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**AN INQUIRY INTO THE DEVELOPMENT OF FUTURE SPEECH-LANGUAGE
PATHOLOGISTS: A MIXED METHODS STUDY**

by
Kimberly P. Plotts

A Dissertation

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Doctor of Education
at
Rowan University
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Dissertation Chair: James Coaxum, III, Ph.D.

Dedications

For my son, doctoral students, and future speech-language pathologists.

You have the capability to do great things!

Acknowledgments

To my son: You are and will always be the brightness in my day. I love you more than words can express. Thank you for having patience with me and understanding the time it took to make this goal a reality. Your love and words of encouragement have kept me going. I am proud to be your mom. May you live a life that is full of love, laughter, joy, and knowledge that you can accomplish what you set before you.

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Abstract

Kimberly P. Plotts
AN INQUIRY INTO THE DEVELOPMENT OF FUTURE SPEECH-LANGUAGE
PATHOLOGISTS: A MIXED METHODS STUDY
2016-2017
James Coaxum, III, Ph.D.
Doctor of Education

Upon graduating college, many students seek employment within the degree area

in which they obtained. Employers are seeking skills in individuals that encompass

interpersonal, technical, analytical, personal, and professional abilities. As with many

careers, the allied health field requires content specific knowledge and specialized skills,

which indicate sufficient work readiness. The allied health field of speech-language

pathology is touted as one of the fastest growing professions in this decade and is in

demand. To become a speech-language pathologist, one must complete a master's

program and supervised clinical practicums. Despite participating in a master's program

with quality curricula, having supervision by a certified speech-language pathologist, and

experiencing clinical practicums, some speech-language pathology graduate students

have expressed concern with their preparation for the workforce. There is a lack of

research on the impact of supervision on speech-language pathology graduate students

feeling prepared to render services after completion of several practicums, how practical

experiences assist students in meeting ASHA's standards, and the impact of self-efficacy

on speech-language pathology graduate students. Therefore, the purpose of this mixed

methods study was to explore the perceptions of second-year graduate speech-language

pathology students on their preparedness for the speech-language pathology workforce

through clinical supervision and practicums, examine the impact that clinical supervision,

practicum experiences, and self-efficacy had on preparation for the workforce, and

explore the perceptions of supervisors on equipping graduate students for the speech-language pathology field. Data were gathered through semi-structured interviews, a graphic elicitation, and utilization of the New General Self-Efficacy Scale (Chen, Gully, & Eden, 2001). Results of the study indicated that supervision, clinical practicums, academic preparation, reflection, and confidence impacted the development of a novice to independent speech-language pathology graduate student clinician. Participants noted that supervisors who were supportive, communicative, and understanding were vital for the supervision process. Graduate speech-language pathology students and supervisors alike reported that clinical practicums gave a means for graduate students to directly provide treatment, conduct evaluations with a variety of clients, gain confidence, and become independent as a graduate student clinician. It was discussed that reflection in- and on- practice was important and should be frequent as it helped graduate students adjust their therapy sessions and gave them knowledge on what skills of theirs needed improvement. University program directors and the American Speech-Language-Hearing Association (ASHA) may want to consider reviewing their academic coursework content and requirements and supervision and clinical practicum policies. Recommendations for future research included study on instruction of soft skills and global worldview in graduate level courses, collaboration and time management benefits during clinical practicums, simulated therapy as preparatory exposure to therapeutic services experienced in clinical practicums, and two graduate speech-language pathology students being supervised by one field supervisor in a semester.

Keywords: Work readiness, soft skills, supervision, clinical practicums, ASHA standards, self-efficacy, reflection, worldview

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Chapter 1

Introduction to the Study

Upon graduating college, many individuals seek employment within the degree area in which they obtained. They have participated in a two or four year program focusing on a field of interest. With a resume in hand, they begin to locate organizations advertising employment in their degree area. While the employment rate for adults ages 20 to 24 was 72% in 2016, this is a decline from 2000 when the employment rate was 77.4% (United States Department of Education, 2017, 2015). One of the main factors for this decline was economic recession within the United States (United States Department of Education, 2015). Other factors such as company layoffs, decreasing job creation, individuals going back to school for college degrees, diminishing entrepreneurship and investment from the private sector, and caring for families can contribute to the decrease in employment (Plumer, 2013; Sherk, 2010; Terry, 2014), but one area of interest is work readiness. Work readiness refers to the depth of skills and attributes that individuals possess which prepare them to be equipped and excel in an organization (Caballero & Walker, 2010; Clark, 2013; National Association of Colleges and Employers, 2015; Walker et al., 2013). It is a key factor in connecting an employee and employer for successful transition into work (National Work Readiness Council, n. d.; Scott, 2015). Diminishing are the days where having strong reading, writing, and arithmetic skills secure a job (Casner-Lotto & Barrington, 2006). Employers are looking for broader skills (Hansen & Hansen, 2015; National Association of Colleges and Employers, 2015). These encompass interpersonal, technical, analytical, personal, and professional abilities (Casner-Lotto & Barrington, 2006; Hansen & Hansen, 2015; Landrum, Hettich, &

Wilner, 2010; National Association of Colleges and Employers, 2015; United States Department of Labor, 2006; Walker et al., 2013; Youth.gov, 2015). Work readiness strengthens an individual's employability and likelihood of remaining as an employee of an organization (Scott, 2015). Those who possess work readiness skills are better prepared to complete job related responsibilities (Scott, 2015; United States Department of Labor, 2006). They are able to solve problems, meet company goals and objectives, acclimate to various work issues, and gain new knowledge (Scott, 2015). In turn, employers reap the benefit of productive employees (Scott, 2015).

While there are various names for the skills and attributes that research has indicated as pertinent for work readiness, they can be grouped into four domains: academic and technical knowledge, social interaction and personality traits, organizational and management abilities, and reasoning and problem solving capabilities (Landrum et al., 2010; United States Department of Labor, 2006; Walker et al., 2013; Youth.gov, 2015). Academic knowledge includes strong reading, math, writing, computing, and career specific knowledge (Landrum et al., 2010; Walker et al., 2013; Youth.gov, 2015). It involves the ability to take what is known and accurately and efficiently apply it to the roles and responsibilities of a job (Landrum et al., 2010; Youth.gov, 2015). A significant part of application of knowledge in today's global market and workplace is through the use of technology. Technical awareness requires an individual to select appropriate equipment to complete work assignments, monitor progress through the use of technology, problem solve technologic issues, and improve work performance with the utilization of technology (Landrum et al., 2010; Youth.gov, 2015).

Academic knowledge and technical awareness are important to employability, but many employers want to confirm that potential employees have abilities to collaborate and work with multiple staff members as well as demonstrate ethical and professional actions. Social interaction incorporates the ability to work well with other employees specifically in groups or teams, balance and adapt emotions according to various work situations, effectively communicate with peers and management, receive performance feedback, and demonstrate conflict resolution (Landrum et al., 2010; Soule & Warrick, 2015; Walker et al., 2013; Youth.gov, 2015). It also involves the ability to share job roles and responsibilities, network with others within and outside of the organization, and meet the requests and needs of clients, patients, or customers (Landrum et al., 2010; United States Department of Labor, 2006; Walker et al., 2013; Youth.gov, 2015). While there are many personality traits, research has indicated that an individual who demonstrates work readiness will be able to work by oneself, be flexible, confident, honest, meticulous, decisive, responsible, and enthusiastic as well as demonstrate professionalism (Clark, 2013; Landrum et al., 2010; United States Department of Labor, 2006; Walker et al., 2013; Youth.gov, 2015).

Along with social interaction and amicable personality traits, employers are seeking individuals who are organized and able to efficiently manage their time. Organizational and management skills refer to one's ability to set goals, create a timeline to accomplish them, and effectively utilize resources to complete the tasks (Landrum et al., 2010; Youth.gov, 2015). It involves gathering and evaluating job related data, maintaining office files, and writing reports (Landrum et al., 2010; Youth.gov, 2015). An individual with strong organizational and management capabilities will be able to

multitask as well as receive and interpret ideas from peers in order to increase job performance (Landrum et al., 2010; Youth.gov, 2015).

Lastly, an individual who demonstrates work readiness will be able to present reasoning and problem solving skills. He or she can identify and prioritize problems while providing potential solutions that would benefit the organization (Landrum et al., 2010; Soule & Warrick, 2015; United States Department of Labor, 2006; Youth.gov, 2015). Critical and innovative thinking contribute to solving difficult work situations as they can provide new perspectives and ideas for resolutions (Soule & Warrick, 2015; United States Department of Labor, 2006; Youth.gov, 2015).

Allied Health Work Readiness

As with many careers, the allied health field requires content specific knowledge and specialized skills, which indicate sufficient work readiness. Numerous allied health professionals assist and treat people with medical, physical, mental, and/or cognitive concerns. Therefore, work readiness and competency is critical. Unlike other professions, allied health professionals work with situations that are high risk and stressful (Walker et al., 2013) as they can be dealing with life or death circumstances. Critical decisions need to be made in a swift manner and accurate treatment must follow. Allied health specialists need to have strong communication abilities as they are often relaying vital information to patients, clients, students, and/or families (Patterson, Curtis, & Reid, 2008). Being aware of an organization, hospital, rehabilitation, or acute and long-term care facilities' safety policies and procedures as well as daily routines is important to the staff and clients' care and well-being (Eley, 2010; Patterson et al., 2008). Allied health specialists also need to demonstrate personal and professional maturity as the field can be

demanding and hold extended hours due to work conditions (Walker et al., 2013, p. 117), staff shortages (American Speech-Language-Hearing Association, 2014b), and difficult patients (Patterson et al., 2008).

Furthermore, many careers today, specifically allied health, require an education beyond high school. Universities and colleges have the responsibility of facilitating learning through instructing and training students (Altbach, 2008; Bandura, 1993; Hart, 2006; Kaaya et al., 2012). Emphasis in higher education institutions is placed on providing information for increased pedagogy and skill development within various professions (Hart, 2006). Research has indicated that higher education institutions should adopt a broader lens to educating students that includes global awareness and preparing students for the workforce (Altbach, 2008; Kaaya et al., 2012; Llasus, Angosta, & Clark, 2014). Hart (2006) interviewed employers and recent graduates of four-year colleges and the results of the study indicated that both the employers and graduates believed higher education should be a balance of providing a broad knowledge base and specific skills needed for targeted careers. Among the top skills which employers in the study sought in new hires were teamwork, critical thinking and reasoning, and oral and written communication (Hart, 2006, p. 5). These findings correlate with the work readiness skills of social interaction, organization and management, and reasoning and problem solving. Teamwork is noted as a part of one's ability to interact and collaborate with other staff members, while being efficient in oral and written communication are included in setting goals, managing time, and meeting deadlines. Critical thinking and reasoning are associated with one's ability to prioritize concerns and offer solutions. Another result in Hart's (2006) study was both the graduates and employers noted that increased

experience with applying skills in real-world settings was important for higher education institutions to offer. This sentiment was further highlighted in several other studies in which nursing students and registered nurses indicated that despite some clinical experience, they felt unprepared to work in mental health and discrepancy was present with their competency and abilities to meet standards in the workplace in spite of a strong confidence in their skill to apply evidence based practices (Kaaya et al., 2012; Llasus et al., 2014; Wynaden, Orb, McGowan, & Downie, 2000).

In order to offer those who are interested in the allied health field a means to have access to education and therefore, address a shortage of allied health professionals in today's society, Brandt, Quake-Rapp, Shanedling, Spannaus-Martin, and Martin (2010) found that universities who adopt delivering courses through a mix of online and in-person classes (blended learning) will be able to provide opportunities for increased allied health enrollment due to convenience and flexibility of interaction with the instructor. Like Hart's (2006) research, Brandt et al. (2010) note that learning which includes student-centered education and practical experiences is critical. Brandt et al. (2010) state that having a curriculum focused on regularly evaluating student learning and outcomes would indicate the effectiveness of the curriculum and student preparation for the workforce.

Moreover, in the education of allied health professionals, Miller and Gallicchio (2007) note that individuals should be skilled in the use of technology, show proficiency in their content area, hold a global worldview, and present cultural aptitude. Similar to the work readiness skill of technological knowledge, the authors note that the 21st century allied health professional would need to be versed in using technology for initiating and

monitoring patient care, reaching patients through various media outlets, and conversing with other professionals (Miller & Gallicchio, 2007). Miller and Gallicchio (2007) state that a vision towards the future would include higher education institutions providing allied health professionals with strategies to educate the public on health awareness and wellness as it relates to disease prevention and healthy living. In order to promote a healthier way of living to the public and better health care services, approaches such as multimedia outreach, collaborative research among allied health professionals, health prevention education, and broadening of worldviews can be utilized by allied health educators and practitioners alike (Miller & Gallicchio, 2007).

While research has indicated that higher education institutions should focus on an integrative approach to preparing students for the workforce, a recent study (Chegg, 2013) found that only 50% of the college students surveyed (n = 2,001) from various degree programs believed they were prepared to enter into the workforce and only 39% of hiring managers believed the college students were ready for a job within the associated field of study (Chegg, 2013). In similar fashion, McKinsey & Company (2013) in collaboration with Chegg, surveyed 4,900 students from various degree tracks and found that a third of students in four-year college programs and 60% to 70% of students in two-year programs felt underprepared for entering the workforce. Contrarily, 72% of the surveyed educational providers believed that college students were adequately prepared to enter into the job market (McKinsey & Company, 2013). Within the job market, careers in allied health fields are projected to have some of the greatest employment growth from 2012-2022 (United States Bureau of Labor Statistics, 2014a).

Among these careers are physical and occupational therapists, health specialty teachers, and interpreters and translators (United States Bureau of Labor Statistics, 2014a).

In addition, the allied health field of speech-language pathology (SLP) is touted as one of the fastest growing professions in this decade and is in demand (American Speech-Language-Hearing Association, 2014b). The field is projected to increase its employment opportunities by 19% from 2012-2022, which is swifter than the mean for any other occupation within and outside the allied health professions (United States Bureau of Labor Statistics, 2014b). According to the U. S. News and World Report (2017), the field of speech-language pathology is ranked number 28 out of the best 100 jobs to have in the United States. The field of speech-language pathology is expanding as a result of numerous reasons. As the baby-boomer generation ages, there will be an increase in health related incidences that may affect one's ability to communicate such as hearing impairment, strokes, and dementia (United States Bureau of Labor Statistics, 2014b; Weiss, 2009). With one in six children in the United States diagnosed with a developmental disability (Boyle et al., 2011), related services such as speech-language pathology are needed. Speech-language pathologists can assist children with developmental delays in learning new cognitive, social-emotional, and communicative skills. Since Spanish is one of the fastest expanding languages in the United States, there is an increased need for bi-lingual speech-language pathologists that can evaluate children who present possible delays in their native language (Weiss, 2009). Therefore, the preparation of speech-language pathologists for the field is critical.

Foundation of Speech-Language Pathology

Even though speech-language pathology may currently be at the forefront as an appealing career, its origins began in 1872 when Alexander Melville Bell developed a visual design containing symbols which demonstrated where the lips, tongue, and throat were placed during various sound productions (Duchan, 2002). Visible Speech, as it was labeled, was used by Alexander Melville Bell and his son Alexander Graham Bell as a speech therapy technique with individuals who had verbal speech weaknesses (Duchan, 2002). Many early speech-language therapists started in other careers such as doctors, educators, or conventional professionals (Duchan, 2002). In their respective practices, they were working with individuals that had speech difficulties and desired to focus more specifically on helping this population. In the early 1900s, there was a group of speech clinicians that formed and created a subgroup for speech correctionists under the National Education Association (NEA). In 1925, the American Speech-Language-Hearing Association (ASHA) was established to provide national standards, credentialing, and scientific research for the fields of speech-language pathology, speech/language/hearing science, and audiology (American Speech-Language-Hearing Association, 2015). For the past 90 years, ASHA has overseen the field of speech-language pathology.

Speech-language pathology is a specialty that offers evaluative and therapeutic services for individuals who have delays or disorders in communication, language, fluency, voice, feeding/swallowing, and/or hearing (Logemann, 2006; Mayo Clinic, 2015; United States Bureau of Labor Statistics, 2014c). The field offers an individual the opportunity to work with people of all ages and in many different settings including hospitals, rehabilitation centers, private practices, home health, nursing/assisted living

centers, private and public schools, and early intervention programs. With this array of settings for employment comes the need for skills that are developed in the areas of speech sound production, voice, resonance, fluency, language, communication, cognition, hearing, social communication, and feeding and swallowing (ASHA, 2009; United States Bureau of Labor Statistics, 2014c). Within these capacities, a speech-language pathologist needs to be prepared to offer prevention and pre-referral, consultation, referral, screening, evaluation, diagnosis, treatment and intervention, management, counseling, collaboration, and documentation services (ASHA, 2009; Mayo Clinic, 2015; United States Bureau of Labor Statistics, 2014c).

Furthermore, ASHA has set forth requirements for competence and certification within speech-language pathology. Three of the requirements are: (a) earning a master's degree in speech-language pathology, (b) having direct supervision from a clinical supervisor for 375 clinical hours with an additional 25 hours of observation by the graduate student of the supervisor during therapy sessions, and (c) participating in practicums with children and adults during the years of graduate school (ASHA, 2009). According to the ASHA database, there are 266 higher education institutions that offer master's degrees in speech-language pathology (ASHA, 2014a). However, out of hundreds of applications each year, most universities only accept 15-25 students per year for their program, making the master's programs very competitive. One could gather that universities are aiming to select the best of the applicants to succeed in their program and represent the university. For the 375 clinical hours and 25 observation hours to be recognized, the graduate student must be overseen by a certified speech-language pathologist who holds and maintains a Certificate of Clinical Competence (CCC). An

individual is able to obtain a CCC by fulfilling the three requirements above, passing a national speech-language pathology exam, and successfully completing a supervised Clinical Fellowship Year (CFY) upon entering the workforce after graduation. The CCC must be maintained by a supervisor through obtaining 30 certification maintenance hours (CMHs) of qualifying professional development every three-year cycle (ASHA, 2009).

Problem Statement

Despite participating in a master's program with quality curricula, having supervision by a certified speech-language pathologist, and experiencing clinical practicums, some speech-language pathology graduate students have expressed concern with their preparation for the workforce (Adamson, Harris, & Hunt, 1997; Compton, Tucker, & Flynn, 2009; Kelly et al., 1997). The problem surrounding this concern would be the quality of care that clients, patients, and students would receive if novice speech-language pathologists lack some grounding to render assessment and therapeutic services. If speech-pathology graduate students lack preparation as they enter the field, there could be crucial errors in testing and interpretation of assessment results. This could lead to misdiagnosis and limited speech-language services. Patients, clients, and/or students could be placed in programs or therapy settings that are not appropriate for the concerns at hand.

As stated before, while the baby-boomer population ages, there will be an increase in health impairments such as strokes, hearing loss, and/or dementia which may require skilled speech-language pathologists to treat them (United States Department of Labor, 2014; Weiss, 2009). With medical advances and increased awareness of the public surrounding potential developmental delays (Centers for Disease Control and Prevention,

2015), there is an ongoing rise in the need for speech-language services (United States Department of Labor, 2014). Therefore, having graduate speech-language pathology students who feel they are equipped to enter the workforce is vital.

Through the lens of personal experience, I have had the opportunity and privilege to supervise graduate speech-language pathology students during the required clinical practicums throughout my 22 years in the field. Graduate students, with various levels of knowledge and skills, have completed one of their clinical practicums at the setting where I work. During many of the conversations, students have stated that while supervision and practicums have aided in their pedagogy and clinical skill development, they still felt a level of unpreparedness for the workforce as a speech-language pathologist. Reasons stated have been meeting the vast standards set by ASHA as well as personal and theoretical incompatibility with supervisors or clinical settings.

Moreover, research on supervision has indicated that there are various styles of oversight and supervision that are preferred by students. These include styles that are collaborative, flexible, supportive, and amicable (Holloway, 1995; Ladany, Walker, & Melincoff, 2001; McJunkin, Justen, Strickland, & Jesten, 1998; O'Conner, 2008; Steward, Breland, & Neil, 2001). Details regarding the styles are further discussed as part of the literature review in Chapter 2 of this dissertation. While studies have been conducted on preferred supervisory styles in various professional fields, there is a lack of research on the efficacy of supervision in the field of speech-language pathology (McCrea & Brasseur, 2003; Spence, Wilson, Kavanagh, Strong, & Worrall, 2001). Likewise, there is a lack of research on supervision's impact on graduate students feeling equipped to render services after completion of several practicums in the areas of speech

sound production, voice, resonance, fluency, language, communication, cognition, hearing, social communication, and feeding and swallowing (ASHA, 2009). Research has shown that competency within speech-language pathology is on a continuum and significantly improves with clinical experience (McAllister, Lincoln, Ferguson, & McAllister, 2011; Sheepway, Lincoln, & Togher, 2011). However, research needed to be conducted on how the practicum experiences assisted second-year graduate students in their preparation to enter into the field of speech-language pathology.

Furthermore, literature has shown that the relationship between the supervisor and supervisee is key in graduate programs (Anderson, 1988; McCrea & Brasseur, 2003; Wagner & Hess, 1999). Clinical practicums are the bridge between academic learning and application of skills within the professional setting. Self-efficacy can influence one's actions and continued motivation to perform well. Clinical practicums, self-efficacy, and supervision have been studied individually (Attrill & Gunn, 2010; Chan, Carter, & McAllister, 1994; Fitzgerald, 2009; Ho & Whitehill, 2009; Ho, Whitehill, & Ciocca, 2014; Joshi & McAllister, 1998; Lee & Schmaman, 1987; Ostergren, 2011; Pasupathy & Bogschutz, 2013; Rudolph, Manning, & Sewell, 1983; Schramski, 2010; Sheepway, Lincoln, & McAllister, 2014; Vest & Culton, 1990) and paired (Ensslen, 2013; Hill, Davidson, & Theodoros, 2013; Lincoln, Adamson, & Covic, 2004), but there is minimal research on the combination of the three regarding second-year graduate speech-language pathology students.

Purpose of the Study

The majority of studies on preparation for the workforce in the area of allied health and field of speech-language pathology were focused on professionals in the

workplace or included samples of students from various allied health fields of study (occupational therapy, physiotherapy, orthoptics, health information management) (Adamson et al., 1997; Compton et al., 2009; Kelly et al., 1997). This present study was unique in that it sought to study individuals who were on the cusp of entering the speech-language pathology workforce and should have had a strong academic and experiential foundation to meet ASHA's standards upon graduation and entrance into the job market. Therefore, the purpose of this mixed methods study was to explore the perceptions of second-year speech-language pathology students on their preparedness to meet ASHA's standards through clinical supervision and practicums as well as examine the impact that clinical supervision and practicum experiences had on their development from a novice to independent graduate student clinician. In addition, examination into the impact of self-efficacy on second-year graduate students' preparation to enter the field of speech-language pathology was conducted.

Within supervision and practicums is the development of a supervisor/supervisee working relationship. This relationship is critical as it can impact the professional development of graduate students and their overall preparation for the workforce. Clinical practicums not only provide a means for graduate students to apply the academic knowledge they have gained, but participate in collaboration with the supervisor and other professionals, receive feedback and support from the supervisor, and develop time management as well as problem solving and reasoning skills. As the graduate students conduct therapy and achieve objectives set for themselves, self-efficacy may build. While there may be complications in the supervisor/supervisee working relationship and clinical

practicums, one's ability to persist and accomplish goals can allow skills to be mastered and self-efficacy to be increased.

Since second-year graduate speech-language pathology students had a year of specialized courses as well as at least two practicum and supervision experiences from which to derive information and data, they were selected for this study. Exploration of the perceptions of faculty members and supervisors regarding how university speech-language pathology programs utilize supervision and clinical practicums to prepare graduate students was incorporated into this study as well. Faculty members and supervisors provided detailed information pertaining to coursework, programming requirements, the supervision and practicum process, and graduate student academic and therapeutic performance.

Additionally, in order to have a deeper understanding into the preparedness of second-year SLP graduate students, conduct in-depth analysis, compare qualitative and quantitative results, and present sound inferences, a parallel mixed methods study was warranted (Creswell, 2014; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). Through qualitative measures of interviewing, a deeper understanding of the problem occurred. Interviewing provided the researcher an opportunity to gather "real-life" information and first-hand descriptions from participants (Gertz, 1974; Miles, Huberman, & Saldana, 2014; Rossman & Rallis, 2012). Through quantitative measures of a self-efficacy scale, descriptive statistics (Fink, 2013), standard deviation, and variance were gathered. A frequency table was developed and percentages were obtained from quantitative data rendered through a graphic elicitation. Detailed analysis and evaluation of data transpired as qualitative study focused on the process of research as well as

offered different methods of data collection and quantitative study examined relationships and significance of outcomes (Creswell, 2014; Maxwell, 2013; Miles et al., 2014; Pope & Mays, 2006; Rossman & Rallis, 2012; Teddlie & Tashakkori, 2009). As a result of the multiple methods that quantitative and qualitative research offered for data collection and analysis through mixed methods study, meta-inferences were explored and presented (Creswell, 2014; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009).

Exploration and examination into the ways that supervision and practicums may equip second-year speech-language pathology graduate students for the roles and responsibilities of a speech-language pathologist is critical. Gaining knowledge through a speech-language pathology master's program and being able to apply the information through supervision and clinical practicums allows a student to participate in placing theory into action (Argyris, 1990). As it pertains to academics, theory in action refers to one's ability to apply what he or she has learned in the classroom to every day practice. It is the use of techniques, strategies, and theories that have been embedded in research and academic dialogue. Theory in action requires a level of reflection (Argyris, 1990). Reflection requires an individual to examine his or her actions and determine areas of growth in performance (Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). As reflection continues through implementing the determined changes and the individual observes positive outcomes from the modifications, a level of self-efficacy develops. Self-efficacy is one's belief in his or her ability to complete tasks and accomplish goals that were set (Bandura, 1989). The greater a person's self-efficacy, the deeper his or her commitment is to completing objectives (Bandura, 1989; Lane, Lane, & Kyprianou, 2004). An individual's motivation can influence whether he or she decides to remain

passive or chooses to act and/or complete tasks (Deci, Vallerand, Pelletier, & Ryan, 1991; Kruglanski, Chernikova, & Schori-Eyal, 2014; Ryan & Deci, 2000, 2000a; Taylor, 2015; Vansteenkiste, Lens, & Deci, 2006). As stated previously, an allied health career can be demanding and specialists need specific skills. It was important to research the self-efficacy of second-year speech-language pathology graduate students in order to explore the preparedness of the graduate students to meet the demands of the field.

Research Questions

As there is a lack of research on the impact of supervision on speech-language pathology graduate students feeling prepared to render services after completion of several practicums, how practical experiences assist students in meeting ASHA's standards, and the impact of self-efficacy on speech-language pathology graduate students, the following research questions guided the parallel mixed methods study:

1. How do university speech-language pathology programs utilize supervision and practicums to prepare graduate students for entry into the workforce?

2. What aspects of supervision and practicums contribute to the development of second-year graduate speech-language pathology students from a novice to independent graduate student clinician?

3. In what ways do second-year graduate speech-language pathology students believe their practicums and supervision experience equipped them to meet ASHA's Knowledge and Skills Standards?

4. What impact does self-efficacy have on second-year graduate students being equipped to enter the field of speech-language pathology?

These questions were relevant in that they addressed a current need for research in speech-language pathology as well as approached investigation of supervision, practicums, and self-efficacy in the field in a way that had not been explored. Segmenting the research questions into smaller areas of focus allowed the study and research to provide rich and detailed information which rendered deeper inference, discussion, and understanding (Creswell & Plano Clark, 2011) for the readers and offered recommendations for programmatic enhancement.

Significance of Study

Researching the preparedness of second-year graduate speech pathology students was vital because if novice speech-language pathologists lack preparation to provide assessment and therapeutic services, then the quality of care that clients, patients, and students would receive would be negatively impacted. Society would have specialists entering the speech-language pathology field ill equipped which could impact diagnosis, treatment, and the well-being of individuals (Costigan & Light, 2010; Tellis, Witmer, Link, Ranocchia, & Tellis, n. d.; Vallino, Lass, Bunnell, & Pannbacker, 2008). In addition, as the general population ages and incur health related problems, the public is going to require confident and prepared speech-language pathologists to assist them with communication issues that may arise (United States Department of Labor, 2014; Weiss, 2009).

