation to job satisfaction, job related affective well being, gender, occupation and length of service*. [Bachelor of Arts, DBS School of Arts Dublin].
- Hojat M, Louis DZ, Maio V, & Gonnella J.S., (2013). Empathy and health care quality. *American Journal of Medical Quality*, 28(1), 6-7. <https://doi.org/10.1177/106286061246473>
- Hovland, C., Milliken, B. & Niederriter, J. (2021) Interprofessional simulation education and nursing students: Assessing and understanding empathy. *Journal of Clinical Simulation in Nursing*. 60, 25-31. <https://doi.org/10.1016/j.ecns.2021.07.002>
- Hsieh, H., & Shannon, S. (2005). Three approaches to a qualitative content analysis. *Quality Health Research*, 15, 730-741.
- Interprofessional Education Collaborative (IPEC), 2016. Core competencies for interprofessional collaborative practice. <https://ipec.memberclicks.net/assets/2016-Update.pdf> 06/20/2023.
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 357–361. <https://doi.org/10.1037/0033-3204.38.4.357>
- Lieberman, A. (2018). Counseling issues: Addressing behavioral and emotional considerations in the treatment of communication disorders. *American Journal of Speech-Language Pathology*, 27(1), 13-23. https://doi.org/10.1044/2017_AJSLP-16-0149
- 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
- Michalec, B., Schneider, J.M., & Mackenzie, M. (2021). Teaching empathy in an interprofessional setting with a focus on decategorization: Introducing I-Team. *Journal of Interprofessional Education & Practice*, 22. <https://doi.org/10.1016/j.xjep.2020.100395>
- Miles, M. & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Milliken, B., Hovland, C. & Niederriter, J. (2022). Development of empathy through participation in interprofessional simulation: An exploratory study of master of occupational therapy students’ perspectives, *Occupational Therapy in Mental Health*, 38(3), 273-295. <https://doi.org/10.1080/0164212X.2022.2060417>
- Moudatsou, M., Stavropoulou, A., Philalithis, A. & Koukouli, S. (2020) . The Role of Empathy in Health and Social Care Professionals. *Healthcare*, 8(10), 1–9. <https://doi.org/10.3390/healthcare8010026>
- Quesal, R. (2010). Empathy: Perhaps the most important E in EBP. *Seminars in Speech and Language Pathology*, 31(4), 217-225. <https://doi.org/10.1055/s-0030-1265755>
- Robinson, J. H., Callister, L. C., Berry, J. A., & Dearing, K. A. (2008). Patient-centered care and adherence: Definitions and applications to improve outcomes. *Journal of the American Academy of Nurse Practitioners*, 20(12), 600–607. <https://doi.org/10.1111/j.1745-7599.2008.00360.x>
- Rogers, C.R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21(2), 95–103. <https://doi.org/10.1037/h0045357>
- Rogers, C., Chakara, Z., Cohen, R., Fourie, K., Gounder, D. & Makaruse, N. (2015). Levels of empathy in speech therapy and audiology undergraduate students training at the University of Cape Town. *Faculty of Health Sciences Undergraduate Research Day*, 1(2). <https://doi.org/10.15641/ur-at-uct.v1i2.39>

- Stepien, K. A. & Baernstein, A. (2006). Educating for empathy. *Journal of General Internal Medicine*, 21(5), 524–530.
- Sylvan, L. (2019). How to teach concern: Inspiring graduate students to develop empathy and advocacy with the power of personal stories. *Teaching and Learning in Communication Sciences and Disorders*, 3(2), Article 9. <https://doi.org/10.30707/TLCSD3.2Sylvan>
- Whicker, 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
- Winfield, C., Sparkman-Key, N., & Vajda, A. (2017). Interprofessional collaboration among helping professions: Experiences with holistic client care. *Journal of Interprofessional Education & Practice*, 9, 66-73.
- Yegidis, B., Weinbach, R. & Myers, L. (2012). *Research methods for social workers*. Pearson Allyn & Bacon.