Since preparation of graduate speech-language pathology students is completed in part through supervision and clinical practicums (ASHA, 2009), it would be advantageous to universities, students, certification boards, and potential employers to know if the students believe they are ready to enter into the workforce after participating

in multiple practicums and supervisory settings. Literature has indicated that a strong relationship between supervisor and supervisee is important in the graduate student's program (Anderson, 1988; McCrea & Brasseur, 2003; Wagner & Hess, 1999). Clinical practicums are the link between academics and practice (Roger et al., 2008; Ryan, Toohey, & Hughes, 1996; Sprague & Percy, 2013). Therefore, results of the study as gathered from graduate students preparing to enter the speech-language pathology field provided current and relevant information relating to the effectiveness of supervision and clinical practicums.

Department leaders within universities can utilize the information to analyze whether the programs are sufficiently preparing graduate students. Adaptations to higher education supervision and clinical practicum policies and/or academic curriculums can be considered upon review of the study's results. Students can examine the outcomes of the study to further their knowledge or change their actions in order to gain more from their learning experience (Ryan & Deci, 2000a; Vansteenkiste et al., 2006).

Self-efficacy is an individual's confidence in his or her capability to complete responsibilities and accomplish objectives that were set (Bandura, 1989). Motivation can influence a person's desire to complete tasks and achieve goals (Deci et al., 1991; Kruglanskiet al., 2014; Ryan & Deci, 2000, 2000a; Taylor, 2015; Vansteenkiste et al., 2006). Many higher education programs aim to facilitate students' ability to take theory and place it into action outside of the classroom. The application in clinical settings promotes a level of reflection. Through reflection (Argyris, 1990), self-efficacy forms. There is a lack of research in the field of speech-language pathology regarding graduate student perceptions of preparedness for the workforce. Obtaining the perceptions of

second-year speech-language pathology graduate students on preparedness for entering the field provided valuable information for improved curriculums, teaching models, programs, supervision styles, and practicum settings.

Furthermore, certification boards may find the study valuable as various standards, which are used to examine competency, were included in the study. Student perceptions regarding their preparedness to apply the standards were pursued. The certification boards can use these data as part of an analysis to determine if the standards are applicable or need to be adjusted. Potential employers can gain insight on factors that possible employees may need in order to be successful in their organization.

Conclusion

Speech-language pathology is an expanding and exciting field of employment. It offers an array of opportunities for an individual to pursue for a career path. However, the requirements for certification and eventual employment are demanding. ASHA expects an entering speech-language pathologist be prepared to offer prevention and pre-referral, consultation, referral, screening, evaluation, diagnosis, treatment and intervention, management, counseling, collaboration, and documentation services (ASHA, 2009). In addition, ASHA requires successful collection of 375 supervised clinical practicum and 25 observation hours and completion of a master's program as part of the certification process.

Supervision provides a means for graduate students to gain feedback and knowledge, which can enhance their academic, personal, and professional skills. Clinical practicums allow graduate students the chance to apply theory and their knowledge to practical experiences. Through supervision and clinical experiences, graduate speech-

language pathology students have the opportunity to participate in reflection. Insight gained from reflection can promote and enhance self-efficacy. Motivation can influence one's choice to remain inactive, or complete tasks and be successful in meeting goals that have been set.

Yet, second-year speech-language pathology graduate students have reported a lack in feeling prepared to enter the field. There is research that has discussed the importance of supervision and clinical practicums as well as the development of self-efficacy. However, there is a lack of research in the field of speech-language pathology, specifically from the graduate students' perspective, on the impact of supervision regarding students feeling prepared to render services after completion of practicums and how applied experiences assist graduate students in preparation for the field.

As a result, a mixed methods study provided a process to collect and synthesize qualitative and quantitative information, methods, results, and conclusions. These data allowed pursuit of detailed information, which gave a deeper understanding into an area of interest, phenomenon, theory, or social issue (Creswell & Plano Clark, 2011; Johnson, Onwuegbuzie, & Turner, 2005; Onwuegbuzie & Leech, 2005, 2006). Research questions, which focused on qualitative and quantitative measures, provided means to gather information that was compared and contrasted and analyzed for contradictions. The in-depth data gave way to valuable inferences and rich discussion that can be used for programmatic and regulatory decisions.

Moreover, the mixed methods study on the preparedness of second-year graduate speech-language pathology students was warranted as there is minimal literature that addresses this concern. If SLP graduate students lack some preparation, critical mistakes

in evaluation and treatment could be made. This could result in over or under identification of individuals who may or may not require speech-language services. In addition, unprepared individuals could make errors in diagnosis, which could affect clients' and/or students' ability to communicate and function within society. Results of the study provided vital information to assist in preventing unpreparedness of graduating master's level speech-language pathology students.

Literature on self-efficacy as well as the importance and impact of supervision and clinical practicums was collected and reviewed. Details of the literature are discussed in the following chapter and theoretical frameworks are examined and presented as well. The literature review and theoretical framework were utilized to obtain a survey and develop interview protocols as well as a graphic elicitation, which provided a base for the parallel mixed methods study. The gathered research and data were analyzed for comparison, contrast, contradictions, and selection of common themes.

Chapter 2

Literature Review

In order to become successful in the field of speech-language pathology, an individual needs to obtain skill sets in prevention and pre-referral, consultation, referral, screening, evaluation, diagnosis, treatment and intervention, management, counseling, collaboration, and documentation services (ASHA, 2009). The American Speech-Language-Hearing Association has set forth requirements for competence and certification within the specialty. Three of the requirements are: (a) earning a master's degree in speech-language pathology, (b) having direct supervision from a clinical supervisor, and (c) participating in practicums with children and adults during the years of graduate school (ASHA, 2016).

Requiring supervision, clinical practicums, and a master's degree in speech-language pathology are crucial aspects in the education and training of graduate students (ASHA, 2009, 2008b, 2008c). Research shows that there is value in graduate student supervision and completion of practicums (ASHA, 2009; Carlin, Milam, Carlin, & Owen, 2012; McCrea & Brasseur, 2003; Ralph, Walker, & Wimmer, 2009). Within supervision, it is vital for a working alliance to be established and feedback as well as reflection occur (Dawson, Phillips, & Leggat, 2013; Fone, 2006; Fowler, 2011; Gaitskell & Morley, 2008; Gard & Lewis, 2008; Geller, 2001; Geller & Foley, 2009; Hunter & Blair, 1999; Mendel, 2006; Murphy & Wright, 2005; Saxby, Wilson, & Newcombe, 2013; Senediak, 2013; Smith, 2010; Sweeney, Webley, & Treacher, 2001). To aid in the development of a robust working relationship and provide efficient supervision, research indicates that a supervisor should demonstrate communicative, reflective, supportive, relational,

empathetic, realistic, intuitive, collaborative, and instructional skills (Bogo & McKnight, 2006; Dawson et al., 2013; Driscoll, 2000, 2007; Fitzgerald, 2009; Geller & Foley, 2009; Kilminster & Jolly, 2000; Ladany et al., 2001; Meier, 2001; Ostergren, 2011; Saxby et al., 2013). However, despite creation of supervisor/supervisee rapport, supervisors and supervisees have expressed dissatisfaction and difficulties such as lack of time to supervise and collaborate, conflict between individuals, poor supervisee skills, insufficient organizational abilities, and inadequate guidelines in the supervision process (Dawson et al., 2013; Dawson, Phillips, & Leggat, 2012; Grant, Crawford, & Schofield, 2012; Kavanagh et al., 2003; McAllister, 2005; Ostergren, 2011; Ralph et al., 2009).

Within the profession of speech-language pathology, Jean Anderson's (1988) supervisory method in speech-language pathology and audiology is the primary model utilized for the supervision of graduate students. According to Anderson (1988), supervision is a process that involves a diverse set of actions, which depend on the supervisor's and supervisee's needs, theories, expectations, results, and competencies. ASHA (2008a, 2008b, 2008c) adds to this definition the aspect of effective clinical teaching, which includes assisting the supervisee in developing problem solving skills, self-analysis, and self-evaluation.

These skills can be applied (theory in action) and mastered during clinical practicums. Theory in action refers to a person's ability to take what he or she has learned in the academic classroom and apply it to every day practice (Argyris, 1990). A clinical practicum can be described as a setting in which a graduate student is supervised by a certified professional and is able to apply his or her pedagogy, evaluate and treat

individuals with delays or disorders, strengthen his or her specialized skills, problem

solve, and analyze outcomes (ASHA, 2008c; Pasupathy & Bogschutz, 2013).

During practicums, competency develops on a continuum (Anderson, 1988;

McAllister et al., 2011; Sheepway et al., 2014). Individuals have an opportunity to move

from a novice to established practitioner. They can consciously contribute to their own

motivation and actions (Bandura, 1989, 2012). According to the social cognitive theory, a

person's actions can be impacted by a triad of stimuli: personal factors, environmental

determinants, and behaviors (Bandura, 1989, 2012). As individuals progress on the

continuum and successfully complete tasks, self-efficacy can be developed. Research

indicates that past accomplishments can be the most compelling supply of self-efficacy

(Bandura, 1982; Pajares, Johnson, & Usher, 2007; Usher & Pajares, 2006).

Furthermore, an effective means for progress in skill development is reflective

practice (Argyris, 1990; Betts, 2004; Gellar, 2001; Osterman & Kottkamp, 2004; Schon,

1994; Senediak, 2013). Reflection can transpire on an individual (graduate student) or

joint (supervisor with supervisee) basis (ASHA, 2008a, 2008b, 2008c; Argyris, 1990;

Geller, 2001; Gellar & Foley, 2009). Mastering the skill of reflecting on events that

happened and reflecting as they unfold in order to make modifications to actions are vital

to improved and effective practice (Argyris, 1990; Osterman & Kottkamp, 2004; Schon,

1994; Senediak, 2013).

Even though clinical practicums provide a rich environment for learning, skill

development, and reflection, anxiety and stress can occur surrounding the roles and

responsibilities of the graduate student and supervisor as well as the expectations

concerning the practicum (Chan et al., 1994; Hojat, Gonnella, Erdmann, & Vogel, 2003;

Lincoln et al., 2004; Meisenhelder, 1987). Strategies to manage stress, anxiety, and time during the supervision and practicum process such as reflective practice, increasing confidence, building a supervisor/supervisee relationship, segmenting tasks into smaller parts, providing clear directions, seeking as well as giving support and guidance, and setting priorities are represented in literature (Bandura, 1993; Covic, Adamson, Lincoln, & Kench, 2003; Meisenhelder, 1987). Effective supervision during clinical practicums is a crucial aspect to the progress of graduate students' skill growth and management of environmental and programmatic stressors (ASHA, 2008a, 2008c; Brueggeman, 2006; Kavanagh, Spence, Wilson, & Crow, 2002; Senediak, 2013; Vest & Culton, 1990).

ASHA Standards

As speech-language pathology graduate students enhance their intervention skills and therefore performance through supervision and clinical practicums, they need to be mindful of ASHA's requirements and standards. ASHA (2016) has eight standards, which encompass the type of college degree and educational programming (Standards I-III), knowledge and skills outcomes (Standards IV-V), assessment (Standard VI), and speech-language pathology clinical fellowship (Standard VII) needed for certification. Once certification is obtained, ASHA's Standard VIII provides requirements for maintenance of certification (ASHA, 2016). Standard VII will not be researched in this study as it focuses on the clinical fellowship year after graduation from a master's program and that is beyond the scope of this study. Relative to this study are Standards II (educational program), IV (knowledge outcomes), and V (skills outcomes). These standards were selected as they speak to graduate level requirements, performance, and preparedness, which directly relate to the study's research questions' aims and participant

selection. The participants sought in this study were second-year graduate students who have completed several practicums with supervision. The students should have been instructed and assessed in the areas included in Standards IV and V, which represent ASHA's expectations and requirements for competency and eventual certification.

Embedded within Standard II and Standard III is the requisite of graduate clinical practicum completion (ASHA, 2016). ASHA (2016) requires a total of 400 direct client/patient contact hours to be obtained with a minimum of 325 hours collected at the graduate level. Diagnostic and therapeutic clinical hours must be gained with both children and adults across the areas of language, articulation, voice, fluency, dysphagia, and hearing. Competency is on a continuum, which begins with an individual who is a novice clinician (has theory and knowledge) and develops to an expert (experience with practical application of theory and knowledge) (Anderson, 1988; McAllister et al., 2011; Sheepway et al., 2014).

Under Standard IV: Knowledge Outcomes, ASHA (2016) requires that graduating students demonstrate knowledge in the areas of biological sciences, statistics, physical sciences, and social/behavioral sciences. Coursework that would fulfill this mandate could be in the areas of biology, veterinary science, human anatomy and physiology, human genetics, neuroanatomy and neurophysiology, physics or chemistry, sociology, anthropology, psychology, or public health. All students must complete a full course in statistics. Individuals must show general knowledge in the neurological, psychological, biological, acoustic, developmental, and linguistic and cultural bases for human communication and swallowing process (ASHA, 2016, Standard IV-B). They need to have assimilated details regarding normal and abnormal human development from birth

to death (ASHA, 2016, Standard IV-B). Standard IV-B (ASHA, 2016) carries over into Standard IV-C in that individuals need to have demonstrated pedagogy in the difference between communication and swallowing delays versus disorders as well as their etiologies and characteristics in the following areas: articulation, voice and resonance, expressive and receptive language, fluency, hearing, swallowing functions, social communication, cognitive aspects of communication, and augmentative and alternative communication modalities. The individuals also need to be versed in prevention, evaluation, and intervention of the aforementioned areas (ASHA, 2016, Standard IV-D). In addition, persons who seek the CCC must present knowledge of research designs, reimbursement protocols, and developments in the field of speech-language pathology as well as ASHA's code of ethics and policies and procedures (ASHA, 2016, Standard IV-E through G).

Furthermore, under Standard V: Skills Outcomes, ASHA (2016) requires that individuals show skills in written and oral communication through coursework, practicums, interpersonal communication, report writing, treatment plans, and professional correspondence (Standard V-A). Standard V-B states that applicants "…must have completed a program of study that included experiences sufficient in breadth and depth to achieve…skills outcomes…" in conducting screenings, prevention, referrals, collection of case histories, assessment, adapting evaluation and treatment plans, goals, and therapy, writing, interpreting, and synthesizing test outcomes, conducting therapy, and measuring progress (ASHA, 2016). Also included is demonstrating effective culturally sensitive communication, collaboration with other professionals, adherence to ASHA's ethics code of conduct, and providing

communication and swallowing disorder counseling to family members, clients, caregivers, and other pertinent individuals (ASHA, 2016). Assessment of the standards typically occurs through course requirements (e.g., tests, projects, reports), problem-based learning, observation by supervisors, evaluation of therapeutic skills through the use of a university selected rubric or assessment tool, student self-evaluation, and sometimes, supervisors discussing the students' performance with applicable staff members and/or clients (Anderson, 1998; Hancock & Brundage, 2010; Hill, Davidson, McAllister, Wright, & Theodoros, 2014; Mok, Whitehill, & Dodd, 2014).

Clinical Practicums

Clinical practicums are the means for graduate students to apply academic knowledge and fulfill ASHA's standards. It is the responsibility of university staff and supervisors to deliver quality clinical education and oversight to ensure that graduate students are moved from novice to career ready speech-language pathologists (ASHA, 2008a, 2008b, 2008c; McCrea, 2003). Practicums provide an opportunity for significant learning to occur through encountering and problem solving various situations met by professionals and participation in self-evaluation and reflection on clinical performance (Cruice, 2005; Fitzgerald, 2009; Ho & Whitehill, 2009; Pasupathy & Bogschutz, 2013; Ralph et al., 2009; Renzulli, Gentry, & Reis, 2004; Sheepway et al., 2014). Through an occupational development view, practicums can provide a means to put into practice what is learned in the academic setting, develop time management skills, network with professionals within specialized fields, draw from a supervisor's experience, obtain experience in a variety of settings, and collaborate with speech-language pathologists and

other professionals in the workplace (Attrill & Gunn, 2010; Cruice, 2005; Hernandez, Bejarano, Reyes, Chavez, & Mata, 2014; Lincoln, 2012; Lincoln et al., 2004).

Within the practicums, there are critical aspects that supervisees have noted are needed. Observation of the supervisor rendering therapy services, receiving suggestions and constructive critique on how to improve skills, receiving encouragement to remain driven, having a level of independence, and creating high expectations and promoting metacognition are vital in the practicum setting and in the supervisor/supervisee relationship (Fitzgerald & Sims, 2004 as cited in Fitzgerald, 2009). Through an action research approach attempting to validate the Competency Assessment in Speech Pathology (COMPASS) tool, McAllister, Lincoln, Ferguson, and McAllister (2011) found that students, university staff, and field supervisors stated the need for theory and knowledge to be assimilated with practice and new skills that were learned to be generalized across therapy sessions and work contexts. The research showed that the participants' responses indicated four areas of competency found through practicums: reasoning, communication, lifelong learning, and professionalism (McAllister et al., 2011, p. 472). Reasoning competency consisted of the integration of various viewpoints to promote a holistic approach to thinking and preparation in practice. Communication denoted interpersonal skills that were efficient for intervention, collaboration, and written and oral dialogue. Lifelong learning involved the ability to reflect upon one's performance, make necessary changes, and carryover feedback and newly learned skills to a variety of practicum events. Professional competency encompassed management of responsibilities and personal attitude, organization, and ethical actions (McAllister et al., 2011, p. 472).

Furthermore, O'Kane's (2010) research indicated that upon completion of practicums, students noted an increase in their communication abilities, overall belief in their skills, and capabilities with working with clients. In research conducted by Hernandez et al. (2014), the health professionals stated similar in that they believed practicums provided them with experience and developed confidence in them which helped them in future practicums (p. 97). Also, having the opportunity to communicate with other professionals during their practicums allowed them to broaden their own views as well as interact with diverse clients. One health professional in the study also stated that she valued the opportunity through practicums to apply what she had learned in the classroom. While another noted that she felt because of the skills gained through clinical practicums, she was hired right after graduating (Hernandez et al., 2014, p. 98).

In a survey of 546 post-practicum engineering, nursing, and teacher education students, Ralph, Walker, and Wimmer (2009) found that students reported receiving effective supervision, opportunities to work with congenial colleagues and apply theory to practice, being treated as a fellow team member, and increasing their independence and confidence as a result of practicum experience (p. 437). Contrarily, some students noted that they did not receive efficient supervision due to their supervisor being controlling, impatient, and an inadequate role model. In addition, students noted that they were given trivial tasks to complete, had impractical time limits, received imbalanced performance evaluations, and were placed in settings that did not meet their learning and clinical growth needs (Ralph et al., 2009, p. 437). Similarly, in a qualitative study of final year undergraduate nursing students, Dale, Leland, and Dale (2013) found that the students demonstrated cynicism pertaining to their supervisor's ability to provide precise

evaluations that were based on solid facts and perceptions (pp. 4-5) and expressed

concerns with being rushed into treatment settings (p. 4). The students also expressed

concerns with the supervisor's lack of field knowledge and competency to supervise and

believed that the assignment of supervisors was haphazard.

In a longitudinal, qualitative study with newly graduated professionals in the field

of student affairs, Renn and Jessup-Anger (2008) found that while many felt their

supervisors were vital in helping them enter the workforce, some felt unappreciated by

their supervisor and experienced a level of shock when transitioning from the sheltered

atmosphere of graduate programming into the field (p. 328). Numerous of the new

professionals noted that practical experiences were critical to successful movement into

the workforce. Yet, they stated they needed more training in administrative tasks,

advising, managing budgets, obtaining continual professional development, assessment

and analysis, handling large amounts of organizational policy, and application of

knowledge (Renn & Jessup-Anger, 2008, pp. 325-329).

Stress and anxiety in clinical practicums. While clinical practicums can be an

excellent environment for learning, problem solving, self-evaluation and reflection,

collaboration with specialists, and professional networking (Cruice, 2005; Fitzgerald,

2009; Hernandez et al., 2014; Ho & Whitehill, 2009; Lincoln, 2012; Pasupathy &

Bogschutz, 2013; Ralph et al., 2009; Renzulli et al., 2004; Sheepway et al., 2014), they

can also be a source of anxiety and stress (Chan et al., 1994; Hojat et al., 2003;

Meisenhelder, 1987). Anxiety is a physiological and psychological response to a threat to

one's idea of self (Meisenhelder, 1987, p. 27). An individual may become anxious if a

task or situation is believed to be too challenging or a danger, the person feels incapable

of dealing with the event, fear of failure is present, and/or a negative impact on respect from others is a potential (Sarason, 1980). Individuals who have confidence in their ability to control the difficult situation minimize negative thoughts, which could decrease anxiety (Bandura, 1993). However, those who think they cannot cope with dangers have an intensification of anxiety and stress (Bandura, 1993).

In a quantitative study with 127 undergraduate speech-language pathology students, Chan, Carter, and McAllister (1994) found several sources of anxiety for students during practicums. Writing reports, developing goals for therapy sessions, and working with specialists were found significant for anxiety in the category of clinical responsibilities (Chan et al., 1994, pp. 61-62). The skill of balancing college and practicum expectations, setting time to meet with a supervisor, preparation for therapy sessions, and travel time caused increased anxiety for the students (Chan et al., 1994, p. 62). In the area of client well-being, the students felt anxiety because they were concerned about making errors in intervention and diagnosis, possibly harming the client, and managing the needs and outcomes of patients (Chan et al., 1994, p. 63). Other sources of anxiety for the undergraduate students were having enough clinical experience to fulfill the demands of practicums, being able to take knowledge and theory and apply them to practice, and having high expectations for themselves (Chan et al., 1994, p. 64). Similarly, in a quantitative study of 2,114 medical students, Hojat, Gonnella, Erdmann, and Vogel (2003) found that 68% of the students experienced stress in the areas of academics, family life, finances, and personal health issues. Other factors that can contribute to stress during practicums are inadequate supervision (Lincoln, Carmody, & Maloney, 1997), different viewpoints of the supervisee and supervisor regarding amount

of rendered therapy services, and level of student control during the length of the practicum (Lincoln et al., 2004).

Addressing anxiety in clinical practicums. Meisenhelder (1987) provides strategies to help students and supervisors address anxiety that may arise during practicums. She notes that establishing a supervisor/supervisee relationship that is safe is important. Meisenhelder (1987) recommends that the supervisor express to the student a desire to see them excel and gain knowledge. She notes that the supervisor should refrain from showing frustration and be cognizant that the student is observing his or her actions. She suggests that the supervisor reciprocally discuss the anxiety while building the student's confidence. Other recommendations include providing clear directions, segmenting tasks into smaller parts, and develop realistic goals with the student (Meisenhelder, 1987, p. 29). Moreover, through the use of the Australian Time Organization and Management Scale, Lincoln, Adamson, and Covic (2004) found the third year speech-language pathology undergraduate students sought social and emotional support, took a proactive stance in dealing with anxiety (acceptance, venting, decreasing external stressors), arranged tasks as per level of importance, and created a schedule for completing activities (pp. 96-98).

Supervision of College Students

While there are many facets to supervision, it can be referred to as a formal collaborative working relationship between specialists in which the focus is to enhance the application of knowledge and skills as well as increase pedagogy and competence while adhering to organizational, ethical, and professional regulations (Anderson, 1988; Edwards et al., 2005; Falender & Shafranske, 2007; Kavanagh et al., 2002; Senediak,

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2013; Simpson & Sparkes, 2008). It is an ongoing process in which supervisors assesses students' therapeutic skills and overall performance (Anderson, 1988; ASHA, 2008a, 2008c). Supervision involves the provision of support and guidance to a student by a practitioner with the goal of facilitating and developing an autonomous student clinician (Brueggeman, 2006; Kavanagh et al., 2002; Senediak, 2013; Vest & Culton, 1990). On the continuum of supervision, oversight of the student clinician begins with direct and involved supervision and moves through collaboration to eventually consultative services (Anderson, 1998; Mendel, 2006). During the supervision process, feedback can be provided to encourage and develop student pedagogy, student therapeutic and professional skills, and the supervisor/supervisee working relationship (Dawson et al., 2013; Fowler, 2011; Gaitskell & Morley, 2008; Hunter & Blair, 1999; Mendel, 2006; Murphy & Wright, 2005; Smith, 2010; Sweeney et al., 2001). Reflective practice and ongoing conversations regarding daily therapy practice and collaboration among fellow professionals are also a part of supervision (Fone, 2006; Geller, 2001; Geller & Foley, 2009). Modeling reflective practice and contributing to student reflection is an important aspect of supervision (Dawson et al., 2013; Driscoll, 2000, 2007; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013).

In addition, within the supervisor and supervisee working relationship is a recognition of roles and responsibilities of each member (Anderson, 1998; Geller, 2001; Senediak, 2013). A written contract between the supervisor and supervisee allows a means for clear boundaries, expectations, and distribution of authority for therapy practices to be presented and mutually agreed upon (Gard & Lewis, 2008; Gellar, 2001; Mendel, 2006; Saxby et al., 2013; Senediak, 2013). Through the development of a

contract, communication and collaboration can be established. Communication and collaboration provide an avenue for supervisor and supervisee concerns to be discussed, a working relationship to be built, and the development of an established graduate student clinician (Anderson, 1998; Bogo & McKnight, 2005; Driscoll, 2007, 2000; Geller, 2001).

      Effective supervisory skills and styles. Multiple studies have indicated supervisory skills such as relational, supportive, empathetic, intuitive, realistic, instructional, communicative, reflective, and collaborative that are crucial for efficacy as well as supervisee learning and skill growth (Bogo & McKnight, 2005; Dawson et al., 2013; Driscoll, 2007, 2000; Fitzgerald, 2009; Geller & Foley, 2009; Kilminster & Jolly, 2000; Ladany et al., 2001; Meier, 2001; Ostergren, 2011; Saxby et al., 2013). Being aware of the graduate student's academic preparation and initial strengths and weaknesses (Mendel, 2006) as well as creating a welcoming environment (Dale et al., 2013) manifests a foundation from which a working relationship can begin. Asking questions which will promote critical thinking and promote refinement of the supervisee's therapeutic skills is vital (Driscoll, 2000, 2007). This will encourage the graduate student to reflect upon their actions and enhance their therapeutic performance (Dawson et al., 2013; Driscoll, 2000, 2007). Ensuring availability to the graduate student as well as knowledge and competency (Bogo & McKnight, 2005) in the respective professional field allows for development of supervisor/supervisee relationship and communication. Being aware of the supervisee's emotional state and being willing to learn from one another can strengthen the working alliance as well as assist in managing the graduate student's response to difficult therapy sessions and stress related to work (Dawson et al., 2013; Driscoll, 2000, 2007; Geller & Foley, 2009).

Furthermore, concentration on what the supervisee is communicating will allow the supervisor the opportunity to stimulate open communication and address specific concerns regarding performance that may be present (Bogo & McKnight, 2005; Dale et al., 2013; Driscoll, 2000, 2007; Geller, 2001). Feedback that details positive aspects as well as areas of growth for performance will assist the graduate student in expanding his or her knowledge as well as refine therapeutic skills (Clynes & Raftery, 2008; Driscoll, 2000, 2007). In addition, in a survey of allied health individuals, Dawson, Phillips, and Leggat (2012), found that the respondents felt trust, relationship, guidance, support, assistance in skill development, and reflection in clinical supervision were needed in order for the supervision to be effective (p. 95). ASHA (2008b) concurs that interpersonal skills and dialogue as well as joint respect are important in a supervisory relationship.

Riconscente and Seli (2012) found that professor ratings (professors are often the supervisors of graduate students in SLP) are predictive of how effective undergraduate students perceive themselves to be pertaining to their domain of study. McJunkin, Justen, Strickland, and Jesten (1998) found that 42% of the student teachers surveyed had supervisors who utilize a collaborative style of supervision. Twenty-nine percent had a direct style, while 29% had a nondirective style of supervision (McJunkin et al., 1998). The study further discovered that 67% of student teachers preferred a collaborative supervision style. In addition, multiple studies have shown that supervisors who are friendly, supportive, and more flexible in their supervisory style facilitate student skill growth and working alliance (Dale et al., 2013; Ladany et al., 2001; Holloway, 1995; O'Conner, 2008; Ostergren, 2011; Steward et al., 2001). Contrarily, lack of these characteristics negatively impacts supervisees' performance and self-evaluation of their

skills and outcomes during practicums (Kilminster & Jolly, 2000; Steward et al., 2001; Renn & Jessup-Anger, 2008). Specific for the supervisors of speech-language graduate students, ASHA created a list of knowledge and skills that should be obtained, which are similar to the effective skills and styles of supervision found in research (see Appendix A) (ASHA 2008a, 2008c; Handcock & Brundage, 2010; Ho & Whitehill, 2009; Joshi & McAllister, 2000; O'Conner, 2008).

Supervisory feedback. One of the skills ASHA requires of supervisors is the provision of timely, descriptive, and applicable feedback (ASHA, 2008a). Feedback from a supervisor can be given by verbal and/or written means (Clynes & Raftery, 2008; Ho & Whitehill, 2009). Frequently provided constructive feedback can be one of the most potent strategies for increasing student pedagogy and skills during practicums as well as strengthening the supervisory work alliance (Dawson et al., 2013; Fowler, 2011; Gaitskell & Morley, 2008; Hunter & Blair, 1999; Mendel, 2006; Murphy & Wright, 2005; Smith, 2010; Sweeney et al., 2001). In order to be effective, feedback should contain both encouraging and constructive statements, strengths and weakness, avoid vagueness, be given regularly, and be detailed (Clynes & Raftery, 2008; Cox & Araoz, 2009; Kilminster & Jolly, 2000; Mendel, 2006; Ostergren, 2011; Smith, 2010; Sweeney et al., 2001). The goal of feedback should be to nurture and enhance the graduate student's overall therapeutic skill development and pedagogy (Mendel, 2006).

In order for feedback to be relevant and productive, Freeman (1985) suggests that it be understandable, timely, organized, mutual, and detailed. For the information to be understandable, it should contain statements that are specific and direct in areas of revision for the graduate student. Timeliness refers to the feedback being given as soon as

possible after the observed therapy session. Written or verbal feedback should aim to be frequent and objective as well as contain both positive statements and constructive criticism. When reciprocity is present during feedback, the graduate student is able to seek explanation and request help when needed.

Yet, it has been reported that some clinical supervisors avoid having to provide negative feedback (Grant et al., 2012; Hoffman, Hill, Holmes, & Freitas, 2005; Ladany & Melincoff, 1999; Skjerve et al., 2009). Hostile reactions from the supervisees, a weak working relationship, legitimacy of supervisor feedback, and adverse impact on supervisee learning and application of skills are reasons found for not disclosing negative feedback (Hoffman et al., 2005; Ladany & Melincoff, 1999; Skjerve et al., 2009). In a study with 90 supervisors, mostly supervising at the graduate level in the fields of counselor education, counseling psychology, or clinical psychology, Ladany and Melincoff (1999) found that 98% of the supervisors kept some form of information from the students (p. 168). The authors noted that more than 50% of the supervisors did not provide negative feedback because they believed it was not pertinent as well as the belief that the concern would dissipate as the students learned and developed a stronger skill set. The supervisors also stated that they addressed issues indirectly and therefore, negative feedback was not required (Ladany & Melincoff, 1999).

Furthermore, when surveying 48 supervisors of psychology students, Skjerve et al. (2009) found that 97% of the supervisors modified the content of their feedback so that the supervisees would not feel like they were being negatively criticized (p. 37). The supervisors believed that the feedback should be specific to each student and should be provided progressively. They noted that if too many concerns were addressed in a

singular moment, the student could become stressed (Skjerve et al., 2009). Two-thirds of the supervisors stated that they refrain from negative feedback as to not impact the education of the supervisee and avoid giving personal reactions to the student's performance (Skjerve et al., 2009).

  Difficulties in supervision. Complications in supervision can foster conflict and deteriorate the relationship between the supervisor and supervisee (Grant et al., 2012). In a study with 16 experienced supervisors (mean of 27.5 years in clinical practice) in the fields of clinical psychology, psychotherapy, clinical social work, and counseling, Grant, Crawford, and Schofield (2012) found that the supervisors addressed issues in supervision through reflective, relational, confrontational, and avoidant measures (p. 528). Within the intervention of reflection, the supervisors noted that they tried to be tolerant of the emotions of the supervisees, monitor their own reactions, and be honest about difficult situations. The supervisors would implement reflection as a means to discover the root of concerns or conflict. Some supervisors sought guidance from their own bosses in order to best handle involved concerns (Grant et al., 2012). Relationally, the supervisors sought to swiftly address the area of difficulty while being mindful of the supervisee's needs and confidence level. In addition, the supervisors stated that they would provide support and shared responsibility during complex situations. All 16 of the supervisors noted that they addressed issues directly through conversation and problem solving with the supervisee after they had transitioned through reflection and relational interventions (Grant et al., 2012). At times, supervisors would temporarily avoid discussing problems in order to protect the working alliance and/or the supervisee because the employee may be nervous or respond negatively (Grant et al., 2012, pp. 534-

535). Sometimes supervisors evaded conflict all together. They would refrain from addressing the problem with hopes that the supervisee may choose to end the supervisory relationship or the supervisee may seek employment elsewhere (Grant et al., 2012, p. 536).

Another area of difficulty perceived by supervisees and supervisors alike is the lack of time to properly supervise (Dawson et al., 2012, 2013; McAllister, 2005; Ostergren, 2011). With caseload numbers high and the many roles and responsibilities of supervisors, finding time to supervise can be difficult (Dawson et al., 2012, 2013; Kavanagh et al., 2003). Dawson et al. (2012) found that supervisees in allied health felt they did not have sufficient time to "debrief" with their supervisors or discuss personal matters in order to alleviate stress (p. 96). Ostergren (2011) recorded that first year speech-language pathologists in the field felt that their supervisor was not available for observation or consultation, did not initiate communication, and was not organized (p. 69). Kavanagh et al.'s (2003) research indicated similar results as Ostergren (2011) and noted that the surveyed allied health professionals and supervisors felt that the supervisors had inadequate professional development in supervision, there were inadequate guidelines for supervision, and the meetings between supervisor and supervisee needed to be increased (p. 192).

Supervision framework. In order to address the lack of official training and preparation in supervision as well as provide consistency in supervision for speech-language pathology, ASHA (2008c) adopted Jean Anderson's (1988) continuum of supervision model. Within this three-stage approach, the level of supervision and type of supervisory involvement changes over time. The three stages of evaluation-feedback,

transitional, and self-supervision do not have set time limits (Anderson, 1998; Mendel, 2006; Ostergren, 2011). Rather, the continuum is based on the individual needs of the graduate student and his or her clinical progress. The style of supervision provided to the supervisee is also on a continuum within the model and the type utilized depends on the skills of the graduate student (Anderson, 1998; Ostergren, 2011). The supervision process begins with direct/active oversight, moves through a collaborative stage, and ends with consultative interaction (Anderson, 1988; Mendel, 2006). The approach is also designed to promote the professional development of both the supervisor and graduate student (Anderson, 1988).

In the evaluation-feedback phase, the supervisor is central and governing the clinical process while the graduate student is passive as his or her skills are not suitable to handle complex therapeutic and/or work situations (Anderson, 1998; Ostergren, 2011). In this initial stage, the supervisor models effective therapeutic and interpersonal skills (McCrea & Brasseur, 2003; Ostergren, 2011). From the evaluation-feedback stage comes the transitional phase. At this level, the graduate student has demonstrated a stronger level of pedagogy and competency (Anderson, 1998; Ostergren, 2011). He or she is able to engage in discussion, find solutions to problems, and communicate with co-workers (Anderson, 1998). The supervisee is not yet to a level of independence, but is able to make decisions and own more responsibility for the clinical process. In the self-supervision stage, the graduate student is able to evaluate his or her performance and make modifications stemming from the analysis (Anderson, 1998). The supervisee is becoming much less dependent on the supervisor for planning, implementation, and follow-up of therapeutic services (Ostergren, 2011).

Along the stages of the continuum are the various styles of supervision; direct-active, collaborative, and consultative (Anderson, 1998; Mendel, 2006). The direct-active style of supervision aligns with the evaluation-feedback stage. The supervisor controls the decisions and actions that take place during this phase. The supervisor is viewed as the expert and provides hands-on guidance and feedback to the graduate student (Anderson, 1998; Mendel, 2006). The supervisor is the dominant figure and the supervisee is dependent upon the supervisor's direction. As the supervisee's skills develop and he or she demonstrates aptitude, supervision crosses over to a collaborative style. The decision making, planning, and overall communication becomes joint (Anderson, 1998). The supervisee expresses ideas and participates in therapeutic problem-solving. The supervisor provides ongoing feedback, but begins to pull back so that the graduate student can develop independence and begin to conduct self-analysis (Anderson, 1998; Mendel, 2006). Near the end of the continuum is the consultative style of supervision. Within this style, the supervisee assumes much more responsibility of the clinical roles and experience (Anderson, 1998). The supervisee independently monitors more of his or her actions and conducts self-evaluation (Anderson, 1998; Ostergren, 2011). The supervisor takes the role of listener and becomes more of a peer in problem solving circumstances (Anderson, 1998; Mendel, 2006; Ostergren, 2011). Advice from the supervisor can still be sought and rendered in the consult phase, but the graduate student maintains his or her decision-making responsibilities (Anderson, 1998; Ostergren, 2011).

Self-Efficacy Development

During practicums and the supervision process, individuals have to manage stress and anxiety, make many decisions, and possibly adjust their performance. The social cognitive theory denotes that individuals cognitively and intentionally contribute to their own motivation and acts (Bandura, 1989, 2012). The actions taken can be influenced by three areas of stimulus: personal factors, environmental determinants, and behaviors (Figure 1). A person's behavior is affected by his or her thoughts, actions, and the environment in which the individual is. Environmental or social influences can impact one's beliefs, cognitive abilities, and actions. The environment in which a person is can be forced upon him or her, personally chosen, or fashioned by oneself (Bandura, 1989, 2012). An individual's actions can impact his or her environment and vice versa as well as thoughts upon completion of the act (Bandura, 1989, 2012).

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                    ┌──────────────┐
                    │   Personal   │
                    │ Determinants │
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                      ↙          ↖
        ┌──────────────┐      ┌──────────────┐
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        │ Determinants │      │ Determinants │
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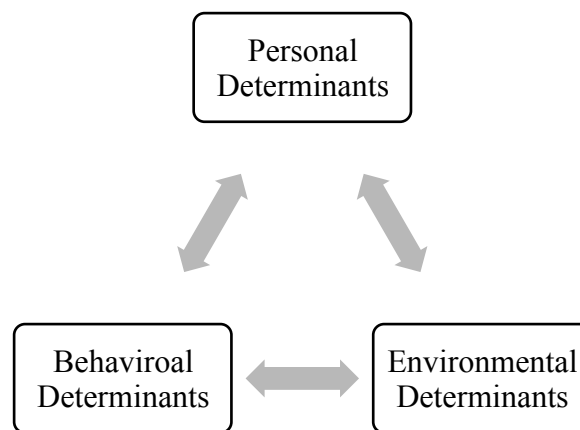
Figure 1. Triadic influences on actions in social cognitive theory (Bandura, 2012).

Embedded within the social cognitive theory is self-efficacy. Self-efficacy is the extent to which individuals believe they are able to complete tasks and achieve the goals they set for themselves (Bandura, 1989, 1993, 1997, 2012; Schunk & Pajares, 2002). The higher their self-perception, the stronger their dedication to accomplishing goals (Bandura, 1989, 2012; Bouffard-Bouchard, 1990; Caprara et al., 2008; Lane et al., 2004). A greater sense of self-efficacy promotes cognitive thought patterns, which develop effective actions; in turn, effective actions increase self-perception (Bandura, 1982; Bandura & Adams, 1977; Bouffard-Bouchard, 1990; Caprara et al., 2008; Pajares, 1996).

Self-efficacy can be established through four means: verbal persuasion, vicarious experience, emotional and physical states, and performance accomplishments (Bandura, 1977, 1997, 2012). Verbal persuasion involves one being convinced to have faith in his or her self, which promotes a sense of determination that increases the potential for success (Abdullah, Ramlan, Sabran, & Alsagoff, 2014; Bandura, 1977, 2012). Social modeling (vicarious experience) consists of an individual gaining aspiration and a sense of persistence from watching people similar to him or her achieve goals (Bandura, 2012, p. 13; Bandura, 1977). How someone assesses and interprets their emotional and physical status can influence his or her confidence (Abdullah et al., 2014; Bandura, 1977, 2012). Self-efficacy is increased when heightened negative emotions and reactions are reduced and interpreted more accurately (Bandura, 2012).

Learning through failure and overcoming complications and challenges develops an individual's resilient self-efficacy (performance accomplishments) (Bandura, 2012). Through that perseverance, a person can gain knowledge that can be informative (Bandura, 2012) for future endeavors. Acquiring knowledge through a master's program

and being able to apply the information through practicums and supervision gives opportunities for a student to participate in placing theory into action (Argyris, 1990). Theory in action refers to a person's ability to take what he or she has learned in the academic classroom and apply it to every day practice. It is the use of techniques, strategies, and theories that have been embedded in research and academic dialogue. The experience gained from executing like tasks develops mastery and influences one's self-efficacy (Abdullah et al., 2014; Bandura, 1977, 1997). Research shows that prior accomplishments can be the most potent supply of self-efficacy (Bandura, 1982; Pajares et al., 2007; Usher & Pajares, 2006).

In a study with 76 graduate counseling and educational diagnostician graduate students, Overton (2015) sought to measure the impact that service learning experiences had on graduate students' self-efficacy. Through the use of self-efficacy scales and feedback forms, results of the quasi-experimental study indicated that hands-on clinical experiences significantly increased the graduate students' self-efficacy in relation to assessment (Overton, 2015). Similar results were found in a study of 113 college students enrolled in programs for counseling (Barbee, Scherer, & Combs, 2003). Barbee et al. (2003) utilized a demographic questionnaire and two survey tools to assess if beginner counseling students who participated in a service learning approach had different self-efficacy and anxiety levels than students who did not partake in service learning training (Barbee et al., 2003, pp. 115-116). Results of a *t* test indicated that students who had service learning experience had higher levels of self-efficacy and decreased anxiety than individuals who did not have the hands-on experience (Barbee et al., 2003, pp. 113-114). Multiple regression analysis revealed that there was a significant relationship with self-

efficacy and previous counseling work experience, service learning opportunities, and counselor training/development (Barbee, et al., 2003, p. 114). Furthermore, in a study of 112 engineering, education, liberal arts, science, and consumer and family science undergraduate students, Schaffer, Chen, Zhu, and Oakes (2012) found significant increases in students' self-efficacy after they participated in a cross-disciplinary project based team learning experience (p. 88).

In a study of 475 undergraduate and graduate students in programs of teaching English as a second language, mathematics, physical education, educational management, and an "other" category, Fook et al. (2015) examined the relationship between active learning and self-efficacy. Active learning can be referred to instructional approaches which involve students in activities that require collaboration and analytical thinking (Fook et al., 2015; Prince, 2004). Examples of activities would be group discussions, debates, role-playing, writing exercises, cooperative learning, and case studies (Fook et al., 2015, p. 140). The authors utilized a survey and the results revealed that the students strongly agreed that their self-efficacy was improved through active learning, and experiences through active learning heightened their motivation to learn (Fook et al., 2015, p. 145). Multiple regression analysis indicated that the collaboration experience in this learning approach contributed to increased levels of self-efficacy.

Moreover, in a study of 150 graduate teaching assistants, Prieto and Altmaier (1994) inspected the relationship of prior teaching experience, previous instruction, and demographic variables with levels of self-efficacy (p. 493). Through the utilization of a survey, the authors found that there were higher levels of self-efficacy in graduate teaching assistants who had prior teaching opportunities and training (Prieto & Altmaier,

1994, p. 493). This study and the aforementioned studies support Bandura's concept that individuals' self-efficacy increases when they participate in opportunities or experiences which allow the practical application of skills learned during instruction (Bandura, 1977, 1982, 1997). Development of self-efficacy, theory in action, and mastery of skill require a level of reflection (Argyris, 1990; Bandura, 1982; Bandura & Adams, 1977; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013).

Reflection on personal performance. Reflective practice refers to the process of mentally evaluating one's actions and performance and determining ways to improve skills and outcomes (Argyris & Schon, 1974; Geller, 2001; Gellar & Foley, 2009; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). Through this inquiry and examination, learning, personal changes, and increased effectiveness can occur (Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). Schon (1994) described two types of reflection: reflection-in-practice and reflection-on-practice. The latter refers to an individual's ability to be aware of his or her actions and make immediate modifications to a situation in order to improve results (Schon, 1994; Senediak, 2013). Reflection-on-practice involves aptitude to meditate retrospectively on one's actions in an event in order to have a greater understanding of what transpired.

Osterman and Kottkamp (2004) described reflective practice as a cyclical experience. The first step is to recognize a concern that has prevented the desired outcome from occurring. This involves detailed thinking through the event. Once the problem is identified, inquiry and scrutiny of the situation evolves (Betts, 2004; Osterman & Kottkamp, 2004). Full description of the event is created mentally and the practitioner steps back to identify and evaluate his or her activities, beliefs, and any assumptions that

may be present (Betts, 2004; Osterman & Kottkamp, 2004, p. 29). Time and effort is placed into analyzing these three areas to determine where breaches may have occurred that hindered the goals of the event from being met. These discrepancies are used by the practitioner to locate new techniques and strategies in order to respond to the concern (Osterman & Kottkamp, 2004). The new information, ideas, techniques, and strategies that were gathered from the process of reflection are then put into practice. Through reflective practice, the practitioner is better prepared to offer enhanced therapeutic services and carryover the new knowledge to other contexts (Gellar, 2001; Senediak, 2013). The cycle then begins again with reflection on the improved event and outcomes.

As the aforementioned research has indicated, reflection in- and on- practice is vital as reflective practice can improve overall performance. This is crucial in the field of allied health and speech-language pathology as these specialists are often providing diagnoses, life and death treatment, and daily life skills therapy (Caballero, Walker, & Fuller-Tyszkiewicz, 2011). The knowledge gained from reflection in- and on- practice can promote development and growth of one's clinical skills, indicate alternative options for situations, enhance therapeutic strategies, and increase client outcomes in rehabilitation (Betts, 2004; Gellar, 2001; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013).

Conceptual Framework

With ASHA's requirements and vast standards, supervision, practicums, and self-efficacy in mind, the question of student preparedness for the speech-language pathology workforce was raised. Supervision and clinical practicums are a mandated part of programming and preparation for SLP graduate students (ASHA, 2008a, 2008b, 2008c,

2016). Research has shown the positive impact that supervision and practicum experiences can provide college students (Attrill & Gunn, 2010; Cruice, 2005; Dawson et al., 2013; Fowler, 2011; Gaitskell & Morley, 2008; Hernandez et al., 2014; Hunter & Blair, 1999; Lincoln, 2012; Lincoln et al., 2004; Mendel, 2006; Murphy & Wright, 2005; Smith, 2010; Sweeney et al., 2001).

Supervision is a collaborative working relationship which focuses on improving student knowledge and skill application, pedagogy, and competence while following professional, organizational, and ethical regulations (Anderson, 1988; Edwards et al., 2005; Falender & Shafranske, 2007; Kavanagh et al., 2002; Senediak, 2013; Simpson & Sparkes, 2008). It is on a continuum that initially commences with direct supervision and transitions through collaboration into consultative oversight (Anderson, 1998; Mendel, 2006). Supervision is the provision of guidance and support to a student with the goal of facilitating an independent student clinician (Brueggeman, 2006; Kavanagh et al., 2002; Senediak, 2013; Vest & Culton, 1990). During clinical practicums, graduate students are able to utilize the academic knowledge they gained in the classroom (Ryan et al., 1996; Roger et al., 2008; Sprague & Percy, 2013). Amidst an occupational development view, practicums provide opportunities to obtain experience in multiple settings, network with staff members within specialized fields, develop time management skills, collaborate with speech-language pathologists, and learn from a supervisor's experience (Attrill & Gunn, 2010; Cruice, 2005; Hernandez et al., 2014, p. 95; Lincoln, 2012; Lincoln et al., 2004).

The experience gained from implementing like tasks develops mastery and impacts one's self-efficacy (Bandura, 1977, 1997). Self-efficacy can form through

vicarious experience, verbal persuasion, emotional and physical states, and performance accomplishments (Bandura, 1977, 1997, 2012). A strong sense of self-efficacy promotes cognitive thought patterns, which develop effective actions; in turn, effective actions increase self-perception (Bandura, 1982; Bandura & Adams, 1977; Bouffard-Bouchard, 1990; Caprara et al., 2008; Pajares, 1996). Effective performance can be enhanced through reflective practice (Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). Reflection on one's actions and performance can occur in- and on- practice (Schon, 1994). It can transpire in a cyclical manner through full description of the event, recognition of any barriers that prevented desired outcomes, analysis of the activity for strengths and discrepancies, drafting new ideas, techniques, and strategies from the analysis, and then applying the gained information into practice (Betts, 2004; Gellar, 2001; Osterman & Kottkamp, 2004; Senediak, 2013).

However, what impact does self-efficacy have on second-year graduate students being equipped to enter the field of speech-language pathology? How do second-year speech-language pathology students perceive their preparation for entry into the workforce after supervision and clinical practicums? What are the perceived skills needed for preparedness as well as the ways that supervision, practicums, and self-efficacy influence preparation for the field? In addition, how do university speech-language pathology programs utilize supervision and practicums to prepare graduate students? Various studies have researched supervision and clinical practicums' impact on students' first externships, clinical educators' and students' perceptions of stress, time management, and coping strategies in clinical placements, as well as clinical experiences and increased confidence (Attrill & Gunn, 2010; Chan et al., 1994; Ensslen, 2013;

Fitzgerald, 2009; Hill et al., 2013; Ho & Whitehill, 2009; Ho et al., 2014; Joshi & McAllister, 1998; Lee & Schmaman, 1987; Lincoln et al., 2004; Ostergren, 2011; Pasupathy & Bogschutz, 2013; Rudolph et al., 1983; Schramski, 2010; Sheepway et al., 2014; Vest & Culton, 1990), but there is minimal information on the incorporation of supervision, clinical practicums, and self-efficacy regarding preparedness of graduate speech-language pathology students who are in their second year of study. Therefore, Figure 2 depicts the conceptual framework for the study.

Clinical Practicum
- Application of knowledge
- Increased skills

Supervision
- Working relationship
- Style and characteristics
- Feedback
- Jean Anderson's 3 stages

Second Year SLP Graduate Student Preparedness

Self-Efficacy
- Social Cognitive Theory
- Bandura

ASHA Standards
- Standards II, IV, and V

Reflective Practice
- Schon: Reflection in- and on- practice
- Osterman & Kottkamp: Cyclical experience

Figure 2. Conceptual framework for the study

Summary

In order to be certified as a speech-language pathologist, completion of a master's program, obtaining supervision, and completing clinical practicums are required. As the supervisor and graduate student begin to collaborate together and get to know one another, a working relationship develops. Research has indicated that the working relationship between a supervisor and supervisee is crucial (Dawson et al., 2013; Fone, 2006; Fowler, 2011, Gaitskell & Morley, 2008; Gard & Lewis, 2008; Geller, 2001; Geller & Foley, 2009; Hunter & Blair, 1999; Murphy & Wright, 2005; Saxby et al., 2013; Senediak, 2013). It is important for the supervisor to foster an environment of support, guidance, instruction, as well as reflection on practice while moving a student through the supervisory stages of evaluation-feedback, transitional, and self-supervision (Anderson, 1998; Bogo & McKnight, 2005; Dawson et al., 2013; Driscoll, 2000, 2007; Fitzgerald, 2009; Geller & Foley, 2009; Kilminster & Jolly, 2000; Ladany et al., 2001; Meier, 2001; Ostergren, 2011; Saxby et al., 2013). The ultimate goal of supervision is to aid in the development of a student from a novice speech-language pathology student to an autonomous practitioner (ASHA, 2008a, 2008b, 2008c; Brueggeman, 2006; Kavanagh et al., 2002; McCrea, 2003; Senediak, 2013; Vest & Culton, 1990). Clinical practicums are a conduit for applying the academic knowledge gained, acquisition of new therapeutic skills, fulfilling the requirements of ASHA standards, and reflecting on practice (Cruice, 2005; Fitzgerald, 2009; Ho & Whitehill, 2009; Pasupathy & Bogschutz, 2013; Ralph et al., 2009; Renzulli et al., 2004; Roger et al., 2008; Sheepway et al., 2014).

As the student transitions from a novice to autonomous practitioner, self-efficacy can increase. As research has indicated, completing similar tasks, persisting through

complications, accomplishing goals, and reflecting on practice can positively impact one's level of self-efficacy (Bandura, 1982, 1977, 1997, 2012; Osterman & Kottkamp, 2004; Pajares et al., 2007; Schon, 1994; Senediak, 2013; Usher & Pajares, 2006). As the speech-language pathology graduate student receives supervision, completes clinical practicums, participates in reflective practice, and develops self-efficacy, preparation for the field has the potential to be fostered.

Chapter 3

Methodology

Colleges and universities aim to facilitate learning through instructing and training students (Altbach, 2008; Hart, 2006). Presenting a balance of broad knowledge and specific content area skills with a global worldview is a desired outcome of higher education (Altbach, 2008; Brandt et al., 2010; Hart, 2006; Miller & Gallicchio, 2007). Upon graduation from a master's degree program, speech-language pathology graduates need to be prepared to render a variety of pre-intervention and therapeutic services (ASHA, 2009; Logemann, 2006; Mayo Clinic, 2015; United States Bureau of Labor Statistics, 2014c). However, some speech-language pathology graduate students have expressed concern with their preparedness for the workforce (Adamson et al., 1997; Compton et al., 2009; Kelly et al., 1997). The preparation during graduate school is addressed through academic coursework, supervision, and clinical practicums (ASHA, 2009, 2016; Anderson, 1988).

As such, there is a lack of research in the field of speech-language pathology on the efficacy of clinical supervision (McCrea & Brasseur, 2003; Spence et al., 2001) as well as research on clinical supervision's impact on graduate students' preparedness to render services after completion of several practicums in the areas of speech sound production, voice, resonance, fluency, language, communication, cognition, hearing, social communication, and feeding and swallowing (ASHA, 2009). There is minimal research on how clinical practicums have assisted second-year speech-language pathology students' preparation for the workforce. In addition, there is a lack of research

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on self-efficacy of second-year speech-language pathology students with feeling equipped to enter the field.

The three entities of supervision, practicums, and self-efficacy have been studied individually and paired, but there is minimal research on the combination of the three regarding second-year graduate speech-language pathology students. Therefore, the purpose of this mixed methods study was to explore the perceptions of second-year graduate speech-language pathology students on their preparedness for the speech-language pathology workforce through clinical supervision and practicums, examine the impact that clinical supervision, practicum experiences, and self-efficacy had on preparation for the workforce, and explore the perceptions of supervisors on equipping graduate students for the speech-language pathology field. The following research questions guided the parallel mixed methods study:

1. How do university speech-language pathology programs utilize supervision and practicums to prepare graduate students for entry into the workforce?

2. What aspects of supervision and practicums contribute to the development of second-year graduate speech-language pathology students form a novice to independent graduate student clinician?

3. In what ways do second-year graduate speech-language pathology students believe their practicums and supervision experience equipped them to meet ASHA's Knowledge and Skills Standards?

4. What impact does self-efficacy have on second-year graduate students being equipped to enter the field of speech-language pathology?

Research Design

In order to answer the research questions, explore and understand the perceptions of the selected stakeholders, and utilize various methods of inquiry, mixed methods was selected. Mixed methods research is a single or multi-phase inquisition that focuses on gathering, analyzing, and integrating qualitative and quantitative information, research questions, methods, results, and conclusions in order to pursue and offer enhanced insight as well as explanation into a phenomenon, an area of interest, concern, and/or theory (Johnson & Onwuegbuzie, 2004; Johnson et al., 2005; Onwuegbuzie & Leech, 2005, 2006; Plotts, 2014; Teddlie & Tashakkori, 2009). Mixed methods was appropriate for the study as it provided a means to utilize qualitative and quantitative research designs, methods, and strategies of inquiry so as to enrich the process of interviewing and surveying second-year graduate SLP students, provide detailed data through convergence of the research designs for deeper analysis of the graduate students' views and opinions, explore connections or contradictions between the students' interview reporting and survey documentation, provide stronger inferences for potential SLP programmatic and policy recommendations, render deeper understanding and knowledge in the area of study, and fill a gap in SLP research (Collins, Onwuegbuzie, & Sutton, 2006; Creswell, 2014; Creswell, Fetters, & Ivankova, 2004; Jick, 1979; Onwuegbuzie & Leech, 2005; Plotts, 2014). Within a mixed methods design, there are several approaches to research. For this study, a parallel mixed methods focus was chosen.

Parallel mixed methods is an approach in which quantitative and qualitative data are collected simultaneously as separate individual strands, analyzed, and then compared to explore if the findings complement or disconfirm each other (Brannen, 2005; Creswell,

2014; Small, 2011; Teddlie & Tashakkori, 2006). This design of mixed methods research was chosen as it offered an opportunity to seek detailed and robust data regarding the perceptions of preparedness for the workforce from second-year graduate SLP students, compare, contrast, and triangulate information from the interviews, graphic elicitations, memos, and surveys gathered through the dual approaches rather than single, and form meta-inferences which can influence SLP graduate student supervision, practicums, and programming (Brannen, 2005; Collins et al., 2006; Creswell et al., 2004; Johnson & Onwuegbuzie, 2004; Palinkas et al., 2011; Teddlie & Tashakkori, 2006, 2009). In addition, exploration into the perceptions of supervisors on equipping graduate students for the speech-language pathology field through academics, supervision, and clinical practicum was pursued. An illustration (Teddlie & Tashakkori, 2009, p. 152) for the process of the parallel mixed methods study is located in Appendix B.

Qualitative and quantitative research benefits. Mixed methods study allows the researcher the opportunity to explore, examine, and therefore, present both qualitative and quantitative inquiry, data, and results. Qualitative research often begins with questions that seek to be answered with the purpose of learning as its foundation (Pope & Mays, 2006; Rossman & Rallis, 2012). The research focuses on understanding a social phenomenon through the eyes of the participants as they experience and develop meaning of the world (Pope & Mays, 2006; Maxwell, 2013; Rossman & Rallis, 2012; Rubin & Rubin, 2012; Welman & Kruger, 1999). In a qualitative approach, "the researcher is the means through which the study is conducted" (Rossman & Rallis, 2012, p. 5). One of the greatest strengths of qualitative research is that it frequently occurs in the natural setting of the stakeholders (Pope & Mays, 2006; Lincoln & Guba, 1985; Maxwell, 2013; Miles

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et al., 2014; Rossman & Rallis, 2012; Rubin & Rubin, 2012). This provides the

opportunity for "real-life" encounters to be expressed as the individuals are rooted in

their surroundings (Gertz, 1974; Miles et al., 2014; Rossman & Rallis, 2012). Another

strength of qualitative study is that it concentrates on the process of the research

(Maxwell, 2013) allowing for detailed information to be gathered through first-hand

descriptions from the participants (Gertz, 1974; Miles et al., 2014). Qualitative study

concentrates on the context and allows it to materialize (Rossman & Rallis, 2012). This

leads to a third strength of qualitative research in that gathering qualitative research can

be conducted through different methods. Interviewing, observation, and general

discussions with individuals are some of the methods that can be utilized in qualitative

data collection (Pope & Mays, 2006; Maxwell, 2013; Miles et al., 2014; Rossman &

Rallis, 2012). This information can be gathered over a length of time and not necessarily

in a brief period as in some quantitative studies (Miles et al., 2014). In-depth analysis and

comparison of data can transpire as qualitative study focuses on the process of research

(Creswell, 2014; Maxwell, 2013; Rossman & Rallis, 2012). As the study and results

unfold, analysis and interpretation of the information occurs through inductive reasoning

and out of systematic examination (Pope & Mays, 2006; Rossman & Rallis, 2012). As a

result of the multiple methods that qualitative research offers for data collection and

analysis, inferences can be explored and presented (Creswell, 2014; Creswell & Plano

Clark, 2011). In relation to quantitative study, qualitative research can be utilized to

confirm, supplement, and/or continue quantitative results (Creswell & Plano Clark, 2011;

Miles et al., 2014; Teddlie & Tashakkori, 2009).

Qualitative research was appropriate for this study as it promoted gathering data in the participants' environment. In this matter, the speech-language pathology graduate students may have felt more comfortable with interviews as they took place at the selected University, which provided a sense of familiarity. With a sense of familiarity, the graduate students may have been more at ease and willing to share their experiences. In addition, semi-structured interviewing gave an opportunity for the participants' voices to be heard. I sought to document and better understand the perspectives of speech-language pathology graduate students regarding their preparedness for the field. Interviewing the University SLP staff offered me the chance to gain supervisors' opinions on the programmatic preparation and readiness of speech-language pathology graduate students. Qualitative methods of interviews, graphic elicitation, coding, theme development, and triangulation allowed me to collect and analyze detailed information (Gertz, 1974; Pope & Mays, 2006; Maxwell, 2013; Miles et al., 2014; Rossman & Rallis, 2012).

Quantitative studies are often referred to as the scientific approach to research. They contain examination of interrelated variables that create a hypothesis to be analyzed (Creswell, 2014; Teddlie & Tashakkori, 2009). Quantitative research consists of a systematic approach that places emphasis on neutrality, prediction, rationality, control of methods, and collection of numerical data (Teddlie & Tashakkori, 2009; Walker, 2005). One of the greater strengths of quantitative research is the ability to study a large amount of people in a randomized sample, which could aid in presenting results that could be generalized (Johnson & Onwuegbuzie, 2004). The results of a larger quantitative sample can be analyzed in a fairly swift manner through the use of statistical software (Fink, 2003; Johnson & Onwuegbuzie, 2004). Another strength is the opportunity to control

trials within the study, which reduces the risk of researcher bias and erred assumptions (Burns & Grove, 1999; Hicks, 1998). A fourth strength of quantitative study is that it may be more broadly accepted in scientific research as it provides the means for control and statistical rigor which can increase the validity and credibility of the study (Johnson & Onwuegbuzie, 2004; Walker, 2005).

Quantitative research was appropriate for this study as it provided a means to collect numerical data on self-efficacy and perceptions of second-year graduate speech-language pathology students on characteristics and styles of supervision as well as outcomes of clinical practicums. The numerical data were gathered swiftly through a self-efficacy scale and graphic elicitation. The statistics that followed from data entry and analysis were vital to a deeper understanding into what the second-year graduate students believed to be valuable and important in supervision and practicum experiences as well as how much self-efficacy impacted them being equipped to enter the field of speech-language pathology. The quantitative data were also beneficial as they assisted in balancing any weaknesses that may have been present in a qualitative only study.

Pragmatic worldview. A worldview that corresponds to the mixed methods approach is pragmatism (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Leech, 2005; Tashakkori & Teddlie, 1998; Teddlie & Tashakkori, 2009). As a pragmatist, the researcher moves beyond the quantitative versus qualitative research debate and seeks to fluidly integrate both forms in the study (Creswell, 2014; Onwuegbuzie & Leech, 2005; Teddlie & Tashakkori, 2009). Focus is placed on what means are appropriate for addressing the research questions and finding solutions to the phenomena (Creswell, 2014; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). The researcher is

able to delve into the "what" and "how" of the phenomena through the utilization of various world views, hypotheses, and methods (Creswell, 2014, p. 11). As a pragmatist, the researcher is not bound by one design of study, but is able to have multiple options for data collection and analysis which can provide deeper understanding into the concern at hand (Creswell, 2014; Rossman & Wilson, 1985).

By conducting a mixed methods study, I was able to utilize the strengths of both quantitative and qualitative research. Thus, bolstering the weaknesses that may have existed in each form of research. Through the lens of pragmatism, I was able to approach research with openness and let the process and data unfold. I was not bound by one form of data collection. Through the various supervisor and student interviews, the New General Self-Efficacy (Chen, Gully, & Eden, 2001) scale, and graphic elicitations, I was able to compare and contrast the data to one another as well as findings in literature. I sought to understand through the participants' experiences what was needed for preparation to become a speech-language pathologist. I explored through dialogue how university staff aimed to prepare graduate students for the workforce. By interacting directly with the stakeholders, I had first-hand knowledge into the preparation of graduate speech-language pathology students.

Sampling

Setting. In purposive sampling, the researcher selects individuals and/or settings for a specific reason to best aid in providing key information to answer the research questions (Teddlie & Tashakkori, 2009). Within purposive sampling, homogenous sampling seeks to find a group that has similar characteristics (Teddlie & Tashakkori, 2009). A university that fulfills the sampling strategy criteria of having an ASHA

accredited SLP master's program was a University in the tri-state area of Pennsylvania, New Jersey, and Delaware. A portion of the SLP accreditation process involves meeting standards for speech-language pathology programming set by ASHA (Council on Academic Accreditation, 2017). ASHA guidelines and standards were part of the foundational framework, which the study utilized and the selected University met these criteria also. In relation to this study, coursework pertaining to the master's degree was discussed with staff members/supervisors and a recent program director. Examination of this information was conducted to note the content of the coursework and explore how it addressed ASHA's standards for the preparation of speech-language pathology graduate students.

Participants. The participants for the mixed methods study were chosen using criterion sampling, which asserts that individuals were selected to meet a specific standard (Maxwell, 2013; Patton, 2001; Suri, 2011). There were close to 100 students enrolled in the master's level speech-language pathology program with some students projected to graduate in December, 2016 and another group anticipated to graduate in May, 2017. For the projected study, 20 second-year graduate SLP students at the University who had a minimum of two clinical practicums and a year of classes were sought. A target sample of 20 accounted for unavailability and rejection of participation from some of the 32 second-year graduate students. Students in their second year of a master's program had over a year of specialized courses, which offered them with knowledge regarding prevention, intervention, evaluation, supervision, and practicums. In addition, they were finishing or had completed at least two clinical practicums, which provided them with experience to render details and information that assisted in

answering the study's research questions. Having the coursework and clinical experience also gave the students increased awareness and understanding of the SLP field which impacted their perceptions of supervision, practicums, and preparedness for becoming a speech-language pathologist. Their understanding, experiences, and views as second-year graduate speech-language pathology students offered relevant information that directly linked to the research questions and aim of the study (Maxwell, 2013; Onwuegbuzie & Collins, 2007). Data from the second-year graduate SLP students were gathered through qualitative and quantitative measures as part of the mixed methods design.

In addition to the graduate students, a total of four to five supervisors, which included University faculty members and field supervisors were sought. Participation of four to five faculty members/supervisors and field supervisors provided opportunities for collection of various programmatic standards, which were reviewed and analyzed as well as views on preparation of a portion of the next generation of speech-language pathologists through clinical practicums and supervision. Any faculty members/supervisors who were currently supervising graduate students in clinical practicums were preferred. However, if the individuals were unavailable, faculty/supervisors and field supervisors who supervised students within a one-two year time frame would be selected. It was my opinion that being removed from supervision for only a short amount of time would not impede the staff members' or supervisors' ability to provide detailed information in order to answer the research questions.

Qualitative Data Collection Procedures

An in-person presentation of a summary of the study was given to potential participants during evening graduate classes at the University. Review of the consent

forms (see Appendices C and D) occurred and opportunities for questions and answers were provided. An incentive of a $10 Wawa gift card was mentioned to the potential participants. An incentive was provided in order to increase the participation rate. The consent forms (see Appendices C and D) were left for the students to sign and return to the University's masters of science in speech-language pathology program director. If interested in participating in the study, the students were asked to write their e-mail address on the consent form for follow-up communication with the researcher. Of those who indicated that they were willing to participate, selection was made in the order that they responded as well as meeting the study's participant criteria. Invitation e-mails to the potential University's faculty members/supervisors and field supervisors (see Appendix E) along with consent forms for review (see Appendices D and F) were sent through the University's program director.

Interviews. Face-to-face, semi-structured interviews were utilized in this study (Creswell, 2014; Maxwell, 2013; Rossman & Rallis, 2012; Rubin & Rubin, 2012; Teddlie and Tashakkori, 2009). Semi-structured interviews consist of the researcher having a set of questions regarding a particular topic, which he or she plans to ask of the interviewee (Rubin & Rubin, 2012). Interviewing allows the researcher the opportunity to collect first-hand information about complex issues through active listening (Creswell, 2014; Maxwell, 2013). It gives the researcher a means to hear and understand the perspectives of the participants (Maxwell, 2013). For this study, interviews were conducted on the University's campus or at a mutually agreed upon place. The interviews ranged from 25 minutes to approximately one hour. At the beginning of each graduate student interview, the informed and audio consent forms (see Appendices C and D) that

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had been signed and turned in to the program director by the graduate students were reviewed again for understanding and continued agreement to participate in the study. Informed consent to participate in interviews as well as audio consent were also gathered from the field supervisors and University staff at the time of their interviews (see Appendices D and F).

The main focus of the interviews was asking questions that inquired about information that assisted in answering the research questions. Interview protocols are a tool used to organize questions that need to be asked of the stakeholders and provide a guide for conducting the interviews (Rubin & Rubin, 2012). The interview protocol used with the graduate students contained 15 questions (see Appendix G). Questions 1 through 4 included demographic and programmatic questions. Questions 5 and 6 focused on what skills the graduate students believed were necessary to be prepared for the workforce and what opportunities they had in their program to meet ASHA's standards. Questions 7 and 8 explored the characteristics and skills that the students believed were important for a supervisor to exhibit and their working relationships with the field supervisors they encountered. Questions 9 through 11 focused on what aspects of supervision and clinical practicums aided the students in preparation for the speech-language pathology workforce. Questions 12 through 14 addressed students' self-efficacy as a result of supervision and clinical supervision and how it impacted their feelings of readiness for the field. Question 15 covered reflective practice and question 16 sought the students' perceptions regarding their preparation for the workforce through the University's programming. Probing questions during the interviews allowed for a better understanding of the discourse as well as provided opportunities for detailed information and aspects

about the issue to be gathered that was not anticipated, but aided in answering the research questions (Rossman & Rallis, 2012; Rubin & Rubin, 2012). Demographic questions were utilized at the beginning of the interviews to initiate dialogue and allow rapport to be created.

The interview protocol for the staff members and field supervisors contained 15 questions (see Appendix H). Questions 1 through 4 focused on demographic information as well as teaching and supervisory experience. Questions 5 and 6 inquired about the faculty's and field supervisors' opinions regarding skills that students need to be prepared for the speech-language pathology workforce and what opportunities the University's program offer to meet ASHA's standards. Questions 7 and 8 explored the skills and characteristics that were important for a field supervisor to exhibit and what aspects of clinical practicums aided in student preparation for the field. Questions 9 and 10 addressed the working relationship between a supervisor and supervisee. Question 11 inquired how the supervisors oversaw the clinical practicums of the graduate students. Question 12 focused on the ways that university programs utilized supervision and practicums to prepare graduate students. Questions 13 and 14 explored student self-efficacy, and question 15 inquired about students participating in reflective practice.

Quantitative Data Collection Procedures

Self-Efficacy scale. When considering quantitative measures to answer the self-efficacy research question, the New General Self-Efficacy scale (NGSE) (Chen et al., 2001) was utilized (see Appendix I). The NGSE scale consisted of eight statements that were placed on a 5-point scale ranging from strongly disagree to strongly agree (Chen et al., 2001; Scherbaum, Cohen-Charash, & Kern, 2006). The NGSE scale was selected for

multiple reasons. Evidence (Chen et al., 2001; Chen, Gully, & Eden, 2004) has shown

that internal consistency (.85 to .90) for the scale items was above the mark (.70)

(Henson, 2001; Nunnally & Bernstein, 1994) for explorative research (Scherbaum et al.,

2006, p. 1051). Secondly, in a multi-study, the NGSE scale rendered higher predictive

and content validity when compared to Sherer, Maddux, Mercadante, Prentice-Dunn,

Jacobs, and Rogers' (1982) widely used general self-efficacy scale (Chen et al., 2001).

Thirdly, several of the NGSE scale items were skill and task oriented which directly

linked to a couple of the research questions for this study. In addition, question number 6

on the NGSE (Chen et al., 2001) scale examined one's belief on how confident he or she

was in completing multiple tasks (Chen et al., 2001, p. 79). As there are multiple

responsibilities found in ASHA's Knowledge and Skills Standards, the data gathered

from this question provided insight in to how well second-year speech-pathology

graduate students believed they were equipped to complete many tasks. The responses to

the survey items not only provided descriptive data to answer the research questions, but

were utilized to compare with qualitative findings for deeper understanding, detailed

analysis, meta-inferences, and discussion. To fulfill the standards of a parallel mixed

methods design, the survey was presented in person at the beginning of interviews with

the graduate students who volunteered to participate.

Graphic elicitation. Graphic elicitation is a way to display diagrams or

illustrations that can be used to stimulate interview dialogue, explore a problem through

various ways, and gather research question information, which may be difficult to obtain

by other means (Bagnoli, 2009; Crilly, Blackwell, & Clarkson, 2006). It can aid in

focusing participants and introduce them to the interview topics (Crilly et al., 2006). A

graphic elicitation helps an individual to be creative and display his or her experiences in a different way than just verbally responding to interview questions (Bagnoli, 2009). This may provide an opportunity for participants to express themselves more openly than they would when being interviewed in a one-on-one setting (Bangoli, 2009). For this study, the presentation of the graphic elicitation occurred in person, at the beginning of each interview (see Appendix J). It contained statements based on literature findings about supervisory skills and possible clinical practicum outcomes. The students were requested to rank the statements in order of importance based on their views. Utilization of this graphic elicitation directly assisted in answering the research question focused on what factors in supervision and practicums were important in preparing graduate students for the SLP workforce. The graphic elicitation results were gathered to compare and triangulate with interview data and NGSE scale results. In addition, the graphic elicitation results were used to compare with literature to note whether the graduate students' perceptions were similar or indicated different views on supervision and practicums.

Qualitative Data Analysis

During the qualitative research, the analysis techniques of data cleaning, data coding and reduction, constant comparative approach, data transformation, data comparison and display, and drawing conclusions were conducted (Creswell, 2014; Creswell & Plano Clark, 2011; Greene, 2007; Onwuegbuzie & Leech, 2005). Data cleaning refers to visually inspecting the results and clearing any documentation or input errors (Creswell & Plano Clark, 2011). Coding of data takes a large amount of information and places it into groups that are more manageable for continued analysis and interpretation. Lincoln and Guba's (1985) constant comparative method refers to

continually examining the data through preliminary coding, narrowing of categories, examining relationships between themes that arise, and synthesizing of the data. Data reduction can further occur through statistical analysis of quantitative results (Onwuegbuzie & Teddlie, 2003).

Furthermore, data transformation and conversion occurs when qualitative data are given numeric values and quantitative data are given codes or themes and described narratively (Onwuegbuzie & Teddlie, 2003; Teddlie & Tashakkori, 2009). This process was pursued so that the data could be analyzed collectively and compared through different sources as well as aid in the conversion of the mixed methods data (Teddlie & Tashakkori, 2009). Displaying data consists of showing quantitative results in the form of tables and illustrating qualitative information through figures or charts (Onwuegbuzie & Teddlie, 2003). Integration of the data allows the information from the two strands to be synthesized for joint interpretation (Creswell & Plano Clark, 2011; Onwuegbuzie & Teddlie, 2003).

Conclusions were derived in part through inductive and deductive reasoning. Inductive analysis works from specific to abstract units of information (Creswell, 2014). Constant reference between the categories and data is made to ensure that the themes are representative of the participants' statements (Creswell, 2014). Once the main themes are discovered, the researcher should review the coding results and interviewees' narratives to ascertain whether there is enough evidence to support the themes or if more data should be gathered (Creswell, 2014). In doing so, this represents deductive reasoning.

Interviews. A Sony voice recorder was used during the semi-structured interviews to aid with data collection and assist with validity. The interview recordings

were transcribed verbatim (Hammersley, 2010; Maxwell, 2013) and then individually studied and coded (Miles et al., 2014; Rossman & Rallis, 2012; Rubin & Rubin, 2012; Saldana, 2012). The interviews were represented by a number in chronological order of when the interviews took place. Five interviews were transcribed verbatim by the researcher and the remaining eight interviews were transcribed verbatim using the transcription company, Landmark Associates, Inc. Landmark Associates, Inc. was utilized to afford quicker access to the data for review and analysis and for the study's timeline to remain intact. A flash drive was utilized to save the transcriptions and was secured in a locked file cabinet when not in use for data collection. A codebook containing the definitions of each code found in the transcripts was developed to aid with authenticity and consistency (DeCuir-Gunby, Marshall, & McCulloch, 2010; Miles et al., 2014; Plotts, 2013).

Coding. For the first cycle of analysis, descriptive coding (Miles et al., 2014; Saldana, 2012) was utilized so that a catalogue of topics could be collected for categorizing. Descriptive coding supported the gathering of rich and detailed information about the perceptions of second-year graduate SLP students on their preparedness for the field. A code was created when repetitions, similarities versus contrasts, changes in views, classifications, and/or missing information became evident (Merriam, 1998; Miles et al., 2014; Plotts, 2013; Ryan & Bernard, 2003). A table that included inclusion and exclusion coding criteria as well as examples from the texts was developed to ensure reliability of the coding analysis technique. For triangulation, data transformation, and category development, the technique of counting (Miles et al., 2014) was utilized. Through the utilization of counting, a frequency table for the codes was developed.

Themes. To assist in data condensation (Miles et al., 2014), pattern coding (Miles et al., 2014; Saldana, 2012) was implemented during second cycle data analysis. Pattern coding (Miles et al., 2014; Saldana, 2012) allowed the researcher to map and display the codes in a sequential and hierarchical manner (Anfara, Brown, & Mangione, 2002; Flora & Hirt, 2008; Plotts, 2013) through listing and pairing them with interview narrative examples (Miles et al., 2014).

Moreover, in order to enhance the extraction of themes and further examination of the data, inductive reasoning (Ryan & Bernard, 2003), Saldana's (2012) trinity technique, and discussions with critical friends (Rossman & Rallis, 2012) were used (Plotts, 2013). Inductive reasoning (Ryan & Bernard, 2003) allowed the researcher to use the stakeholders' words and the information that was extracted from the interviews to gather themes (Plotts, 2013). Saldana's (2012) trinity technique of selecting three key themes from the collected information aided the researcher in finding three ideas that encompassed the pinnacle points of the data (Plotts, 2013). Discussions with critical friends assisted in understanding the interview information, allowed researcher bias to be constructively addressed, and deepened knowledge for stronger conclusions and inferences.

Quantitative Data Analysis

Self-Efficacy scale. Parallel to the analysis of the qualitative information was analysis of the quantitative data. All data from the NGSE survey (13 participants) were uploaded to Qualtrics, an online data collection and analysis platform. Descriptive statistics (minimum, mean, maximum), standard deviation, and variance were run through Qualtrics. The data were also examined for patterns in order to determine if

themes within the self-efficacy results arose and to compare the results to the qualitative data gathered through interviews regarding perceptions of self-efficacy.

Graphic elicitation. The graphic elicitation contained supervision and clinical practicum statements that were ranked by the interviewee (see Appendix J). The hierarchical results were placed in a frequency table. The findings were calculated to obtain percentages depicting the graduate students' perceptions regarding the importance of supervision and practicum factors that prior research had shown as vital. In addition, the graphic elicitation findings were compared with interview statements and the NGSE scale to find commonalities, patterns, contradictions, and/or outliers.

It should be noted that three of the 13 participants' sections for the clinical practicum outcomes on the graphic elicitation were not able to be used as one graduate student did not fill out the information as requested and there were difficulties within the software application for two participants. As a result, there were 10 clinical practicum outcome sections that were utilized for frequency counts and percentages. The graduate student who did not sufficiently complete the clinical practicums outcomes section on the graphic elicitation in Qualtrics did so as well on the supervisor skills segment. Therefore, only 12 participants' responses were able to be utilized for the supervisor skills calculations.

Qualitative and Quantitative Comparison

Ongoing data display and comparison (Creswell, 2014; Creswell & Plano Clark, 2011; Greene, 2007; Jang, McDougall, Pollon, Herbert, & Russell, 2008; Merriam, 1998; Onwuegbuzie & Leech, 2005) between the quantitative and qualitative results as well as quantifying and qualifying the data allowed the researcher occasions to explore

similarities and differences within the data, seek predominant themes, discover principal statistical findings, and converge the data from both methods (Creswell, 2014; Plotts, 2014; Teddlie & Tashakkori, 2009). The graphic elicitation and self-efficacy scale results were compared to qualitative measures to explore connections and contradictions within the study as well as past research on the desired or positive factors relating to supervision and practicum experiences. Themes from the qualitative data were compared to the quantitative results in order to examine likeness, contradiction, and outliers. Information gathered from the in-depth comparisons was used for meta-inferencing.

Ethical Considerations

Ethical research was pursued through informing the participants of the aim of the study, discussing confidentiality measures, avoiding deception and harm, representing views based on results, disclosing both positive and negative results, and informing the students that they could withdraw from the project at any time (Creswell, 2014; Teddlie & Tashakkori, 2009; Plotts, 2014). During the class presentations at the University, the consent forms that contained a description of the purpose of the study, reasons for participation in the research, confidentiality statements, and audio consent were available to each graduate student (see Appendices C and D). At the outset of each student interview, the signed consent forms were reviewed and continued agreement to participate was ensured. The consent forms for the field supervisors and University staff were reviewed and signed at the beginning of interviews before interview questions were presented. The participants were assured that their personal identification information, dialogue during interviews, and responses on the graphic elicitation and self-efficacy scale would remain confidential (Rubin & Rubin, 2012). Furthermore, approval through

the Institutional Review Board (IRB) was obtained to assist in protecting the participation of the students, staff, and field supervisors as well as ensure avoidance of harm and deception (Teddlie & Tashakkori, 2009).

Credibility, Transferability, and Trustworthy Threats

The students, staff, and supervisors who were sought to participate in the study made up a sample size that aimed to be representative (Onwuegbuzie & Collins, 2007). In order to increase knowledge on how to protect the participants during the research process, the researcher successfully completed an online training and assessment program offered by the National Institute of Health. In addition, integrity in conducting the research as well as drawing conclusions were addressed through explaining any researcher bias that may have been present anytime during the study (Maxwell, 2013).

Peer review and debriefing of data collection and analysis allowed clarity and transparency of explanations and conclusions as well as improve validity of the study (Lincoln & Guba, 1985; Tashakkori & Teddlie, 1998; Teddlie & Tashakkori, 2009). When assessing the survey data, interval scales were used as it is a conventional statistical factor and offered a form of objectivity (Plotts, 2014; Tashakkori & Teddlie, 1998). Credibility and validity were further addressed by recording the interviews, transcribing the interviews verbatim, and reviewing alternative accounts through negative case analysis (Hammersley, 2010; Maxwell, 2013; Tashakkori & Teddlie, 1998).

Furthermore, member checks, triangulation, and thick descriptions were used to improve trustworthiness, validity, and transferability of the study (Lincoln & Guba, 1985; Miles et al., 2014; Teddlie & Tashakkori, 2009). Member checks refer to the researcher asking the participants if the interpretations and conclusions of the data gathered are

representative of the information they provided (Maxwell, 2013; Rossman & Rallis, 2012; Teddlie & Tashakkori, 2009). This allowed the stakeholders an opportunity to expand on or correct the information and gave the researcher an opportunity to rule out any researcher biases that may have been present (Maxwell, 2013; Rossman & Rallis, 2012). Triangulation permitted the researcher to take multiple data sets and compare and contrast them in order to draw conclusions from all the data and not a segment of the results as well as check that the conclusions were not based on researcher bias (Maxwell, 2013; Rossman & Rallis, 2012; Teddlie & Tashakkori, 2009). Thick description involved the researcher detailing information such as the research environment, date and place of the research, observations of the participants, data results, and any events that happened which may have influenced the research (Rossman & Rallis, 2012, pp. 269-270). By detailing the research, the reader can know the study's procedures, what the researcher gathered, and understand the conclusions that were drawn (Miles et al., 2014; Rossman & Rallis, 2012). In addition, thick description allows the inferences of one study to be reviewed, compared, and applied to other studies (Teddlie & Tashakkori, 2009). Lastly, noting and discussing the study's limitations and need for further research aided in the transferability and external validity of the study (Miles et al., 2014).

Summary

There is a lack of research in the profession of speech-language pathology on the efficacy of supervision (McCrea & Brasseur, 2003; Spence et al., 2001) and research on supervision's impact on speech-language pathology graduate students' preparedness to render services after completion of multiple practicums. The purpose of this mixed methods study was to explore the perceptions of second-year speech-language pathology

students on their preparedness for the speech-language pathology workforce through clinical supervision and practicums as well as examine the impact that clinical supervision, practicum experiences, and self-efficacy have on preparation for the workforce. Exploration of the perceptions of faculty members/supervisors and field supervisors regarding how university speech-language pathology graduate programs utilize academics, supervision, and clinical practicums to prepare graduate students was also incorporated into the study. The four research questions for the study focused on second-year graduate speech-language pathology students' and supervisors' perceptions of skills necessary for preparation to be a speech-language pathologist, academic preparation for speech-language pathology, supervisory and clinical practicum experiences, and self-efficacy.

Furthermore, mixed methods research was selected as it focuses on collecting, examining, and synthesizing qualitative and quantitative information, research questions, methods, data, and conclusions in order to gain enhanced insight as well as explanation into a phenomenon (Johnson & Onwuegbuzie, 2004; Johnson, Onwuegbuzie, & Turner, 2005; Maxwell, 2013; Onwuegbuzie & Leech, 2005, 2006; Plotts, 2014; Pope & Mays, 2006; Rossman & Rallis, 2012; Rubin & Rubin, 2012; Teddlie & Tashakkori, 2009; Welman & Kruger, 1999). It provided the opportunity for multiple methods of data collection and analysis to be conducted and compared. For this study, data were collected with second-year speech-language pathology students, faculty members/supervisors, and field supervisors at the University or a mutually agreed upon location through semi-structured interviews, graphic elicitation, self-efficacy scale, and memos. Memos were utilized to detail field notes (Hanson, Balmer, & Giardino, 2011), look for patterns within

the information of the notes, and aid in reflection, understanding, and interpretation of participant actions and responses (Maxwell, 2013). Data analysis included first and second cycle coding, theme development, descriptive statistics, frequency counts and percentages, triangulation, comparisons, and inductive and deductive reasoning. The results of the study provided information for potential policy, higher education programming, and future research recommendations.

Chapter 4

Findings

The allied health profession of speech-language pathology is one of the fastest growing fields in this decade and is in demand (ASHA, 2014b). The profession is estimated to increase its employment opportunities by 19% from 2012-2022, which is swifter than the mean for any other occupation within and outside the allied health fields (United States Bureau of Labor Statistics, 2014b). As the baby boomer generation ages and their health declines as well as one in six children in the United States being diagnosed with a developmental disability (Boyle et al., 2011; United States Bureau of Labor Statistics, 2014b; Weiss, 2009), speech-language services are needed. As such, individuals are seeking further education in speech-language pathology. The American Speech-Language-Hearing Association (ASHA) has requirements for Knowledge and Skills Outcomes, which students need to meet in order to graduate from a master's program and obtain certification in the speech-language pathology field (ASHA, 2016).

Therefore, the purpose of the research study was to explore the perceptions of second-year graduate speech-language pathology students on their preparedness to meet ASHA's standards through clinical supervision and practicums as well as examine the impact these experiences had on their development into an independent student clinician. In addition, examination into the impact of self-efficacy on the graduate students' preparation to enter the field of speech-language pathology and exploration of the perceptions of supervisors on equipping graduate students for the workforce was performed. The four research questions for the study focused on supervisors' and second-year graduate speech-language pathology students' perceptions of skills necessary for

preparation to be a speech-language pathologist, academic preparation for speech-language pathology, supervisory and clinical practicum experiences, and self-efficacy.

Qualitative and quantitative data were collected through interviews, graphic elicitation (GE), and the New General Self-Efficacy (NGSE) scale (Chen et al., 2001). This chapter documents the data analysis that was conducted and presents the results of the research. To further protect anonymity, the participants were mentioned generally as graduate students and supervisors. Fictitious names or referring to the graduate students by numbers were not selected as the researcher did not want to influence any negative bias against the graduate students' or supervisors' statements. Possible negative bias towards the participants based on their responses could impact the reception of their shared information as well as the authenticity of the content and results of the study.

Graduate Students and Supervisor Participants

Participants from a speech-language master's program were sought through presentations of the study during two separate evening classes on the University's campus. A PowerPoint containing information regarding the research study was presented to a class containing 10 potential second-year graduate student participants and then a class of 32 second-year graduate speech-language pathology students. The class of 32 students contained the 10 students from the first class presentation. Out of the 32 potential study members, 11 graduate students responded with interest to participate in the study. Possible appointment times were sent to the 11 graduate students through Doodle as well as e-mail. Seven graduate students committed to and completed the interview process. The remaining four were sought through several e-mail attempts. A

graduate student responded that due to his/her schedule, he/she was not able to participate in the study. The other three students never responded to the follow-up e-mails.

For quantitative data collection, the graphic elicitation and the New General Self-Efficacy (Chen et al., 2001) scale were sent through Qualtrics to 28 of the 32 graduate students for the first attempt. Four of the students had already completed the graphic elicitation and NGSE (Chen et al., 2001) scale during one-on-one interviews. Four students responded to the online survey, which was an approximate 14% response rate. The survey was sent a second time to 25 second-year graduate speech-language pathology students. The number of individuals available was less the second time as several students had graduated in December, 2016. Five individuals responded to the second survey distribution. The response rate for the second dissemination of the survey was 20%.

Furthermore, an e-mail to 75 field supervisors and University staff members who supervised graduate speech-language pathology students within the last two years was sent through the University's speech-language pathology department program director. Seven supervisors expressed interest in participating in the study. E-mail correspondence was utilized to determine dates and times for interviews. Six interviews with supervisors were scheduled. Multiple e-mail exchanges occurred with one of the supervisors, but in the end, the individual did not confirm an appointment time. Three of the individuals interviewed were field supervisors and three were University staff/supervisors. One of the University staff/supervisors had been a University program director as well.

Qualitative Data Analysis

The student and supervisor interviews were transcribed verbatim. The interview transcripts were uploaded to a web application called Dedoose. The interviews were manually coded by the researcher through the online program. Descriptive coding (Miles et al., 2014; Saldana, 2012) was used for first cycle coding. A code was created when repetitions, similarities versus contrasts, changes in views, and/or classifications were evident (Merriam, 1998; Miles et al., 2014; Plotts, 2013; Ryan & Bernard, 2003). Pattern coding (Miles et al., 2014; Saldana, 2012) was utilized for second cycle coding. Pattern coding (Miles et al., 2014; Saldana, 2012) allowed the researcher to configure the codes in a sequential and hierarchical manner (Anfara et al., 2002; Flora & Hirt, 2008; Plotts, 2013) through listing and pairing them with interview narrative examples (Miles et al., 2014).

Inductive reasoning (Ryan & Bernard, 2003), Saldana's (2012) trinity technique, and discussions with critical friends (Rossman & Rallis, 2012) were employed to further analyze the qualitative data. Inductive reasoning (Ryan & Bernard, 2003) allowed the researcher to utilize the participants' statements that were extracted from the interviews to gather themes (Plotts, 2013). Saldana's (2012) trinity technique of selecting three key themes from the qualitative information aided the researcher in finding three ideas that comprised the pinnacle points of the data (Plotts, 2013). Discussions with critical friends assisted in comprehending the interview data, allowed researcher bias to be constructively addressed, and deepened knowledge for stronger conclusions and inferences.

From pattern coding (Miles et al., 2014; Saldana, 2012) the interview responses, the inductive reasoning process (Ryan & Bernard, 2003), Saldana's (2012) trinity technique and discussions with critical friends (Rossman & Rallis, 2012), three overarching themes arose. They were confidence being a critical skill, recognition of the value in clinical practicums, and having a supportive and communicative supervisor. While reviewing and comparing the interview data parallel to one another and after discussion with critical friends, sub-themes evolved. Within theme one, there were three sub-themes. They were impact of supervision on confidence, impact of clinical practicums on confidence, and confidence over time. For theme two, value in clinical practicums, the sub-themes were working with individuals and a variety of disorders, application and continued acquisition of knowledge, and reflection on performance. The third theme, supportive and communicative supervisor, had a sub-theme of communication through feedback.

Theme I: Confidence as a critical skill. Throughout the graduate student and supervisor interviews, building and having confidence was frequently referenced. Self-efficacy is an individual's confidence in his or her capability to fulfill responsibilities and accomplish objectives that were established (Bandura, 1989). The graduate students acknowledged when entering a new clinical practicum or treating an individual with a disorder that they did not have involvement with, their confidence level was not strong initially but developed with experience. The supervisors noted that individuals who supervise needed to be aware of the skill level that graduate students had and adjust supervision and support accordingly as to effectively instruct and build confidence in the graduate students. The graduate students and supervisors expressed that clinical

practicums and supervision had an impact on the progress of confidence in speech-language pathology graduate students.

A graduate student noted that he or she believed confidence was important in the development of an independent student clinician by stating, "I think just being in my placement now, confidence is a huge thing and that's something that they don't really teach you in school is how to be confident. So that's very individualized and internal." A graduate student agreed when he or she noted, "I think the most important skill is confidence. I'm realizing that a lot, especially in the 3rd clinic. I think that's most important; confidence from talking to patients [and] to other professionals." Another participant relayed that confidence may not be present at the beginning of programming, but it increases over time when he or she expressed, "When I first started, I was lacking in confidence but over a period of time, I've slowly gained more and more." In order to move from a novice to independent graduate student clinician, a graduate student stated, "I think you definitely have to feel confident in what you are doing."

Supervisors concurred that confidence was a critical ability to have when becoming an independent graduate student clinician. A supervisor indicated:

I think confidence is a big part of it. I will purposely early on leave the room for a while so they get comfortable gaining rapport. I feel like sometimes people feel they need to act just like you, which is just not going to happen. You have to develop your own personality with people.

Another supervisor supported this notion when he or she stated:

I think that they need to form that independent relationship where I'm not telling them what to do. I like to challenge them to figure out what they feel clinically is

appropriate rather than just say, 'This is what I would do. Follow these steps.' I

like to say a couple suggestions and then get their input. So I often do the whole

therapeutic approaches, asking them a question in response to their question.

Because I feel like they almost already have that answer. They just really need to

kind of pull it out of themselves. I think that they really need to build that

independent ability and also that confidence in their own clinical ability. Because

confidence goes a long way.

In a like manner, a supervisor reported that it is important for students -

To evaluate and not only see the parts, but to be able to put those parts together

into a whole, taking the patient's history into account and their current living

situation and putting that together for a cohesive plan. Then being able to actually

put that plan together.

With confidence not necessarily being taught in academics as mentioned above, it may

need to be found from within. Confidence in oneself is necessary to have assurance in the

actions one takes. It is important for graduate students to build independent rapport with

clients and be able to gain background information on patients in order to establish

confidence in his or her skills.

   Impact of supervision on confidence. While individuals may have an

independent level of self-confidence, it can be impacted by experiences in life,

relationships, education, and externships. Within the education of speech-language

pathology graduate students, clinical practicums and supervision provide means for a

student's confidence to strengthen. According to Anderson (1988), supervision is a

process that involves a varied set of actions, which is dependent upon the supervisor's

and supervisee's theories, expectations, needs, competencies, and results. ASHA (2008a, 2008b, 2008c) adds to this definition the aspect of effective clinical teaching, which includes supporting the supervisee in developing problem solving skills and self-evaluation.

Supervision often begins with direct interaction and gradually moves to the supervisor providing consultative oversight. Within supervision, instruction and support can be given to aid in the progression of confidence in graduate students. A graduate student noted:

> I think the supervisors that I've had in the past, regardless of where I was, always taught me how to be the best that I can be. And that one skill you had me fill out, I circled fives for everything because I thank my supervisors for that. I think if I didn't have people there supporting me and giving me the knowledge that I have now, I would be very less confident. I probably would have circled twos. I think the people that I've had taught me to believe in myself. They taught me if I have questions, don't be afraid to ask. And that was a big thing too because I was very shy back then. I felt like I had to do everything myself and I wouldn't ask for help. But now, I love asking my supervisors for help because they'll help me in ways that I would never have been able to help myself. I think the supervisors within the speech pathology field are amazing. They're the best supervisors I've had.

In a similar fashion, a participant stated:

> It's made me more confident because in practice when I'm treating whether it be the first few times, I know what sounds silly or doesn't work. It is having someone else to sit there and be like 'Maybe you should try this.' So it's almost

like supervision made me more confident because it has helped me to problem solve a lot quicker, pull more tricks out of my bag.

A graduate student reported that -

Supervision definitely helped my confidence. I mean with the good supervisors. It's another confirmation, I guess reassurance that I'm doing the right things. If we were just looking at stats, and if they weren't good, we'd be like, 'Oh, we're really doing a bad job.' You have someone who's out there, who experiences it, and they tell you what's right. I think it definitely helped my confidence and it also helps you work with other people.

Moreover, another participant expressed, "I've gained much more confidence through this process. Much more confidence interacting with other health care professionals and other teachers, even the principal. I've established professional relationships with all these people. It's been a very interesting and positive experience." A graduate student shared that -

It was always just me and my supervisor. We were always together. She was always telling me ways I can improve and things I should do differently or things I did well. It just makes you feel like you are so much more confident than you think you are at first. At first your like 'I don't know what I'm doing' and then she's like 'No, you do know, you did the right thing.' And I'm like 'Oh ok great, you did know how to do it.' So I think that is the most important. They just instill this confidence in you. Even now I get to coast back in the clinic; she's like 'You have grown so much' and it just makes me feel good because I feel like I have.

Interaction with supervisors resulting in increased self-efficacy was concurred as a

graduate student relayed -

It's [supervision] helped a lot because right now in school, you do your best to get

As on everything and you can look up the answers, collaborate with your friends.

'What did you put for that answer?' 'Do you think this sounds right?' Then when

you're at your clinical, you have your supervisor but you're trying to do as much

as you can on your own and for them to recognize 'Hey that was a really good

idea,' that just feels like the best compliment in the world. So having a supervisor

to let you know when you are on point, that definitely has boosted my confidence.

Supervision provides a means for graduate students to be supported and for their

knowledge to increase. It is an avenue for questions to be asked by graduate students and

suggestions for improvement from an experienced speech-language pathologist to be

given. Supervision also gives opportunities for interaction with other professionals, which

occurs during clinical practicums.

Impact of clinical practicums on confidence. During externships, graduate

students may interact with individuals such as physicians, nurses, management, related

service staff, teachers, teacher's assistants, child study team members, and/or

administration. Through these interactions and the planning and provision of therapy,

confidence in oneself and his or her skills can develop. In this study, multiple graduate

students reported that clinical practicum experiences influenced their level of self-

efficacy. A participant noted:

Just getting that actual firsthand treatment experience is really what's done that

for me. It's really just boosted my confidence a lot. I know that once I'm in the

school next semester, I'll probably feel the same about that population. Like 'Ok, I've done this before. I know what to do.' I think now I feel so comfortable with certain populations that's what I'm leaning towards but then I'm like I can't limit myself though because what if I love this thing too. So I just think whatever experience we get, that is what we feel confident in.

Another graduate student echoed these sentiments when he or she expressed, "It definitely increased my confidence in my evaluation and my diagnostic and treatment skills. It definitely increased my confidence dealing with multiple types of people, like all types of people." In the area of preparation and experiences during clinical practicums, a participant said:

One weekend I just planned out a bunch of activities and went on Pinterest and tried look through my textbooks and figure out what I could do. So I organized myself and figured out different ways that if I had to do something on the fly, I didn't have to think as hard in that moment. I could just grab something. So, that helped me. And taking it week by week, I feel like I got more and more confident. I was looking at the schedule for next week and I have two evaluations. And I have a client who has dysphasia who's four years old. There's clients who have autism and then children who are completely nonverbal. There's some who come in just for treatment of a certain sound. So at first seeing all that variability, it kind of freaked me out. Knowing I would have to switch gears from one patient to the next. But I feel like now all of that experience just really solidified everything for me and I feel a lot more confident and prepared. I feel like it takes a lot more to shake me now, whereas in the beginning, if anything changed, I kind of freaked

out. But now that I have three months under my belt, which isn't even that long, that's what I needed to kick it in gear for me.

 In addition, a graduate student noted:

They [clinical practicums] have impacted my confidence in all aspects from communication to therapy. For example, now I'm doing a lot of billing and working with ICD codes. I feel like I'm so lucky to have experience in the hospital right now because I wouldn't have known, I wouldn't be confident in billing. But now I know what I'm looking for. I feel like to not have this practicum and be thrown into the field, I might be a little lost.

A graduate student expressed that through working with a large caseload while in clinical practicums, he or she may not be overwhelmed when entering the field: "When I start working and I get assigned all those kids, I think maybe I won't be so overwhelmed. I've seen it before [and] treated them." Continuing along the lines of the impact of clinical practicums on confidence, a participant stated:

If I just had classes, I think I would have whiplash going out there. I think it prepared me with confidence. I was worried that I just had the academic skills, but I didn't have the common sense skills. Luckily, I have the soft skills. It definitely taught me a lot and I feel more confident going out.

As a result of the clinical practicums and the confidence gained, a graduate student mentioned:

I feel much more knowledgeable in writing reports because that was something that we're not taught in school is how to write medical notes. We're not really taught that. But I learned there [at the clinical practicum site] and I feel I could do

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that independently. I feel like I could treat independently. I am much more

confident in myself. So if I were to go into a job interview, I think I could

definitely sell myself.

Supervisors concurred with the graduate students by noting that during

supervision and practicums, graduate students are consistently developing confidence. A

supervisor stated that clinical practicum experience -

Certainly builds confidence. I think self-efficacy is a lot of being able to stand up

for yourself as well, which sort of is confidence. I see them being able to put their

idea out there and let teachers know, 'This is what I want you to do, this is why,

and it's important.' That's an important skill to have.

Similarly, a supervisor noted:

I really think their practicum experience is probably the greatest determiner in

their self-efficacy. It's sort of a cliché, but we all discuss the student who can get

straight As in the classroom, but not be able to transfer the skills to the clinic. So I

think the clinical practicum experience is brand new. It doesn't relate to anything

really that they've ever done in their background before. So they're all really

novices when they start out. They're all equally uncomfortable depending on the

experiences that they've had and certainly the supervisor's level of support is

going to be a determiner in that. It builds on their self-efficacy.

Another supervisor said:

They're constantly being forced to keep themselves in check and building that

self-efficacy. And there's different ways with these ratings and evaluations in

order for them to do that and do it honestly. I don't feel like any student is going

to leave here, they might not be confident across everything, but they're going to leave here with confidence. They're going to be honest with themselves and they're going to know what they know. And they're going to know what they don't know.

Planning and implementing therapeutic services with a variety of clients can aid in the building of confidence in second-year speech-language pathology graduate students. Giving therapeutic suggestions to staff, writing medical notes, and conducting medical billing can provide ways for self-efficacy to be solidified. Being honest during self-evaluations/ratings can allow a graduate student to know his or her strengths.

Confidence over time. Despite the many reports of confidence by the graduate students, there was a sense of nervousness and being overwhelmed. This was often noted in relation to initial clinical practicums or a placement with a new population of clients. Academic coursework provided foundational knowledge but not direct interaction with patients. Interaction with clients occurred during the graduate students' first clinical practicum. Experience in a medical facility provided different opportunities than what was present in an educational setting and vice versa. Anxiety was reported when facing these new situations. A graduate student referenced this by stating:

So my first one, I was still a little not too confident with myself. Towards the end, I had 11 sessions with this patient, so I was like, 'Oh, I got this.' My confidence increased. But clinic two, it's like starting all over again because you're thrown into, I'm in a hospital. You never had that kind of experience. You're working with swallowing, you're working with voice, and so many different ages and genders and everything. So I think the cycle has just kind of reoccurred. Once I

got to clinic two, I was a complete novice in the beginning. I felt like I knew

nothing and I didn't know where to start.

Another participant stated:

If I were to be put in a medical placement right now because I have not had that

experience, I would be lacking confidence for sure. I would be a little nervous.

But if I were to be put in a school right now, I would feel that I have gained the

experience to carry out the position and to do well and to learn even more over

time.

A graduate student related to the sense of nervousness when he or she mentioned:

I never really treated anyone, so I was a little bit nervous about taking classes and

doing that. I knew it was only going to be one client or two clients, but I was still

super-nervous…I'm at [name removed] Hospital. I found out the one day how

much evaluations cost which I know insurance covers most of it, but at the same

time I was like, 'Oh, my gosh. I'm a student. Am I actually competent to be doing

these evaluations?' You second-guess yourself and it's overwhelming.

While anxiety may be present during initial exposure to clients and settings, confidence

can still develop. Building rapport with patients, completing externship responsibilities,

and providing therapeutic suggestions to other professionals can influence the

progression of self-efficacy. Having a supervisor who allows questions to be asked, gives

suggestions, and provides opportunities for interaction with various staff members can

aid in increasing graduate students' confidence.

     Theme II: Value in clinical practicums. Clinical practicums are the connection

between academics and practice (Roger et al., 2008; Ryan et al.,1996; Sprague & Percy,

2013). Externships are the means for graduate students to work with individuals and a variety of disorders through treatment and conducting evaluations. Practicums allow application and continued acquisition of knowledge to occur. Reflective practice during clinical practicums can indicate one's strengths and areas of improvement. Therefore, clinical practicums are the initiation to becoming an independent graduate student clinician.

Working with individuals and a variety of disorders. The graduate student participants reported that hands-on experiences and having the opportunity to work with a range of clients were key in preparation for the speech-language pathology workforce. Similarly, in a quasi-experimental study, Overton (2015) noted that hands-on clinical experiences significantly increased the graduate students' self-efficacy in relation to assessment. In this study, a graduate student relayed:

> I just think treating a range of clients really helps you because everyone presents so differently. So getting that experience and just seeing that even if a child has autism, they may present totally different than a child the same age with autism that's classified as the same type of severity. I think you really can't replace that time you have to treat, which is so essential.

A graduate speech-language pathology student concurred when he or she stated:

> I think that all of my experiences so far have really bridged that gap between the knowledge that we learn and actually applying it. I think that is so important even after just being out and about at the rehab center for the summer. When I came back in [the University's] clinic, I was so much more confident. I was like 'Oh, I can do this.' When I was in my first semester I was trembling like 'Don't give me

a client, I'm not ready.' So I think that that's the most important; it makes that jump from 'Ok, you know this stuff' but can you apply it to real people. I think the only way to really learn that is to try.

A participant mentioned that during clinical practicums -

I've gotten very comfortable working with a variety of severities [and] a variety of disorders. It's real hands-on experience. It's different from being in the classroom. It's like a brief insight to what a future career will look like.

In addition, through working with children and adults during his/her clinical practicums, a graduate student spoke of having experience with addressing ASHA's standards when he or she stated:

I feel like I've had a very wide array of clients, which I'm very fortunate that I had. Last spring when I was in the clinic, I had a job with Autism Spectrum Disorder, so I got a little bit with that. Then over the summer, I had so many different types of clients: strokes, TBI [Traumatic Brain Injury], MS [Multiple Sclerosis], [and] Parkinson's. So I feel like I've met all of the standards for intervention. In terms of voice for ASHA, I actually had a bunch of stuff and now I have a child with a severe phonological disorder…I have a client with dysarthria and dysphagia of unknown ideology. It was just a sudden kind of onset. So, that is interesting too. Luckily I'm going to be in a school next semester so I'll get so more with adolescents and children.

A participant had similar experiences when he or she stated, "I've personally experienced fluency, language, articulation, [and] AAC [Alternative Augmentative Communication]. I

think my experiences have prepared me. I would feel comfortable working in a school after this externship."

Furthermore, supervisors mentioned that a key aspect of clinical practicums for graduate students was the exposure to working with individuals with various disorders. A supervisor said, that it "Is extremely important to learn the specifics of the disorder dealing with the patient specifically. I think there's a lot to be learned interdisciplinary. Things you cannot learn in a classroom." Another supervisor noted:

> I think a broad base of speech and language issues might come up and that's
> important because I know they're in pediatric hospital settings and we have some
> medically fragile students in our district. So a broad idea of what you might run
> into, the kinds of things you are going to see, different approaches. Some of the
> things that I think are important go back to those soft skills. You can't really teach
> someone how to do them. They have to experience it to do it. So things like being
> able to adapt what you're doing to fit either the day, the situation, or the student
> who's in front of you.

A supervisor stated that while the graduate students were in their clinical practicums, they were collecting hours through experience with many different individuals. He or she relayed, "Students leave their on-campus practicum with me with maybe 25 to 30 hours. They're going out into externships, and they're getting 150 across multitude of clients and disorders."

One of the ways to collect clinical hours is through conducting assessments with clients. Completing evaluations during practicums was frequently mentioned by the graduate students as critical for preparation to meet ASHA's Knowledge and Skills

Outcomes standards. Participants spoke of having opportunities to conduct evaluations in

a variety of areas such as communication, fluency, and modified barium swallow studies.

A graduate student expressed:

> So far I've had opportunities to do full evaluations [in] every aspect of
>
> communication in the clinic. I'm doing my 3rd evaluation actually now on
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> Thursday. Then I have a ton of evaluation hours in terms of when I was at the
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> [name removed] Hospital. We evaluated people every day. So I would say it's
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> more of a cognitive linguistic evaluation that I feel very confident in because I've
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> had that experience. But if I just had to do a fluency evaluation or a voice
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> evaluation, I probably wouldn't feel so confident to be honest because it's a little
>
> bit rarer. We don't get that many clients like that.

A graduate student mentioned feeling privileged to be completing specialized

assessments when he or she said:

> Right now I'm doing a lot of modified barium swallow studies. I think I'm really
>
> lucky to do that with a supervisor that as we're going over it, she talks out loud.
>
> So I think that's a really good opportunity.

A graduate student stated that he or she had experience with providing informal

assessments with individuals with fluency disorders.

Working with clients and a variety of disorders gives graduate students

experience with and exposure to what employment in the field may represent. It gives

them opportunities to become familiar with different assessment tools, understand

diagnoses in a more in-depth way, and begin to understand the intricacy of building

rapport with patients. It is an opportunity to further apply theory to action and apply knowledge to practice.

   Application and continued acquisition of knowledge. Along with conducting evaluations, there are many aspects of clinical practicums that can be advantageous for graduate students for preparation to enter the field of speech-language pathology. Graduate students noted that clinical practicums gave them a means to apply what they learned in the classroom. An individual expressed:

   The coursework that we've had, I felt prepared when I went to my second clinic. Granted, there are so many things that I don't know and it's the stuff that you have to learn hands-on. But I feel like what I learned, especially with swallowing and dysphagia, in the textbooks really came to life when I saw it happen in the hospital. So that helped a lot.

A participant concurred when he or she relayed:

   The classes that I have taken, they have prepared me a lot. Although not every child or every client that you see is by the book, having that knowledge of the foundations for all these different things is so important. So [that] definitely helps when entering clinic two.

Another graduate student mentioned:

   I feel just taking all of that knowledge that we've been learning in class and being able to integrate it and kind of apply it. It's so important. Where I'm at, we have to have the parents in the room unless they openly say that they'd rather just be in the waiting room. The parents [may] ask a question or they might even say during an evaluation, 'Do you think my child has autism?'; which isn't even in our scope

of practice. Questions like that before would throw me off. But now I was able to take a step back and think about, 'All right. It's okay. Even though you're a student, you learned this.' So being able to realize we can apply our knowledge and integrate it into the questions that we're being asked, I think that's really important.

A supervisor also reported that clinical practicums were connected to the application of academic knowledge when he or she stated:

It's probably a 60/40 split between the practicums and their preparation and then the knowledge and skill preparation with the academic classes. Because, I don't want the students to think it's just about clocking those hours. Clocking the hours is important. But really being able to apply what you've learned in your classes is the most effective and efficient way in those [clinical practicums]. They really go hand in hand. The practicums give us the opportunity for the students to apply their knowledge. I wouldn't split it any differently than 60/40 practicum and then the 40, that academic side. Can't really have one without the other.

A supervisor stated that practicum experiences allow him or her to "[Make] sure that each student has the appropriate exposure to opportunities to practice those skills. So that the faculty can say with certainty that the student has competence in that area."

While experiences in clinical practicums provided a way to apply classroom knowledge and have direct interaction with clients, graduate participants frequently stated that there was a continuation of learning occurring through practicums. A graduate student expressed:

I can't say that I'm fully prepared. I think there's going be a lot I have to learn.

Extra hours that I need to put in and just keep in mind that it's okay to ask for

help. Because I feel like interning in your CFY [Clinical Fellowship Year] year,

you're definitely going to need to know, not only about your clinical skills, but

about how the company is run, insurance, [and] all that stuff. That's something I

don't really know much about and I still struggle. I struggled with it at the

practicums and I'm not even responsible for most of it. So I think all aspects, I'm

still going need a lot of help. But who doesn't in the beginning?

A graduate student noted, "I want you to understand where I'm coming from. I'm still a

student. I'm still learning. I don't know everything, but I'm trying." Another graduate

participant said that due to the vastness of knowledge and disorders in the field of speech-

language pathology, learning is continual. He or she relayed:

There's just so much in this field that you know and I still feel like there's a lot

you might not know because there's people that come that have this mysterious

thing going on. And you're just like 'How do I tackle that?'

It is mandated by ASHA that graduate speech-language pathology students obtain

specialized coursework in order to graduate. As referenced before, the academics address

a wide range of topics. While it is imperative for graduate students to gain foundational

knowledge, they need to be able to apply it. Externships are the avenues for application

and continued acquisition of knowledge to occur.

Reflection on performance. Another way to gain information and improve

performance that was mentioned multiple times was reflective practice. Reflection

involves an individual examining his or her actions and determining areas of growth in

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performance (Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). Mastering the skill of reflecting on events that occurred and reflecting as they transpire in order to make modifications to actions are vital to improved and effective practice (Argyris, 1990; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). A graduate student stated:

I think it's very important to reflect, not only to see what you have to work on, but to see how far you've come because if you're constantly just focusing on the criticisms, I think it slows your progress to tell you the truth. You have to celebrate what you're doing right as well as work on what you're doing wrong. You have to reflect on how others felt about your treatment too. I think that's important not only in what your supervisors say about you, but what your clients say about you because you cannot know if you're making something difficult or uncomfortable. I think it's very important to look back on and see the progress and see the huge area for improvement.

A participant concurred when he or she said:

I think that's definitely, I don't want to say a gift, but I'm thinking of a skill that people need to acquire that not every single student can do. I know people that aren't as good at it. I mean I've watched myself grow. There's times where I was just overly critical of myself and now I'm like, 'Ok, I did this right, but maybe I could do this better next time.' So I think I'm at the point now I know when my supervisor's going to tell me something and I know what it's going be. So, we'll walk out of the room, she'll open her mouth. I'm like, 'I know this. I should have done this. I get it.' I think she respects that. She knows that I could see what I'm doing wrong and I can improve. And it's not even like I'm doing something

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wrong. It's just a matter of growth. So I think self-reflection is important in anything.

Another graduate student mentioned that:

> Reflections are important. I feel like that's how I pinpoint what I did wrong or what I could do better. I don't want to say wrong. What I'm doing like 'Ok, this isn't working like we need to think about it.' After the session I'll realize whatever I tried didn't work. I have a supervisor to go to and [say] 'I tried this and she didn't give me the response I wanted or her behavior was out of control or something.' My supervisor's there to be like 'Well try this.' I don't know, in the future maybe I'll go to Google how to control kids. But reflection is important. I just hope that whenever I do reflect and find something I can improve on that I have the tools to actually improve it.

Continuing in the same manner, a participant reported that he or she -

> Love[s] to reflect on my sessions and any interaction that I have with clients. I like to think 'What did I do well? What can I do better? How can I improve for next time?' Because it's like I'm learning.

Another graduate student agreed by stating, "I feel like it's made me more aware of how I am as a clinician. I think everyone is not perfect so if you're able to see your weaknesses, you can learn from that and grow from that." A graduate student mentioned:

> I think it helps me to really put into perspective the feedback that I'm getting and kind of reflect on myself. So for example, in our one clinic we have to self-reflect and we have to write everything down. What we have and how we'll change that in future practice. It's really just taught me to self-improve all together. I

compared my reflections from my first clinic to my clinic now and it's really

interesting to see my reflections then versus now. When I'm asked to apply my

reflection to how I will put it into practice, I'm able to pull out a lot more and

have more detailed reactions.

Moreover, a supervisor acknowledged this concept by relaying:

In any aspect of life, if you can't reflect on what you've done, you're not going to

make any improvements on things. You have to be able to look and say, 'Ok,

what did I do there? What was good? What wasn't good? What can I change for

the next time?'

Another supervisor felt that critiquing oneself was important for improvement. He or she

expressed:

Self-reflection of going back and being able to critique yourself is really

important. Both being able to critique and saying 'Wow, I actually did really well

on this.' I also like writing down notes after your session. I encourage them to jot

down a couple notes about how they think it went [and] what they think they need

to improve on.

During clinical practicums, graduate speech-language pathology students can have

opportunities providing therapy with clients who have a variety of delays, impairments,

and/or disorders. Conducting evaluations with the patients is not only a means to collect

clinical hours, it is a way for graduate students to gain experience assessing and

analyzing data within specific disorders. By evaluating and treating clients, graduate

students are able to apply theory and their academic knowledge to practice. Reflection on

their performance aids in improving their skills and future outcomes of therapy.

Theme III: Supportive and communicative supervisor. As graduate students participate in clinical practicums, they receive supervision by a certified speech-language pathologist. There are many characteristics that a supervisor may have and exhibit with graduate students. Past research has indicated that a supervisor should demonstrate supportive, relational, communicative, realistic, reflective, empathetic, intuitive, collaborative, and instructional skills (Bogo & McKnight, 2005; Dawson et al., 2013; Driscoll, 2000, 2007; Fitzgerald, 2009; Geller & Foley, 2009; Kilminster & Jolly, 2000; Ladany et al., 2001; Meier, 2001; Ostergren, 2011; Saxby et al., 2013). For the graduate students in this study, having a supervisor that was supportive was frequently discussed. A couple of graduate students reported that a supervisor who was supportive was "number one" for them. An individual stated:

> I think they need to be supportive. I think that's number one for me. I marked that
> on that sheet. If I feel like I don't have your support, then I'm going to be nervous
> to implement any kind of therapy because I feel like you're not going to agree
> with anything I do. Or I'll go home and cry. I just want to know that I'm doing
> something right because obviously, those skills grow. Now I'm like, 'Oh, ok, I
> could do this.' But your first few weeks being anywhere, I think that's the most
> crucial time for a supervisor to show how much they're willing to put out for you.

Another graduate speech-language pathology student expressed, "I think it's so important to be supportive, even if you want to teach based on the learn-on-your-own type of way. I feel like some support at this stage is still critical." A graduate student noted that it was important "Making the student clinician feel supported and basically supervise. I didn't have the best experience at my second clinic. Started it off basically, she wasn't there. So,

just being there, being present is a huge thing." In agreement, a graduate student mentioned:

> So far, I've had all great supervisors. I think they were all really understanding of where I am as a student. They didn't expect too much or too little. They still had expectations. But if I didn't know anything or if I'm second guessing what I'm doing, they were there to give me advice and guide me.

Along with supervisors having the skill of being supportive, graduate students noted that communication was important for supervisors to demonstrate. A graduate student explained:

> Communicative. I need them to constantly communicate with me regardless of the setting, with a job, outside of here, or with actually going towards speech pathology. I think your supervisor needs to communicate with you what they want to see in you, what they don't want to see in you. I think that is very important.

A participant expressed:

> I think it's really important for them to be open-minded. For example, my supervisors never assumed I knew how to do something. They would make sure before putting me in a situation that I was knowledgeable of the area. Made sure I was comfortable before I was able to engage with the patient. Apparently I'm very lucky I've heard. I'm very fortunate to have supervisors that really taught me or made sure I knew what I was doing.

Along that sentiment, another graduate student said supervisors -

Need to communicate with you, what they don't want to see. Having that open

channel of communication just so that way your students can feel more

comfortable with the clients and going into the situation just as easily as possible.

Communication was critical for another participant as he or she stated a needed

supervisor characteristic was "Definitely to communicate expectations. That's a big one

so I know just what's expected of me." A supervisor concurred when he or she stated:

What is the student's expectation, what are my expectations? What do we each

hope the other one gets out of this experience? And, while it is sometimes

annoying to have to fill out this paperwork, 'Oh, no, I've got to do that

paperwork,' I think it does help to set a tone and a foundation for the experience.

This supervisor continued on later by relaying that students "Rise to your expectations, so

you expect great things and you get great things."

Continuing with the supervisor skill of communicative being necessary, a

supervisor expressed:

Open communication, big one. That student needs to feel comfortable to come to

the supervisor and say, 'I don't get this. I'm not comfortable doing this yet. What

should I do? Where should I have gone? What can I have done?' The supervisor

needs to be able to be open with them. Be able to positively critique them and say,

'You know, these are the things we could have done.' Kind of getting a feel of

when that student is ready for the next little push.

Another supervisor concurred by stating:

I think you have to be open and honest about things. That goes both ways. So if

the student really doesn't understand a procedure, then they need to seek

clarification from it and not be embarrassed that they don't understand what's

being asked of them. The same thing with the supervisor. They maybe want to

check for the student's comprehension and make sure that what's being

communicated is effective.

Support and communication can help graduate students know what they are doing well

during practicums and areas that may need improvement, recognize what is expected of

them as well as know the supervisor understands their present skill level.

Communication through feedback. One way that communication with

supervisors was noted across the graduate student interviews was through feedback. Not

only did the graduate students indicate that it was a skill that supervisors should have, but

that feedback and correction was a way that supervision helped to prepare them for the

field. A graduate speech-language pathology student noted:

We had to, with our supervisors, the first day talk about what type of feedback

that we preferred. It was very specific, and I kind of liked it at first because I got

to think about what type of feedback I thought I preferred. On paper I felt I

wanted one thing, but then in the real world I don't know. I personally like more

feedback than not that much. So, that's one thing that I feel is definitely essential.

Even if someone says they don't want feedback, I feel it's critical, especially as a

student. Even if something didn't go well, just saying 'Maybe next time you could

do this.'

A graduate student reiterated that thought when he or she said:

Being honest. Tell it like it is. If I need work on this area, be honest. If there is

something I could do better, I like to hear feedback. That's how I improve. I like

to reflect on how I'm doing. How I can do better.

A graduate student indicated that frequent feedback was important. He or she stated, "I

like feedback almost after every session so that the next session, I can go on and apply

that feedback and further refine those skills." A graduate participant stated that her

supervisor "Kind of pushed me in, watched what I did independently, and then gave me

feedback as the time went on. Her feedback was very much respected. I valued her

feedback very much and I always took it seriously."

Moreover, several graduate students noted that having corrective feedback was

beneficial. A participant relayed "I think it was nice to have someone to correct me. That

was really good." A graduate student commented:

From my point of view, I might not catch certain things. So, it's definitely

beneficial to have someone watching me because you might not realize you're

making a mistake unless somebody tells you or you view a video of yourself. It's

definitely good to hear perspectives from other people and it's good to receive

recommendations for the future and suggestions how you can improve for next

time. Any kind of recommendation or suggestion, I take it. I work on it for next

time. So, I internalize those recommendations and I think next time I'll use them

and I'll follow the recommendations in order to improve.

Lastly, a graduate student said that corrective feedback guided him or her in a positive

direction. He or she said:

Right now I feel like I don't know if this is right or wrong, not that there is a right or wrong in our field. But I'm unsure of what I'm doing, I have that person there who's been in the field saying 'Ok, that's a good idea but maybe we will take it in this direction or maybe you should try this next. Or that's too easy, you need to make it harder. That's too much, we need to break it down in to smaller steps.' It's having that second opinion of someone who's experienced to lead me in the right direction.

Supervisors agreed it was important for supervisors to be supportive and understanding. A supervisor expressed, "Compassion is a big one. Understanding that this is someone who doesn't necessarily have any clue what they're doing when they first start. You need to be caring. You need to be nurturing." Another supervisor concurred when he or she noted:

I think the hardest skill is recognizing in a student where they are in terms of their confidence and in their knowledge. Whether or not they actually have the knowledge to gain the skills or if they really don't and I need to make sure their going home and looking over some things at night before they come back. Because otherwise you're pushing them and they don't really have the background knowledge.

Continuing in the significance of a supervisor understanding the growth succession of students, a supervisor reported:

I think you have to have an understanding of the developmental process that these students are going through. For example, when they come to me, I don't have the same expectations as I have [when] they've been with me for 13 weeks…So,

when I employ a student who's come out of [a] graduate program, I do the same

thing. I'm not evaluating them based on how I think they should be as a mature

clinician because they're not. Even at the end of a practicum, they're still not

there. So I think you have to have that understanding and I think you have to be

able to provide support without being directive.

Furthermore, when building a supervisor/supervisee relationship, supervisors

noted that they strived for open communication and provision of feedback. A couple of

supervisors expressed that they make sure communication with the graduate students was

readily available. A supervisor stated:

I make sure that my student knows that there's open communication with me.

Anytime you have questions, concerns, anything, talk to me. I'm here. You can

text me. You can email me. I think I'm a pretty open person and I feel like I'm

nurturing. I'm not going to be mean. I'm not going to be rough. Talk to me.

Another supervisor expressed:

I always tell my students that I generally have an open-door policy. I'm always

here. My schedule's 35 hours a week. I'm never just here 35 hours a week. I tell

them, 'If you email me, I'll probably get back to you 9:00 a.m. to 5:00 p.m.

Monday through Friday.' I also tell them that I check out, that 'I am offline from

5:00 p.m. until usually half-time of the Eagles game on Sunday.' I tell them that 'I

think there are boundaries.' And establishing that respect that I'm here for you,

but I'm also a human being.

A supervisor commented that she was "Pretty much open to whatever form of

communication works for them. In this day and age, we can text. We can call. We don't

Facebook." Another supervisor noted that face-to -ace communication was the mode that he or she participated in with the graduate students he or she supervised. He or she relayed:

> We do a lot of talking. A lot of it is they'll come with an idea. 'What do you think about this idea? Have you ever tried this?' Sometimes I have. Sometimes I haven't. I'm like, 'Well, so try it.' If it works, great. If not, we'll move on.

Additionally, a supervisor said that he or she believes feedback was crucial and stated:

> We have to be in constant communication. I provide them written feedback, verbal feedback about their clients and generally about anything they have questions about. In the same manner, I think the externship supervisors, that kind of dialogue is something that's really important.

In accordance with providing feedback, another supervisor said, "You need to be able to critique someone in a positive way. So you're not creating a negative feeling between the two of you so that student feels they can come to you and they can ask questions."

Communication is key when supervising graduate students. It provides a means for graduate students to improve on their therapeutic performance and have an understanding of what their responsibilities are during practicums. A supervisor who is supportive and understands the current skill level of the graduate student can assist in the development of an independent student clinician through having appropriate expectations, an open and honest style of communication, and a willingness to provide helpful feedback.

Quantitative Data Analysis

During quantitative data collection, the graduate students were asked to complete a graphic elicitation, which contained a list of nine supervisor skills that research had shown to be important for a supervisor to exhibit. The participants were asked to place in order of importance to them the supervisor skills that were randomly listed, with one being the most important and nine being the least important. Table 1 includes the supervisor skills of supportive, empathetic, realistic, communicative, reflective, and collaborative. The rank refers to the hierarchical position when rating. For the supervisor skills section of the graphic elicitation, there were 12 entries that could be utilized for data analysis. Results of the hierarchical rating of supervisor skills (Table 1) revealed that a supervisor who was supportive was found to be the most important ability with the graduate students. Eighty-three percent of the participants (10 individuals) ranked it number one. With the exception of intuitive, all other rated supervisor skills were scattered in terms of importance. Being intuitive was placed as least important with 41.6% of the sample (5 individuals) ranking it in that manner.

Another way of analyzing the hierarchical table of supervisor skills was to divide it into three levels of importance. One to three rankings on the chart could be considered as most important, four to six as moderately important, and seven through nine as least important. When viewed in this manner, a supportive supervisor was found to be the most important ability to possess with the graduate students (100% ranked it number one; 12 individuals). Being communicative received the second highest rating with 75% of the sample (nine individuals) labeling it as important.

Table 1

Supervisor Skills Ratings

Rank	Relat.	Supp.	Emp.	Intuit.	Real.	Instruct.	Comm.	Refl.	Collab.
1		83.3					16.7		
2			16.7		25	25	16.7		16.7
3		16.7	16.7		25	16.7	41.7		
4	16.7		8.3				8.3	25	25
5	25		8.3		16.7	8.3	8.3	16.7	16.7
6			25	16.7	8.3	16.7		16.7	16.7
7	16.7			25	16.7	16.7	8.3		16.6
8	41.6		8.3	16.7	8.3	8.3		8.3	8.3
9			16.7	41.6		8.3		33.3	

Note. The following are the meanings of the abbreviations above: Relat. Is Relational; Supp. is Supportive; Emp. is Empathetic; Intuit. Is Intuitive; Real. is Realistic; Instruct. Is Instructional; Comm. is Communicative; Refl. is Reflective; and Collab. is Collaborative

Furthermore, demonstrating reflection and collaboration were documented as moderately important by the graduate students. They were ranked third by the graduate students (seven individuals for each) with 58.3%. Having empathy was classified as moderately to most important as 41.7% of the sample (five individuals) placed it in the four to six level and 33.3% (four individuals) recorded it in the one to three level. Being realistic and instructional in manner were ranked scattered across all three tiers. Intuitiveness and relational were categorized as least important among most of the graduate students with 83.3% of the sample (10 individuals) rating intuitiveness in the bottom level and 58.3% (seven individuals) placing relational in the 7th-9th positions.

Furthermore, the second part of the graphic elicitation had a list of eight aspects of clinical practicums that research had shown were outcomes of clinical experiences. The graduate speech-language pathology students were asked to place in order of importance to them the aspects of clinical practicums, with one being the most important

and eight being the least important. The clinical practicum outcomes listed in Table 2 were problem solving opportunities, reflection/self-evaluation, application of academic knowledge, time management occasions, collaboration with other professionals, learning from practicum/site supervisor, increased therapeutic skills and competency, and increased self-confidence in speech-language pathology skills. The rank refers to the hierarchical position when rating. For the clinical practicum outcomes section of the graphic elicitation, there were 10 entries that could be utilized for data analysis. Results of the hierarchical rating of clinical practicum outcomes (Table 2) revealed that increased therapeutic skills and competency was found to be the most important outcome of practicums for the graduate students. Fifty percent of the sample (five individuals) ranked it as number one. Fifty percent of the participants (five individuals) placed increased self-confidence in speech-language pathology skills as number two. The percentages for the other six clinical practicum outcomes were scattered among each of the remaining rankings (rankings three through eight).

Continuing in the same manner as the supervisor skills' table, the clinical practicum results (Table 2) were leveled into three different tiers: one to three as the most important, four through six as moderately important, and seven and eight as least important. The number one outcome of clinical practicums, which all 10 graduate students ranked as most important, was increased therapeutic skills and competency with increased self-confidence in speech-language pathology skills ranked as second (nine individuals; 90% of sample). Learning from practicum/site supervisor was third in level of importance (six individuals; 60% of sample). Problem solving opportunities during practicums and application of academic knowledge were ranked equally in the

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moderately important bracket (five individuals each; 50% of sample). Collaboration with other professionals was split among the graduate students with 50% (five individuals) placing it in the moderately important range and 50% (five individuals) in the least important level of importance. Time management occasions and reflection/self-evaluation were deemed by the participants as the least important factors of clinical practicums. One hundred percent of the graduate students (10 individuals) ranked time management occasions in the bottom ranking of importance and 70% (seven individuals) placed reflection/self-evaluation in levels seven and eight.

Table 2

Clinical Practicum Outcomes

Rank	PS	R/S-E	AK	TM	COLLAB	SUPV	Tx	SC
1			10			30	50	10
2						20	30	50
3	30		10			10	20	30
4	20	20	10		40	10		
5	30	10	40		10			10
6	20		10	40	30			
7		30	20	30		20		
8		40		30	20	10		

Note. The following are the meanings for the abbreviations above: PS = Problem solving opportunities; R/S-E = Reflection/Self-evaluation; AK = Application of academic knowledge; TM = Time management occasions; COLLAB = collaboration with other professionals; SUPV = Learning from practicum/site supervisor; Tx = Increased therapeutic skills and competency; SC = Increased self-confidence in speech-language pathology skills

In addition to the graphic elicitation was completion of the New General Self-Efficacy (NGSE) scale (Chen et al., 2001). The survey contained eight questions which the graduate students had to respond to as strongly agree, agree, neutral, disagree, or strongly disagree. Results of the NGSE survey (Table 3) revealed for most of the

questions, the speech-language pathology graduate students (13 participants) reported a solid level of self-efficacy with the mean being represented within the *Agree* range for all questions. The highest percentages of *Strongly Agree* were noted on questions one, three, four, and five. *Neutral* responses were recorded on questions six, seven, and eight with the highest noted on question seven.

These results indicated that the graduate students presented a concrete level of internal confidence to accomplish goals, obtain outcomes, overcome challenges, and be successful in endeavors. A decrease in confidence was noted when a statement addressed comparing themselves to others in performing tasks well. While the shift in confidence was not as large as comparing oneself to others, differences were noted with self-efficacy on performing effectively on many different tasks and performing well when things may be tough.

Table 3

New General Self-Efficacy Scale Results

Question	Minimum	Maximum	Mean	Standard Deviation	Variance	Percent of Agreement
1. I will be able to achieve most of the goals that I have set for myself.	4.00	5.00	4.54	0.50	0.25	46.15%A 53.85%SA
2. When facing difficult tasks, I am certain that I will accomplish them.	4.00	5.00	4.31	0.46	0.21	69.23%A 30.77%SA
3. In general, I think that I can obtain outcomes that are important to me.	4.00	5.00	4.54	0.50	0.25	46.15%A 53.85%SA
4. I believe I can succeed at most any endeavor to which I set my mind.	4.00	5.00	4.62	0.49	0.25	38.46%A 61.54%SA
5. I will be able to successfully overcome many challenges.	4.00	5.00	4.54	0.50	0.25	46.15%A 53.85%SA
6. I am confident that I can perform effectively on many different tasks.	3.00	5.00	4.23	0.70	0.49	15.38%N 46.15%A 38.46%SA
7. Compared to other people, I can do most tasks very well.	3.00	5.00	4.08	0.73	0.53	23.08%N 46.15%A 30.77%SA
8. Even when things are tough, I can perform quite well.	3.00	5.00	4.23	0.58	0.33	7.69%N 61.54%A 30.77%SA

Note. The following are the meanings for the abbreviations above: A = Agree, SA = Strongly Agree, and N = Neutral

Qualitative and Quantitative Data Comparison

Mixed methods study allowed the researcher the opportunity to explore, examine, and therefore, present both quantitative and qualitative inquiry, data, and results. Comparing the data and results gave a means to examine likenesses, contradictions, and outliers. When paralleling and contrasting the qualitative and quantitative results in this study, there were multiple similarities and some differences. Analysis occurred by placing the data from both methods in groups based on qualitative information, categories on the graphic elicitation, and the results of the NGSE (Chen et al., 2001) scale. Within the groups, the top three results were documented for each.

Important supervisor skills. In the category of supervisor skills, in the qualitative data, the graduate students frequently mentioned supportive and communicative as necessary skills for a supervisor to exhibit. Supportive and communicative on the graphic elicitation results were in the first and second rankings. For the qualitative data, a supervisor who was able to provide feedback was mentioned numerous times by the graduate speech-language pathology students. Reference to providing feedback was not directly listed on the GE for quantitative data collection as it was not mentioned in literature as a "skill" per se, but as an important component of effective supervision. For the purpose of analysis, one could assign feedback as part of communication (ranked second in the GE results) as well as collaborative, which was ranked third by the graduate students and in the moderate level of importance.

When the supervisors in the study were asked what characteristics and skills were important for a field supervisor to exhibit, they were in agreement with the graduate students by noting that supervisors should be understanding, compassionate/caring, and

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patient. These skills fall in line with one who is supportive (frequently mentioned skill by the graduate students). The supervisors also discussed communicative and a good listener as important skills for a field supervisor to demonstrate.

Furthermore, the supervisors mentioned that field supervisors should be able to teach and take advantage of teachable moments when supervising. On the graphic elicitation, the speech-language pathology graduate students were split on their view of how important this skill was for a supervisor to display. When the data were segmented into levels 1-3, 4-6, and 7-9, the calculations for instructional were varied among the 12 graduate students (41.7% for 1-3, 33.3% for 7-9, and 25% for 4-6).

Supervisor/Supervisee relationship. When the graduate students were asked during the interviews to describe one of the supervisor/supervisee relationships they had, many referred to their supervisor as being supportive and communicative as well as having an overall positive experience. On the quantitative portion, a supervisor who was supportive and communicative was frequently relayed as important to the speech-language pathology graduate students. It was noted, however, that statements were made by the participants regarding difficulty in the supervisor/supervisee relationship. A graduate student noted that she "Did not have a good experience. My supervisor was not present in the beginning. She expected me to just jump right in. She didn't really understand that it was my first real clinical practicum." In addition, she noted, "Whenever I would ask a question, she almost gave the feeling that I was bothering her. I didn't really learn a lot of the skills sets that I probably should have." A graduate student had a similar experience with a different supervisor by relaying that she "Kind of felt like I was thrown in more which in the beginning, I was super overwhelmed" and -

I had no experience with that whatsoever. So, I was asking my supervisor some questions and sometimes I feel like when I ask her questions, she's always very busy and just kind of gives short answers, which I understand. It's a very fast-paced setting. But I feel like it's definitely important to answer questions that your students are asking because I don't ask that many questions. But if I do ask some, they're pretty important.

Another participant discussed the difficulty in supervisory relationships when he or she noted that it was "Very hard to form a relationship with her in the beginning. She makes you do all the learning yourself and she doesn't really assist you in that. She made me think I really wasn't cut out for it."

While the supervisor/supervisee relationships may have been difficult to build, the students expressed that they did their best to not let it impact them. They noted they kept doing what was expected of them, expressed their emotions outside of the clinical practicum setting, tried to be understanding, and completed independent research. The sentiment of persevering through difficulty was documented on the NGSE (Chen et al., 2001) scale. On the scale, the highest percentage of *Agree* notations was noted on question 2 (69.23%) and question 8 (61.54%) which stated, "When facing difficult tasks, I am certain that I will accomplish them" and "Even when things are tough, I can perform quite well."

When the supervisors were asked what factors were important in a field supervisor/supervisee's working relationship, a recurrent response was being open/honest. This again correlated with the graduate students' answers. Inquiry into what steps the supervisors took to build a relationship with the graduate students during

supervision was conducted. Once more, open communication was frequently mentioned. Stating expectations was discussed multiple times as well. The supervisors also stated that the actual supervision of a student aids in building a relationship with them. Critiquing and providing feedback to the graduate students was noted by the supervisors as an important part of the relationship and a step that they took to form a supervisor/supervisee working relationship. This was in agreement with the graduate speech-language pathology students as they reported in their interviews that giving feedback was a vital skill for a supervisor to have.

A University staff member/supervisor noted, "The [field] supervisors are absolutely our lifeline. We can't do it without them." However, it was mentioned by some supervisors that it appeared to be difficult for Universities to obtain field supervisors due to competition and a possible shortage. They relayed:

I think it's hard for the graduate programs to find placements for all of their students. It is extremely hard. It's extremely competitive. The more programs there are, the less spots there are for students to have placements. It's hard for the supervisors. I'd love to say I could take two students at once, but I could never do that. I don't feel like that would benefit the student and it certainly would stress me out. I wouldn't be able to see anywhere near as much and then my patients would in turn suffer. So I can't do that either. I think that the graduate programs have a tough job to get into the places that they need to. I don't know what the answer is.

And:

I keep signing up because they need the experience. I feel like that's that whole

funnel effect where everyone's applying. People are trying to learn more about

speech, but they can't get enough supervisors so they can be fine. So they don't

go through with it. I feel like I have been more of a [University's name]

supervisor because of the lack of experience coming in.

Clinical practicum outcomes. When asked what aspects of clinical practicums

were important for preparation for the speech-language pathology workforce, the

graduate students mentioned having experience with a range of clients and conducting

therapy were important. This was concurrent with the GE quantitative data as increased

therapeutic skills and competency was ranked number one (five individuals) for

important outcomes of clinical practicums. Similarly, the graduate students (five

individuals) ranked increased self-confidence in speech-language pathology skills as

second. During the interviews, students discussed communicating with others as a part of

clinical practicums and ranked it in the moderate level of importance (four individuals)

on the quantitative measure. When the quantitative data on the GE were split into levels

(1-3, 4-5, 6-8), learning from the site supervisor was ranked third (six individuals) in

level of importance as an outcome of clinical practicums. However, learning from the site

supervisor was not directly mentioned as an outcome by the graduate students during the

interviews.

Furthermore, the supervisors were asked the same question during interviews

regarding aspects of clinical practicums that were important for student preparation for

the workforce. They reported time management and experience with various speech-

language disorders as important clinical practicum preparatory aspects. The graduate

students placed time management occasions in the bottom level of importance (10 individuals), but were in agreement in the qualitative information that involvement with a range of clients was vital. Various other skills were labeled by the supervisors as important: evaluating clients, experience with basic skills, and modifying treatment. In the qualitative data, the graduate students noted that being able to adapt during therapy and modify treatment were moderately important as well.

Self-Efficacy of graduate students. A part of modifying treatment and demonstrating effective skills is having a level of self-efficacy. The graduate participants were asked how supervision and practicum experiences impacted their level of confidence as an upcoming graduating speech-language pathology individual. The most common answer for both areas during the interviews was that supervision and clinical practicum experiences had a positive influence on the level of confidence that was developed. Increased self-confidence in speech-language pathology skills was ranked second (five individuals) in the GE quantitative data as an outcome of clinical experiences. Belief in one's self-efficacy was noted by the graduate students on the NGSE scale as the highest percentages of *Strongly Agree* were calculated on four questions, which covered achieving goals set for oneself, obtaining outcomes that are important, succeeding in any endeavor, and overcoming many challenges. However, variability in agreement was noted on the NGSE scale when rating level of confidence for performing effectively on many different tasks and doing most tasks very well when compared to other people. The highest levels of *Neutral* were calculated on these questions.

Furthermore, receiving feedback from the supervisor as well as learning from him or her were mentioned as important components for increased self-efficacy. In the GE quantitative data, learning from the practicum/site supervisor was ranked third in level of significance (six individuals) when the data were split into segments of 1-3, 4-5, and 6-8. Having the opportunity to engage in direct treatment during practicums was again discussed as vital during the interviews and noted as influencing self-efficacy. Within providing therapy, utilizing professional judgment was mentioned as having a positive effect on self-efficacy growth.

Likewise, the supervisors were asked in what ways they believe supervision and clinical practicums impacted a student's level of self-efficacy. They noted that supervision and practicums provided the experience that students needed to build self-efficacy and through the opportunities, confidence was built. They also noted that these avenues provided a means for independence to develop. When asked what factors they believed enhanced a student's confidence in his or her knowledge and therapeutic skills, the supervisors stated that collaboration with them and other professionals was important. In the quantitative results from the graphic elicitation, some graduate students (four individuals) ranked collaboration as moderately important during clinical practicums. Supervisors also discussed the feedback that students get and increased responsibilities they were given aid in improving self-efficacy. Lastly, practice with application of skills and self-reflection on the therapy sessions were noted by the supervisors as important for self-efficacy. The graduate students (12 participants) ranked reflection/self-evaluation at the bottom level of importance on the graphic elicitation.

Reflection on performance. In response to the research question that inquired about reflection assisting skill development of graduate students, both the supervisors and the graduate students discussed that it improved performance. During the interviews, the graduate students noted that reflection was important and should be frequent. But, as mentioned above, they placed it in the bottom for level of significance in the GE quantitative data. The graduate speech-language pathology students mentioned that reflection helped them adjust treatment sessions while they were occurring and the supervisors stated that reflective practice developed critical thinking. In addition, two supervisors noted that reflection was empowering and helped graduate students set goals.

Novice to independent student clinician. Additionally, during interviews, graduate students and supervisors were asked what skills graduate students needed to move from a novice to an independent graduate student clinician. Both the graduate students and supervisors noted that having confidence was essential. The graduate students indicated that having experience through practicums and being competent were vital to development into an independent student clinician. They also discussed having sound academics, being able to modify therapy sessions, learning from others, having professionalism, and planning for treatment as important to graduate student growth. The supervisors listed being able to think critically, modify therapy sessions, have research skills, and demonstrate soft skills as important to move from a novice to an independent student clinician.

ASHA preparation. Clinical practicums, academics, and supervision are required components for meeting ASHA's Knowledge and Skills Outcomes standards. All participants were asked what opportunities were provided for the graduate students to

meet ASHA's standards. Evaluations and clinical practicums were mentioned by both the supervisors and graduate students as means to prepare students for completion of ASHA's requirements. The graduate students spoke of conducting speech-language evaluations and working with children and adults. The areas of focus were in communication, dysarthria, dysphagia, articulation, apraxia, feeding, voice, phonology, AAC, and fluency. Supervisors discussed clinical practicums being a way to collect required clinical hours, apply academic knowledge, and practice therapeutic skills.

In addition, the graduate students frequently mentioned coursework as an important part in equipping them for ASHA's standards. They noted that the content of the coursework targeted many of the elements of academia that ASHA mandates. The graduate students expressed that during their classes, they had exposure to numerous speech-language diagnostic materials, previewing videos of modified barium swallow studies, and writing therapy plans. The supervisors relayed that the support of supervisors played a role in preparation as well. Universities offer workshops/training to field supervisors to show gratitude for supervising, but also to share in furthering pedagogy and collaboration. This in turn supports the supervisor's continued learning, which can be imparted to the graduate students.

Summary

This chapter documented information regarding the participants in the study and the data gathered from graduate student and supervisor interviews, a graphic elicitation, and the NGSE (Chen et al., 2001) scale. Throughout the data, there were skills, outcomes, and experiences that the supervisors and graduate students found to be vital in the preparation of graduate students for the speech-language pathology workforce and

supervisors to exhibit. Confidence within the graduate students was a recurrent theme in the interview processes as well as the NGSE (Chen et al., 2001) scale. Having a supervisor/supervisee relationship that was open and honest and a supervisor who was able to be supportive and communicative were found in the qualitative and quantitative data as imperative. While the graduate students reported having experience with positive supervisor/supervisee relationships, there were many statements made describing difficulty building and maintaining relationships with some supervisors.

Another theme that arose was the value of having clinical practicum experiences. Graduate students and supervisors alike reported that clinical practicums gave a means for students to directly provide treatment and conduct evaluations with a variety of clients. It was discussed that through supervision and the provision of therapy services, the graduate students were able to gain confidence and become independent as a graduate student clinician. Assisting in the preparation of graduate students was having quality academic coursework.

Lastly, supervisors and graduate students mentioned during interviews that reflection in- and on- therapeutic practice assisted in the graduate students' skill development and performance. It was discussed that reflection was important and should be frequent as it helped graduate students adjust their therapy sessions and gave them knowledge on what skills of theirs needed improvement. However, on the GE, the graduate speech-language pathology students placed reflection at the bottom level of importance as an outcome of clinical practicums and in the moderate level of importance for a skill that a supervisor should exhibit. The following chapter will expound upon the

results of the study through summarization and discussion, interpretation, implications,

and recommendations.

Chapter 5

Discussion, Interpretation, Implications, and Recommendations

Discussion

When an individual graduates from a two or four year collegiate program or a master's program, he or she often seeks employment. Employers desire to employ those who are able to collaborate effectively with others and demonstrate work readiness skills. Numerous positions have national standards and requirements that must be met in order to be certified, and therefore, qualified for employment. This study explored the perceptions of second-year graduate speech-language pathology students regarding being equipped to meet ASHA's standards following supervision and clinical practicums and the impact that supervision and clinical practicums had on their development towards becoming an independent student clinician. In addition, examination into the impact of self-efficacy on the graduate students' preparation to enter the workforce of speech-language pathology and exploration of the perceptions of supervisors on equipping graduate students for the field was conducted. Field supervisors and University staff members who supervised graduate speech-language pathology students within the last two years were sought as participants to gain information regarding students being equipped to meet ASHA's standards and enter the field through the preparation of academics, supervision, and clinical practicums. The research questions (RQ) that guided the study were as follows:

1. How do university speech-language pathology programs utilize supervision and practicums to prepare graduate students for entry into the workforce?

2. What aspects of supervision and practicums contribute to the development of second-year graduate speech-language pathology students from a novice to independent graduate student clinician?

3. In what ways do second-year graduate speech-language pathology students believe their practicums and supervision experience equipped them to meet ASHA's Knowledge and Skills Standards?

4. What impact does self-efficacy have on second-year graduate students being equipped to enter the field of speech-language pathology?

The data were organized into three overall themes of confidence as a critical skill, value in clinical practicums, and supportive and communicative supervisor. While reviewing and comparing the interview data parallel to one another and after discussion with critical friends, sub-themes arose. They were impact of supervision on confidence, impact of clinical practicums on confidence, confidence over time, working with individuals and a variety of disorders, application and continued acquisition of knowledge, reflection on performance, and communication through feedback.

In this chapter, the themes will be discussed through the lens of the study's conceptual framework. The conceptual framework for the study represented theories, ideas, regulations, and practices that may affect the development of future speech-language pathologists. It symbolized the application of knowledge and increased skills in clinical practicums as well as the supervisor/supervisee relationship, supervision style and characteristics, supervisor feedback, and Jean Anderson's three stages of supervision. It included the social cognitive theory and Bandura's theory on self-efficacy. The conceptual framework also displayed aspects of reflective practice such as Schon's

reflection in- and on- practice and Osterman and Kottkamp's cyclical approach to reflection. Lastly, it contained ASHA standards II, IV, and V. Main findings from the qualitative and quantitative data will be discussed. Interpretation of findings, implications, recommendations and suggestions for future research, and limitations of the study will be reviewed as well.

Clinical practicum experience. Revealed in both the qualitative and quantitative data was the value of gaining experience in clinical practicums. Clinical practicums are not only a means for graduate speech-language pathology students to meet ASHA's standards, but a way for students to provide one-on-one consultative, evaluative, and therapeutic services with a variety of clients. During clinical practicums, graduate students are required to plan and execute therapy. Many settings require pre- and post-speech-language evaluations with clients as well as conferencing with parents and/or family members, related service staff, and various professionals. Consistent records of data in order to know the progress of patients are often required by employers.

O'Kane's (2010) research revealed that upon completing practicums, students noted an increase in their overall belief in their skills, ability to work with individuals, and communication abilities. Similarly, Hernandez et al.'s (2014) research indicated that health professionals believed practicums gave them experience and created confidence in them, which assisted them in future settings (p. 97). Within this study, supervisors and students alike noted that clinical practicums and conducting speech-language evaluations during practicums were key experiences in preparation for meeting ASHA's standards and entry into the workforce. Having hands-on experience with a variety of clients during clinical practicums was mentioned numerous times by the participants. For the graduate

students in this study, opportunities of interaction with clients connected the realm of academics to the reality of treating individuals (Attrill & Gunn, 2010; Hernandez et al., 2014, p. 95). Theory in action refers to an individual's ability to utilize what he or she has learned in the academic classroom and apply it in daily practice (Argyris, 1990).

Through experiences during clinical practicums, graduate students' therapeutic skills often develop. It is a time to practice the gained academic knowledge via multiple settings (Attrill & Gunn, 2010; Cruice, 2005, Hernandez et al., 2014, p. 95). Some graduate students (five individuals) in this study ranked increased therapeutic skills and competency as the top outcome of clinical practicum opportunities. At the beginning of clinical practicums, graduate students usually observe the supervisor treating individuals. As the practicum continues, graduate students become responsible for providing therapy with patients on an increasing basis. Eventually, the graduate students are accountable for the supervisor's full caseload of clients. Providing therapy services to a variety of clients allows graduate students to work directly with a client who has a particular disorder.

Moreover, past research has indicated that participation in clinical practicums aids in application of knowledge and learning through problem solving scenarios met by therapists and staff members, increases students' communication skills, provides opportunities for collaboration with other professionals, and improves time management skills (Attrill & Gunn, 2010; Cruice, 2005; Hernandez et al., 2014; Ho & Whitehill, 2009; O'Kane, 2010; Ralph et al., 2009; Sheepway et al., 2014). ASHA's Standard V requires students to demonstrate effective oral and written communication skills, interpersonal communication, and collaboration with staff members (ASHA, 2016). On the graphic elicitation (GE) presented in this study, the graduate speech-language pathology students

found problem solving opportunities and application of academic information to be moderately important during practicums. In reference to collaboration with other professionals, however, the participants were split regarding level of importance by half (five individuals) placing it in the moderate range and 50% (five individuals) in the least important realm. Contrary to past research, the graduate participants (all 10 recordable responses) placed time management occasions during practicums in the bottom level of importance.

While experiences in clinical practicums were shown through the data to be vital in the development of a graduate student from a novice to independent student clinician, the participants frequently spoke of a level of nervousness and sense of being overwhelmed. Meisenhelder (1987, p. 27) referred to anxiety as a psychological and physiological response to one's thoughts of self. Sarason (1980) noted that a person may become anxious if a task or situation is too challenging, if there is a fear of failure, the individual feels he or she cannot deal with an event, and/or there is a potential of respect from others being altered. During the interviews, students frequently mentioned being nervous especially when starting at their first placement or being placed in a new setting with clients that they did not have prior experience with. One graduate student noted that being responsible for evaluations was overwhelming. These feelings of anxiety concur with the results in Chan et al.'s (1994) research with speech-language pathology students. The data in that study indicated students expressed anxiety surrounding having enough clinical experience to meet the expectations of practicums, being responsible for the needs and outcomes of patients, and application of knowledge.

Supervision of graduate students. Along with experiences during clinical practicums, there is supervision that must occur. ASHA (2016, Standard V-E) states the amount of supervision needs to be correspondent with the graduate students' experience, skills, and knowledge. The supervision cannot be less than 25% of the graduate students' total interaction with each client (ASHA, 2016). Supervision is a continual process in which a student's therapeutic skills and overall performance are assessed by the supervisor (ASHA, 2008a, 2008c; Anderson, 1988). Observation of the supervisor providing therapy services, acceptance of recommendations and constructive critique on how to improve skills, receiving encouragement to remain focused, having a level of independence, generating high expectations, and facilitating metacognition are vital in the practicum setting and in the supervisor/supervisee relationship (Fitzgerald & Sims, 2004 as cited in Fitzgerald, 2009).

Initially, supervision is provided directly and transitions through collaboration to ultimately consultative services (Anderson, 1998; Mendel, 2006). ASHA (2008a) has a list of knowledge and skills that supervisors of graduate speech-language pathology students should acquire which include, but are not limited to, utilizing a supervisory style based on the pedagogy and skills of the supervisee, using effective relational skills, preserving a supportive relationship that allows growth for both individuals, and facilitating and promoting an environment of continual improvement and long-term learning. Several studies have documented supervisory skills such as supportive, communicative, relational, empathetic, collaborative, reflective, instructional, realistic, and intuitive as critical for supervisory efficacy along with student learning and skill development (Bogo & McKnight, 2005; Dawson et al., 2013; Driscoll, 2000, 2007;

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Fitzgerald, 2009; Geller & Foley, 2009; Kilminster & Jolly, 2000; Ladany et al., 2001; Meier, 2001; Ostergren, 2011; Saxby et al., 2013).

Within this study, both the supervisors and graduate speech-language pathology students were asked what characteristics and skills were important for a supervisor to exhibit. Being a supportive and communicative supervisor as well as able to provide feedback were frequently mentioned in the interviews. Two supervisors noted that while it may not be easy, supervisors need to recognize where students are with their skill development and provide support accordingly. On the graphic elicitation which was given to the graduate students, all ranked a supportive supervisor as number one in importance when the data were segmented in to levels (1-3, 4-6, 7-9) and nine individuals noted the ability to communicate as number two.

Feedback from supervisors. A key component of communication that was mentioned in this study was feedback. Past research has indicated that feedback which includes positive aspects as well as areas of improvement for performance assists students in broadening his or her knowledge, refining therapeutic skills, and strengthening the supervisory work alliance (Clynes & Raftery, 2008; Dawson et al., 2013; Driscoll, 2000, 2007; Fowler, 2011; Gaitskell & Morley, 2008; Hunter & Blair, 1999; Mendel, 2006; Murphy & Wright, 2005; Smith, 2010; Sweeney et al., 2001). ASHA (2008a) requires that supervisors provide timely, descriptive, and pertinent feedback.

The graduate participants in this study noted that receiving feedback from their supervisors that included constructive criticism or correction was key in helping to prepare them for the speech-language pathology field. Provision of feedback was not

listed on the GE for quantitative data collection since literature did not mention it as a "skill" but rather a crucial component of effective supervision. If one were to place it in the categories of communication and/or collaboration, a supervisor who was communicative was ranked second (nine individuals) on the GE in level of importance and one who was collaborative was placed third (seven individuals) which was in the moderate range of importance.

Supervisor/Supervisee relationship. While the goal of feedback should be to nurture and assist a student's overall therapeutic skill development and pedagogy (Mendel, 2006), a key component in a student being able to receive the instruction is the status of the supervisor/supervisee relationship. Various authors have discussed the importance of recognizing and discussing the roles and responsibilities of each member in the working relationship, providing clear directions, and developing realistic goals with the student (Anderson, 1998; Geller, 2001; Meisenhelder, 1987, p. 29; Senediak, 2013). One of the supervisors in this study noted that he or she had paperwork that was to be filled out with the student at the beginning of the clinical practicum so that expectations and responsibilities of each individual were reviewed and known.

Moreover, supervisors were asked what steps they took to build a relationship with the graduate speech-language pathology students. Overall, they noted that they aimed to have open communication with them. This was observed in the data when the supervisors discussed being receptive to questions and concerns of the students as well as being readily available to have conversations with them.

Multiple graduate students reported having positive supervisor/supervisee relationships. They often spoke of the supervisors they had in practicums as being great

and taking the time to instruct them. One graduate student stated that the relationship with his or her supervisor had been a positive experience as it had been interesting and provided opportunities to work with other professionals. Another participant relayed that he or she was privileged to have the supervisor he or she had at the time of the interview as the individual had heard of multiple situations where his or her peers were having negative supervisor experiences.

Several graduate speech-language pathology students spoke of negative experiences with supervisors. Dale et al. (2013, p. 4) found that undergraduate nursing students expressed concerns with quickly being placed into therapy settings and Renn and Jessup-Anger's (2008, p. 328) research revealed that some recently graduated individuals in the field of student affairs felt unacknowledged by their supervisor. The graduate students in this study referred to supervisors not being involved in the beginning of the clinical practicum, demonstrating annoyance when asked questions, and supervisors expecting them to assume the caseload from the start of the practicum. Despite these difficulties, the participants noted that they kept persevering and tried to understand the supervisor and the situation.

Reflection on performance. A method that students and supervisors alike spoke of improving graduate students' performance was reflective practice. Reflective practice is a process that requires mental inquiry into one's actions and performance and identifying ways to improve skills and outcomes (Argyris & Schon, 1974; Geller, 2001; Gellar & Foley, 2009; Osterman & Kottkamp, 2004; Schon, 1994; Senediak, 2013). Reflection can occur in- practice and after sessions (on- practice) (Schon, 1994). It requires an individual to be cognizant of his or her actions and make immediate

modifications in the therapy session as well as review his or her actions after the session in order to have a deeper understanding of the strengths and weaknesses of the provided treatment as well as areas of improvement.

Both the supervisors and graduate students relayed that reflective practice directly improved performance. Multiple students mentioned that it aided them in discovering what may not have gone well in the therapy session and what strategies, techniques, and/or skills needed adjusting and continued growth. A graduate student also noted that reflective practice was not only a means to identify modifications to actions, but also to see progress. Opposite of the qualitative data were the quantitative results on reflective practice in clinical practicums. On the GE, seven of the graduate participants placed reflection/self-evaluation in the bottom level of importance.

Self-Efficacy in graduate students. Although there were conflicting data regarding reflection/self-evaluation which aids in self-awareness and improvement of skill development, the graduate speech-language pathology students selected a strong level of confidence on the New General Self-Efficacy (NGSE) (Chen et al., 2001) scale. The social cognitive theory indicates that people cognitively and intentionally contribute to their own motivation and acts, which may be initiated by environmental determinants, behaviors, and personal factors (Bandura, 1989, 2012). Within the social cognitive theory is self-efficacy. Self-efficacy is the depth to which individuals believe they can demonstrate task completion and meet the goals they set for themselves (Bandura, 1989, 1993, 2012; Schunk & Pajares, 2002). If one has a higher perception of self, there is a stronger dedication to achieving goals (Bandura, 1989, 2012; Bouffard-Bouchard, 1990; Caprara et al., 2008; Lane et al., 2004). In addition, research has shown that past

accomplishments can be the most compelling supply of self-efficacy (Bandura, 1982; Pajares et al., 2007; Usher & Pajares, 2006).

A solid level of self-efficacy and agreement with ability to achieve goals was evident in the results on the NGSE scale. The mean score for the self-efficacy questions ranged from 4.08-4.62, which fell consistently within the *Agree* range. The highest level of *Strongly Agree* was noted with question 4 on the NGSE scale: I believe I can succeed at most any endeavor to which I set my mind. The second highest selection of *Strongly Agree* was noted on questions referencing the belief in oneself to achieve goals that he or she set, obtaining outcomes that are important, and overcoming many challenges. The strongest level of neutrality was calculated on question 7: Compared to other people, I can do most tasks very well. During interviews, supervisors and students alike expressed that having confidence was essential to move from a novice to an independent graduate student clinician.

There were several factors that the graduate speech-language pathology participants noted had an impact upon their level of self-efficacy. They were experiences during clinical practicums, supervision, and receiving feedback from their supervisors. During the interviews, the most frequently mentioned contributor to increased self-efficacy was clinical practicums and supervision. On the GE, increased self-confidence from participating in practicums was ranked second (five individuals) in outcomes of clinical externships.

Interpretation of Findings

Colleges and universities have the responsibility of facilitating learning through training and instructing students (Altbach, 2008; Bandura, 1993; Hart, 2006; Kaaya et al.,

2012). Higher education institutions place emphasis on providing information for improved pedagogy and skill development within various professions (Hart, 2006). Embedded within the requirements for a university to be accredited to offer a master's level program in speech-language pathology is the provision of clinical practicums and supervision (Council on Academic Accreditation, 2017). In order to graduate from a speech-language pathology master's program, students need to have 400 clock hours (ASHA, 2009). These hours are obtained through observation and direct supervised treatment with clients (ASHA, 2009). Being such, it was of interest how university speech-language pathology programs utilize supervision and practicums to prepare graduate students for entry into the workforce.

Utilization of supervision and clinical practicums (RQ #1). Many universities that have a speech-language pathology program have an on-campus speech-language-hearing clinic. These on-site clinics offer undergraduate speech-language pathology students a means to gain part of the 25 observation hours that ASHA requires. The clinics are also utilized to give graduate students a way to experience their first direct therapeutic interaction with clients and begin to collect some of the 375 clinical practicum hours mandated by ASHA. During the on-campus clinic, graduate students gain their initial exposure to being responsible for a client's care, which can include planning, gathering background history information, administering pre- and post- assessments, writing reports, conducting therapy sessions, collecting data, writing therapeutic notes, interacting with family members, and discharging a patient from speech-language services.

In addition to graduate students gaining initial therapeutic experience during clinical practicums, they begin having supervision from a speech-language pathology staff member. Supervision encompasses the provision of guidance and support to a student by a specialist with the goal of facilitating and developing an independent student clinician (Brueggeman, 2006; Kavanagh et al., 2002; Senediak, 2013; Vest & Culton, 1990). In the on-campus clinics, graduate students receive supervision that is direct and more involved. In this initial stage, the supervisor often models effective therapeutic and interpersonal skills (McCrea & Brasseur, 2003; Ostergren, 2011). It is a way for graduate students to gain first hand therapeutic knowledge as well as experience.

Along with an on-campus speech-language-hearing clinic, universities rely on off-site facilities with speech-language pathologists to further supervise graduate students. These settings often include hospitals, public and specialized schools, rehabilitation centers, and private practices. The universities bear the burden of locating speech-language pathologists who have Certification of Clinical Competence, which is a requirement of ASHA, and who are willing to supervise a graduate student for three to four months. If the coordinators at the universities locate a certified speech-language pathologist (SLP) who is willing to supervise, they will also need to gain contractual agreement with the facility for legal and insurance purposes as well as for the graduate student to treat beside the SLP and then independently with the individuals they serve.

The foundational knowledge that is needed to participate in clinical practicums and supervision is found within academic preparation. ASHA requires that approved universities offer coursework in the areas of speech sound production, voice, resonance, fluency, language, communication, cognition, hearing, social communication, and

feeding and swallowing (ASHA, 2009). ASHA Standard IV-C indicates individuals need to have demonstrated pedagogy in delays versus disorders as well as etiologies and characteristics in the following areas: articulation, voice and resonance, expressive and receptive language, fluency, hearing, swallowing functions, social communication, cognitive aspects of communication, and augmentative and alternative communication modalities (ASHA, 2016).

Upon interviewing graduate students, University staff/supervisors, and field supervisors, it was evident that the University went to detailed lengths to ensure that the graduate students were academically prepared through coursework that addressed and met ASHA's requirements. Members from each representative group spoke of the coursework that the University offered and specific practices during the classes that assisted in addressing increased pedagogy and ASHA's standards. The graduate students confirmed numerous times that the coursework they received at the University helped prepare them for the field and addressed ASHA standards. It was noted, however, by a couple of graduate students that there were clients with disorders or impairments of hearing, fluency, voice, and swallowing that they did not have much, if any, experience with at the time of the interview. One graduate student noted that this was due to the fact that he or she did not have the class yet and another participant stated that the lack of experience was because he or she was still in school. It was mentioned that not many opportunities were available because individuals with these disorders or impairments were rare.

In addition to academic preparation, it was apparent that the University utilized clinical practicums and supervision to meet ASHA's standards. The graduate students,

University staff/supervisors, and field supervisors frequently spoke of the provision of clinic experience, clinical practicums, and supervision. One University staff member/supervisor made this clear when he or she spoke of the on-site and field supervisors being vital to the preparatory process. A couple of supervisors noted, however, that they believed it was difficult for field supervisors and facilities to be located because of competitiveness, demand, and shortage of field supervisors.

While the graduate students spoke of difficulty with some supervisors, they often mentioned that the supervisors they had at the University were some of the best as they were very supportive, understanding, and communicative. They also referred to being fortunate to have great experiences with their field supervisors since they knew that some of their peers were not having a positive outcome with their field supervisor. Having a variety of clinical placements was also stressed as important for meeting ASHA's standards and for having a wide range of experiences.

Through the University utilizing supervision and clinical practicums, the graduate students were able to gain experience within the field of speech-language pathology. The graduate students and supervisors in the study noted that confidence within the graduate students developed as a result of having opportunities in the practicums. The graduate students mentioned having an increased level of comfortableness with various populations since participating in clinical practicums. Supervisors expressed that clinical practicums and supervision were means for graduate students to self-evaluate, identify the knowledge they had and areas of improvement, be proactive and provide therapeutic suggestions to co-workers, and continually build self-efficacy.

As a result of these findings, it is vital for universities to have academic coursework that addresses and gives exposure to a variety of disorders as well as client scenarios. This coursework is crucial in laying the foundation for entering the required clinical practicums and allowing the graduate students to feel equipped with knowledge when beginning to treat patients. While university coordinators may have difficulty locating certified speech-language pathologists to supervise, it is imperative they do so to meet ASHA's standards and to ensure that graduate students have clinical placements in a variety of settings with many different clients.

To temporarily address the difficulty of finding individuals to supervise, university coordinators may want to consider speaking with certified speech-language pathologists, who have a large number of clients on their caseload, about the possibility of supervising two graduate students in one semester. While it is required for each graduate student to collect 400 direct client/patient contact hours over multiple practicums, if a speech-language pathologist has a large caseload, the therapy and diagnostic hours could be split between two graduate students. It is recognized in this conclusive statement that careful consideration would need to be made in scheduling clients as they are often seen two-three times a week. For consistency and optimal therapeutic outcomes, having only one graduate student clinician work with a client is preferred. Exceptions may be needed in the cases where a patient is seen three times a week for therapy.

Progressing to an independent student clinician (RQ #2). Experiences in the clinical practicums provide a means for graduate speech-language pathology students to develop from a novice to independent graduate student clinician. Within this study, both

the graduate students and supervisors noted that having confidence was the most important aspect in the progression to independency. Multiple other aspects such as gaining experience, developing critical thinking skills, academic preparation, being competent, learning from others, modifying therapy sessions, treatment planning, and developing soft skills were mentioned. However, on the NGSE scale, the graduate students solidly rated their level of self-efficacy as the average response was consistently found in the *Agree* range. On the graphic elicitation, increased self-confidence in speech-language pathology skills was ranked number two (nine individuals) in outcomes of clinical practicum experiences. Therefore, while other facets may be beneficial to move from a novice to independent graduate student clinician, confidence is critical.

Similar to the graduate students, some supervisors mentioned that having soft skills were necessary to move from a novice to independent graduate student clinician. Universities may want to consider including instruction in multiple classes on the development of soft skills as employers are seeking individuals who are not only able to display academic knowledge but analytical, interpersonal, professional, personal, and technical abilities as well (Casner-Lotto & Barrington, 2006; Hansen & Hansen, 2015; Landrum et al., 2010; National Association of Colleges and Employers, 2015; United States Department of Labor, 2006; Walker et al., 2013; Youth.gov, 2015). Those individuals are able to solve problems, achieve company goals and objectives, adjust to various work issues, and acquire new knowledge (Scott, 2015). By incorporating this instruction, the graduate students may be equipped to address difficult supervisor/supervisee relationships prior to contacting their university liaison as well as be a well-rounded graduate student clinician when entering the workforce.

Equipping through supervision and clinical practicums (RQ #3). Moreover, while the graduate speech-language pathology students move from novice to independent student clinician, they are participating in clinical practicums and supervision. ASHA mandates that these two entities occur in order to meet the Knowledge and Skills Outcomes Standards (ASHA, 2008a, 2008b, 2008c, 2016). As a result, exploration into the ways that second-year graduate speech-language pathology students believed they were equipped to meet the standards through supervision and completing practicums was conducted. For both the supervisors and graduate students, a supervisor who was supportive, communicative, and understanding was vital. Provision of feedback was a form of communication that the graduate students mentioned as means to assist them in their skill growth and pedagogy. When developing a supervisor/supervisee relationship, the supervisors noted that having open communication with the graduate students and discussing expectations were key to building a relationship.

Furthermore, the graduate students and supervisors expressed that having hands-on experience with clients through evaluations and direct treatment were imperative for graduate student skill development and preparation for the speech-language pathology workforce. During interviews, multiple comments were made regarding bridging the gap between academics and application of information, increased comfort with treating individuals, and improved knowledge as a result of clinical opportunities. When the quantitative data on the clinical practicum outcomes section of the GE were segmented in levels of importance, the graduate students indicated that increased therapeutic skills and competency was the number one outcome of clinical practicums (10 responses). As such, providing clinical practicums that have individuals with wide ranges of disorders and

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opportunities for evaluations would be pivotal in preparing graduate students for the speech-language pathology workforce.

In addition, individuals who seek to supervise and those who are supervisors may want to review their supervisory style to ensure that it encompasses being supportive and understanding. Many universities have mid-term and final evaluations that rate the performance of the graduate student as well as the supervisor. Based on past research and the results of this study, universities may want to review the evaluation forms that the graduate students fill out rating the supervisor to include specific questions regarding the communication and support style of the supervisor. If a particular supervisor continued to receive low ratings in these areas, the university may want to consider placing graduate students elsewhere, despite the discussed shortage of field supervisors and available facilities.

Furthermore, supervisors may want to consider multiple ways of communicating whether it be verbal, written by hand, or sent through technology in order to connect with and help develop the skills of graduate speech-language pathology students. Providing constructive criticism with suggestions could engage the graduate student in discourse and further establish the supervisor/supervisee relationship. Since past research and results of this study have indicated the positive influence feedback from a supervisor can have, ASHA may want to consider regulating the amount of feedback that supervisors give during each clinical practicum. ASHA has requirements for the amount of supervision that must occur (ASHA, 2016). Adding a standard that focused on feedback could assist in streamlining the use and requirement of feedback, which aids in developing prepared speech-language pathologists. To help hold supervisors accountable

for the provision of feedback, universities could add a column for feedback on the clinical hour logs that the graduate student and supervisor would have to initial when feedback was given.

Universities could also add a certification statement about feedback on the signature page that supervisors sign at the end of practicums indicating that the information enclosed in the final evaluation was accurate and true. ASHA could participate in accountability by having the individuals who supervise sign on to the ASHA website to register to supervise. In the registration process, there could be certification statements that address the amount of supervision that is required as well as the expectations for feedback. At that time, the supervisor could electronically sign to carry out the requirements and then would be responsible to sign in again at the end of the clinical practicum to certify that he or she completed the provision of feedback and hours of supervision. If reports were given to ASHA that a particular supervisor was not abiding by the standards, his or her certification could be affected.

In addition, to further address the lack of willing supervisors in the field to supervise as was mentioned in this study, universities may want to petition ASHA to reinstate providing continuing education units to supervisors for supervising graduate students. Reinstatement may increase the amount of certified speech-language pathologists who would be willing to supervise as recognition would be given to how many hours it takes to supervise and the additional work it adds to one's job responsibilities. As a result of more field supervisors, there would be an increase in placements for clinical practicums, which renders increased opportunities for experience and therefore, development of therapeutic, interpersonal, and technical skills.

Self-Efficacy impact on preparedness (RQ #4). It has been documented that if an individual has a higher perception of self, there is a stronger commitment to achieving goals (Bandura, 1989, 2012; Bouffard-Bouchard, 1990; Caprara et al., 2008; Lane et al., 2004). Through the opportunities of clinical practicums and supervision, the graduate students noted that their self-efficacy was affected in a positive manner. They relayed that the more experience they were able to gain, the more self-efficacy they had. In addition, a level of independent self-confidence was evident on the NGSE scale as the highest percentages of *Strongly Agree* were with question 1: I will be able to achieve most of the goals that I have set for myself; question 3: In general, I think that I can obtain outcomes that are important to me; question 4: I believe I can succeed at most any endeavor to which I set my mind; and, question 5: I will be able to successfully overcome many challenges.

A method for the graduate students to increase their self-efficacy and improve their performance was through reflection. Many stakeholders expressed during interviews that reflection had a direct effect on the graduate students' continual improved performance. The participants noted that reflection on performance was important and should occur frequently. The graduate students and supervisors discussed that reflection aided in adjusting treatment during sessions as well as developed critical thinking skills. Despite the discussions during the interviews, seven graduate students placed reflection/self-evaluation as one of the least important outcomes of clinical practicums. Whether having gained self-efficacy through reflection, clinical practicums and supervision, and/or having a certain level of independent confidence, the second-year graduate students relayed during interviews and documented on the NGSE scale that they

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believed they could accomplish many goals, overcome difficulties, work with various clients, modify therapy plans as needed, and overall felt prepared to enter the field of speech-language pathology.

Given that clinical practicums and supervision were reported as having an effect on self-efficacy, which has shown to increase performance and therefore a sense of preparedness, university coordinators may want to conduct site visits to screen potential supervisors and select professionals who have a philosophy of developing confidence in novice, semi-experienced, and independent graduate student clinicians. Supervisors may want to decipher the level of confidence the graduate student has and support him or her accordingly. Moreover, reflection has many benefits. Supervisors may consider having a reflection question to offer the graduate student to answer verbally after each session or at the end of the day as a review of the therapy provided. If written documentation is the preferred mode, the supervisor could present the question and ask the graduate student to write down his or her thoughts. This could be done periodically or kept in a daily journal for review.

Leadership awareness. Emphasis in higher education institutions is given to providing information for increased pedagogy and skill development within various occupations (Hart, 2006). Research has indicated that higher education institutions should adopt a broader lens to instructing students that includes global mindfulness and preparing students for the workforce (Altbach, 2008; Kaaya et al., 2012; Llasus et al., 2014). In the education of allied health specialists, Miller and Gallicchio (2007) note that individuals need to be skilled in the use of technology, show proficiency in their content area, hold a global worldview, and present cultural aptitude. ASHA has standards and

regulations that universities must meet and maintain (ASHA, 2008a, 2008b, 2008c, 2009, 2016). ASHA also has requirements that hold individuals to high levels of accountability and performance (ASHA, 2008a, 2008b, 2008c, 2009, 2016).

Many speech-language pathology master's programs have quality academics and provide clinical practicum placements with supervision. Graduate students may experience an increase in therapeutic skills and self-efficacy as a result of their education and programming. They also have exposure to various forms of technology through academics and clinical placements. Along the master's level educational process, the graduate students have been assessed through various means and have had to meet certain standards in order to continue in a university program.

What may be missing in the graduate speech-language pathology programs is direct instruction in having a global worldview. The world we live in is ever changing. The state we reside in and even the town we call home is evolving. There are new challenges that face the realm of education from Preschool to Doctorate levels. Government regulation in the medical and rehabilitation arena as well as healthcare influences the type and frequency of therapeutic services an individual can receive. Prepared graduate speech-language pathology students are a must. If graduate students lack training, critical mistakes in evaluation and therapy could be made. This could result in over or under documentation of individuals who may or may not need speech-language services. In addition, unprepared individuals could make errors in diagnosis, which could impact clients' and/or students' ability to communicate and function within society.

However, if we only consider the individuals we treat, are we fully open to broadening our worldview and encouraging the world around us to be a better place? A

prepared, confident, and determined graduate speech-language pathology student could become a speech-language pathologist who speaks on behalf of those who are not able to be heard. He or she could find innovative ways to facilitate positive change in the office where he or she works. He or she may become involved in writing curriculum or policies that further address the provision of healthcare services, education, and progress in the lives of those with various disabilities. Prepared and confident graduate students could become the leaders of tomorrow.

Moreover, as prepared and confident graduate students choose to be supervisors and/or become leaders, it is recommended that their individual leadership style be explored. It was noted in this study that there was difficulty in some supervisor/supervisee relationships. Within working relationships where one individual is placed as the manager/supervisor, there can be a power differential. Often, it is represented as positional power (Pfeffer, 1992). While the manager/supervisor has a particular level of authority in the working relationship, there may be an underlying amount of power struggle between the supervisor/manager and practicum student.

Although there are many theories, styles, models, and frameworks of leadership, there are several that align with Anderson's (1988) model of supervision and the results of this study, addressing potential underlying power differentials between the supervisor and graduate student. When considering Maslow's (2012) hierarchy, individuals need the levels of esteem and self-actualization met. Within these areas, inner potential is recognized, problem solving and achievement occurs, confidence is built, respect of others can be gained, and creativity and experience are explored. Included in the democratic leadership style (Northouse, 2012) is the viewpoint that individuals who

receive supervision are capable of independently completing work. The leader seeks to work with supervisees/employees, utilizes collaboration as a means for communication, considers the opinions of the employees/supervisees, and guides the individuals rather than directs (Northouse, 2012, p. 56). The description of leadership within the human resource model (Bolman & Deal, 2008) is one of empowerment and considers the abilities and needs of individuals (p. 18). Lastly, the teleological theory (as discussed in Van de Ven & Poole, 1995) notes that there is intentional cooperation within an organization to implement, adapt, and achieve goals based on what is continually being learned (p. 516).

Within a supervisor/supervisee working relationship is the provision of supervision. As discussed, the supervision often begins with direct oversight and then transitions to consultative supervision as the graduate student becomes independent and oversees the supervisor's caseload. To address the potential power differential in working relationships, supervisors and future leaders could explore the present needs of the individuals they oversee. Ensuring the needs of the individuals are met, to the best of one's ability, lays the foundation for an operative working relationship. As the data in this study suggest, having open, honest, and frequent communication contributes to the development of individuals as independent graduate student clinicians and the supervisor/supervisee relationship within the work environment. Also shown within this study, a supervisor who is aware of the graduate student's abilities promotes confidence and skill development. Within the speech-language pathology clinical practicums, goals for the graduate students as well as the clients are set. Through the democratic style of leadership and the lens of the teleological theory, supervisors and future leaders could

assess their level of collaboration and guidance with employees/supervisees in order to decrease any influence of positional power and work in a unified manner to achieve goals, empower the supervisees/employees, and create positive change within the lives of the clients, those in the workforce and community, and the world around them. Fullan (2011) notes that "The essence of the change leader [is] the capacity to generate energy and passion in others through action" (p. 23).

Implications

Since the preparation of graduate speech-language pathology students is completed through academics, clinical practicums, and supervision (ASHA 2009, 2016), it would be beneficial for universities, potential employers, students, and certification boards to know if graduate students believe they are equipped to enter the field of speech-language pathology. My study offers evidence that supervision, clinical practicums, academic preparation, reflection, and confidence affect the development of a novice to independent speech-language pathology graduate student clinician. Preparation of graduate students often begins with academics. While it is a requirement to have specified coursework to be an accredited speech-language pathology program (ASHA, 2016; Council on Academic Accreditation, 2017), the graduate students in this study indicated that the courses they took at their university aided in preparing them for the field. However, supervisors and graduate students in this study as well as literature reviewed, note students need to possess soft skills. Even though ASHA (2009, 2016) has some of these skills listed as needed outcomes, department leaders in universities that offer speech-language pathology programs may want to consider the results of the study and the literature reviewed to ensure that coursework includes direct instruction in work

readiness. Since the gathered information in the literature review and some of the participants in this study mentioned the importance of graduate students having soft skills, it could be advantageous for ASHA to review coursework mandates and consider including a master's level class that addresses work readiness skills as well as having a global worldview. During clinical practicums, graduate students provide therapeutic services to a variety of clients. Instruction in academic coursework could include discussion of worldviews and how to take the clinical practicum experiences and connect them beyond university programming.

Another form of instruction is through supervision during clinical practicums. Inquiry into what aspects of supervision and clinical practicums aided in the development of an independent graduate student clinician as well as what characteristics and skills are important for a supervisor to display was pursued. Concurrent with literature, results of this study indicated that it was key for a supervisor to be supportive, understanding, and communicative. Therefore, supervisors may want to review their style of supervision and consider modifying their viewpoint if variant from the study's findings and the literature reviewed. In addition, supervisors may want to explore their supervisory style to reflect if it aligns with Anderson's (1998) model of supervision as multiple graduate students noted a negative result of being immediately given a supervisor's caseload. That style is contrary to the widely used supervision model by Anderson (1998). When possible, clinical directors at universities may want to screen potential field supervisors to ensure that the field supervisor's supervision style aligns with Anderson's model, the field supervisors have an understanding of the clinical development of students, they seek to

have an open form of communication with individuals, and they are willing to consistently provide feedback to the graduate students.

Supervisors may also want to consider the amount of feedback they give as the results in this study align with literature in that feedback which was constructive and helpful affected progress in performance in a positive manner and instilled confidence in the graduate students. As discussed above, ASHA and universities may want to consider ways to certify that supervisors are providing a consistent level of feedback. To encourage certified speech-language pathologists to supervise and address the possible shortage of field supervisors, ASHA may want to consider reinstating the provision of continuing education units for supervising students.

Furthermore, the data within my study suggest that experience through clinical practicums increased graduate students' therapeutic skills and competency as well as increased self-confidence in speech-language pathology skills. As such, clinical placement coordinators should make every effort to assign graduate students to settings that align with the graduate student's present level of academic preparation, knowledge, and clinical readiness. Several graduate students discussed having anxiety and a sense of being overwhelmed because they were in clinical practicums that they did not have the academic or clinical preparation for prior to entering the externship. While it is recognized that all graduate students have to gain experience with various clients and disorders at some point, the study appears to support the claim that matching graduate students with practicums for which they have preparation would decrease some of the anxiety and potentially further the level of self-confidence in one's skills. Graduate students could use the aforementioned information to advocate for themselves during

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clinical placement periods as well as understand that having a level of self-confidence will assist them in moving from a novice to independent graduate student clinician.

A means to improve therapeutic performance that was apparent in this study was reflective practice. While there was some discrepancy between the qualitative and quantitative data on the level of importance for reflection, the graduate students and supervisors alike stated that it was necessary for improved outcomes. They noted that reflective practice allowed graduate students to analyze what was successful in therapy sessions and what needed improvement. Through reflection, graduate students were able to identify their clinical strengths and weaknesses. As literature supports reflective practice and employers seek individuals who are able to effectively adjust to various situations, supervisors, graduate students, and university staff should ensure reflection is woven throughout the academic process and therapeutic routines.

The conceptual framework of this study represented the factors that could influence second-year graduate speech-language pathology students' preparation. Results of this study have indicated that supervision, clinical practicums, ASHA standards, reflection, and self-efficacy affected the preparation and development of an independent graduate student clinician. If the results in this study are confirmed through future research, then there could be a basis for university staff seeking supportive and communicative supervisors, placing graduate students in practicums that closely align with his or her academic preparation and clinical skill set, universities revising offered coursework, universities and supervisors adjusting therapeutic practices to regularly include reflection, understanding the value in the perceptions of graduate students as they

prepare to enter the workforce as well as ASHA reviewing its academic requirements, supervisor continuing education policies, and accountability regulations.

Recommendations and Suggestions for Future Research

In order to graduate from a speech-language pathology master's program, a graduate student needs to complete academic coursework and obtain 400 clock hours through observation, clinical practicums, and supervision (ASHA 2009, 2016). ASHA requires that there be specific topic areas taught through master's level classes (ASHA, 2016; Council on Academic Accreditation, 2017). As a result, coursework is often specialized to learning about disorders, diagnoses, and classifications as well as how to assess and provide treatment with individuals with various delays, disorders, and/or disabilities. Research has shown that employers are seeking individuals who demonstrate work readiness skills. In this study, it was mentioned that graduate students need to acquire soft skills along with their academic preparation and clinical practicum experiences. While some soft skills such as communication, empathy, relatability, time management, and collaboration were addressed through the lenses of supervision and clinical practicums, they were not researched with second-year graduate speech-language pathology students or in particular, the curriculum/content of the classes being taught at the University. Since past research has indicated that employers seek individuals who display work readiness skills, these skills are needed when working with critical and sensitive cases, and some of these skills would address broadening one's global worldview, it would be advantageous for future research to be conducted focusing on the content of speech-language pathology instruction pertaining to soft skills.

Teamwork and time management are work readiness skills which employers seek and studies have shown to be key outcomes of clinical practicum experiences. However, the graduate students in this study placed collaboration in the moderate and least important levels on the graphic elicitation. Time management as an outcome of clinical experience was placed in the least important range on the graphic elicitation. As part of a performance assessment tool, universities often have questions for supervisors to rate pertaining to the graduate student's interaction with professionals and management of paperwork, therapy planning, and treatment sessions. It would be rare for a graduate student to participate in clinical practicums and not collaborate with other staff members. The same would be noted with time management requirements. Since speech-language pathology graduate students have exposure to these skills during clinical practicums and potential employers are seeking individuals who possess these abilities, future study that has research questions as well as interview questions and/or a survey to decipher what amount and aspects of collaboration and time management are most beneficial in the development of an independent graduate speech-language pathology student clinician would be valuable. Results of such study could aid university staff and supervisors in ensuring that graduate students have instruction in and experiences with the aspects that were deemed beneficial.

Furthermore, in this study, confidence was found to be the most important factor to move from a novice to independent speech-language pathology student clinician. On the NGSE scale, the highest level of neutrality was noted on question 7: Compared to other people, I can do most tasks very well. When the graduate students spoke of lacking confidence or being nervous and the supervisors discussed the graduate students being

anxious, it was not in reference to comparison with peers. As stated earlier in this chapter, Sarason (1980) noted that a person may become anxious if a task or situation is too challenging, if there is a fear of failure, the individual feels he or she cannot deal with an event, and/or there is a potential of respect from others being altered. The sense of anxiety or being overwhelmed presented in this study by the graduate students and supervisors appeared to be associated with being placed in an initial/new setting or involvement with a disorder that had not been discussed in the classroom or experienced yet in a clinical practicum.

Some universities with master's level speech-language pathology programs use simulated therapy situations as part of their instruction of graduate students to give them exposure to treating individuals before entering their first clinical practicum. ASHA (2016) accepts up to 75 contact hours through clinical simulation. The clinical simulation "may include the use of standardized patients and simulation technologies (e.g., standardized patients, virtual patients, digitized mannequins, immersive reality, task trainers, computer-based interactive). Debriefing activities may not be included" (ASHA, 2016, para. 7). Since the graduate students in this study expressed anxiety about entering new settings and working with disorders that they did not have much exposure to, increased use of clinical simulation could be utilized as preparatory measures before students begin their first clinical practicum or start at a new setting. As such, it is recommended that research be conducted to gain information about utilizing clinical simulation to decrease therapeutic anxiety and further prepare speech-language pathology students for clinical practicum experiences.

Lastly, locating speech-language pathologists who are willing to supervise for externships was mentioned in this study as a difficult task. Universities often have to keep the master's level speech-language pathology enrollment numbers to a smaller amount as there needs to be an assurance of student focused instruction but also enough staff members to adequately supervise the graduate students. Research into speech-language pathology field supervisors, who have numerous clients on their caseload, supervising two graduate students during one semester is recommended. The research could contribute to providing a solution to the lack of available field supervisors and indicate a way for graduate students to still obtain the required clock hours while facing a shortage in accessible facilities for clinical practicums. In addition, ASHA may want to consider increasing the amount of accepted clinical simulation hours. While simulation is not direct contact with clients, it provides a means for graduate students to apply their knowledge, practice their therapeutic skills, and collect clinical hours while already in classes or on-campus. If the simulation hours were increased, the amount of time a clinical practicum needed to occur could be shortened which would allow supervisors to see more than one graduate student a semester. While this is recognized as not the most optimal situation, it could aid in addressing a shortage in supervisors while focusing on assisting graduate students with therapeutic opportunities and obtaining clinical hours.

Limitations in Research

Within every study, there are limitations. Limitations are issues or questions that a study cannot answer or information it cannot provide because the inquiry is outside the scope of the study. One of the limitations of this study was that first year graduate SLP students were not selected. At the time field research began for this study (fall 2016), first

year graduate students were entering the master's level speech-language pathology program, and therefore, did not have the coursework or clinical practicum experience which was needed to fulfill the exploration of the study's research questions and gain perceptual information based on experience. Therefore, the impressions of novice graduate students were not included.

It was recognized that graduate SLP students could not pick who would be their supervisors. They were assigned a supervisor within their university program and the field supervisor was a speech-language pathologist at the site that the university pursued for a practicum placement. Therefore, the graduate students' perceptions could have been negatively influenced if they had one or more deficient supervisors, which they had no voice in selecting. In addition, there may have been theoretical differences between the supervisor and supervisee (Gediman, 2001) that could have impacted graduate student perceptions.

In relation to the quantitative data collection, it is acknowledged that the sample size was small. Discussion with committee members, transparency in reporting the quantitative data, and mindfulness of the sample size during analysis and discussion were implemented in order to not over-estimate the extent of the findings. The study did not seek to generalize the results and it is recognized that the findings cannot be generalized as a result of this single study.

Lastly, the study was a mixed methods design. Within this approach, there is a limitation, which encompasses the acknowledgement that this study will not end the methodological debate between qualitative and quantitative theorists and researchers. It is recognized that some readers will hold the philosophy that research should be solely

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within either qualitative or quantitative designs, but not both within the same study. However, one of the goals of the study was to conduct a mixed methods study that was credible, valid, and trustworthy. In doing so, the study would be able to positively contribute to the mixed methods style of research.

Summary

The field of speech-language pathology is a vibrant, in-demand, and growing profession (United States Bureau of Labor Statistics, 2014b; U. S. News and World Report, 2017). It requires a master's level of education and the collection of 400 clock hours (ASHA, 2016). Diagnostic and therapeutic clinical hours must be gained with both children and adults across the areas of language, articulation, voice, fluency, dysphagia, and hearing (ASHA, 2009, 2016). These hours are obtained through clinical practicums and supervision. As a graduate student participates in practicums and supervision, he or she has the opportunity to develop from a novice to independent graduate student clinician.

The entities of supervision, practicums, and self-efficacy have been studied individually and paired, but there was minimal research on the combination of the three regarding second-year graduate speech-language pathology students. Therefore, the purpose of this mixed methods study was to explore the perceptions of second-year graduate speech-language pathology students on their preparedness for the speech-language pathology workforce through supervision and practicums as well as examine the impact that clinical supervision and practicum experiences had on preparation for the workforce. In addition, exploration into the perceptions of supervisors on equipping graduate students for the speech-language pathology field was completed. For qualitative

data collection, interviews with speech-language pathology supervisors and second-year graduate students were conducted. A graphic elicitation and the NGSE (Chen et al., 2001) scale were given to the graduate students for quantitative data gathering.

In this study, to move from a novice to independent graduate student clinician, the participants noted that confidence was the most important factor. Confidence was frequently spoken of during the graduate student and supervisor interviews and was noted on the NGSE scale by the graduate students. Having a supervisor who was supportive and communicative, and provided constructive feedback with suggestions not only influenced the graduate students' self-efficacy in a positive manner, but also aided in improving their therapeutic performance. Working with numerous individuals with various delays or disorders during clinical practicums gave the graduate students experience in the speech-language pathology field and further increased their self-efficacy. Clinical practicums were also an avenue for the application of knowledge to hands-on experiences. A method to support the development into an independent graduate student clinician through awareness and refinement of therapeutic skills was reflection/self-evaluation. While reflection/self-evaluation varied in level of importance with the graduate students, all mentioned participating in the practice. Supervisors in the study relayed that reflection was an important part of therapeutic skill growth and improved intervention. The graduate students noted that there will be areas of continued learning and development for them as the field of speech-language pathology is frequently changing and new research findings that influence diagnoses and treatment are evolving. As such, one's global worldview is influenced in some manner which requires continual reflection and an open mind to adjusting the lens in which one views the realm

of intervention as well as impacting those around him or her in a positive way. For current and future supervisors and leaders, consideration of one's leadership style is vital in establishing effective movement towards supporting and empowering supervisees/employees and creating positive change within the lives of the clients, those in the workforce and community, and the world around them.

Similar to learning being on a continuum, further research is suggested. It would be advantageous for studies to be conducted focusing on the content of speech-language pathology instruction pertaining to soft skills as these skills are sought by employers and are needed when treating individuals. Also, studies that may decipher what amount and aspects of collaboration and time management are most beneficial in the development of an independent graduate speech-language pathology student clinician would be valuable. Study findings could aid supervisors and university staff in ensuring that graduate students have instruction in and experiences with the aspects that were found beneficial.

Furthermore, it is suggested that research be conducted to gain information about utilizing clinical simulation to decrease therapeutic anxiety and further prepare speech-language pathology students for clinical practicum experiences. Exploration into speech-language pathology field supervisors supervising two graduate students during a semester is recommended. The research could contribute to providing a solution to the lack of available field supervisors and indicate a way for graduate students to obtain the required clinical hours while facing a shortage in accessible facilities for clinical practicums.

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Appendix A

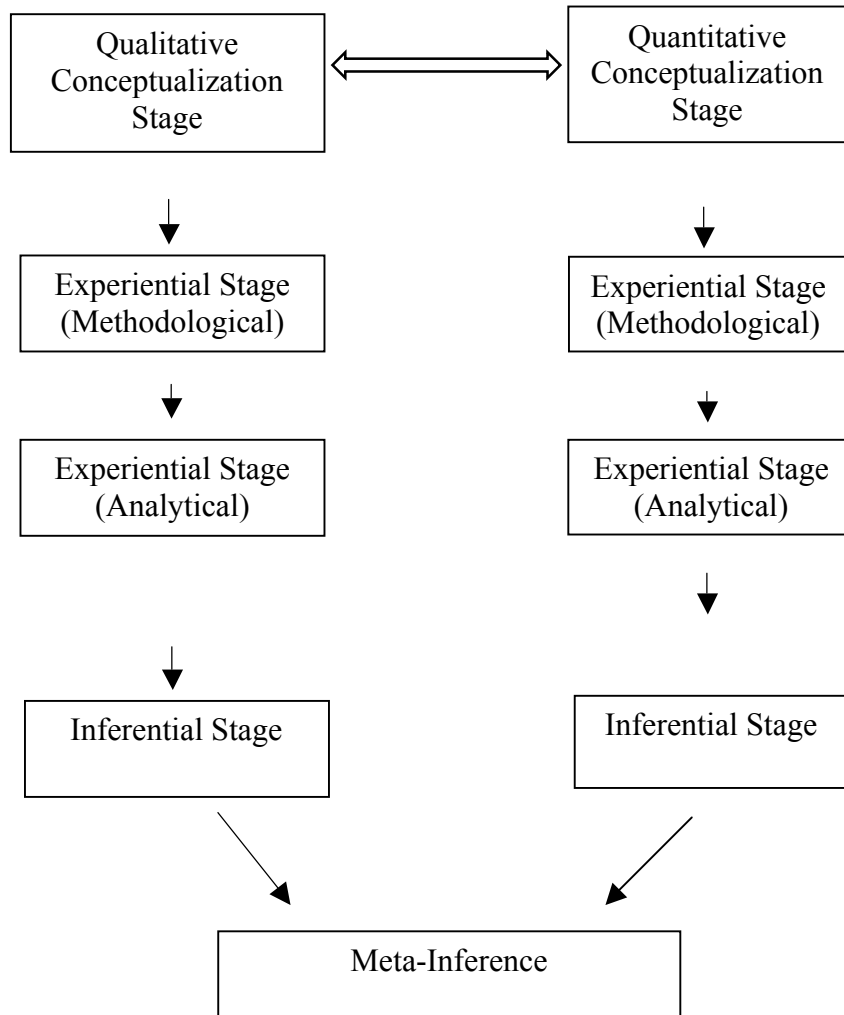**Necessary Knowledge and Skills of Supervisors**

Knowledge and skills that supervisors of graduate speech-language pathology students should acquire (ASHA, 2008):

- Assess the student's skills, knowledge, and prior experience in relation to the individuals served;

- Conduct objective data collection and analysis as well as provide timely, descriptive, and applicable feedback;

- Use a supervisory style based on the pedagogy and skills of the supervisee;

- Utilize effective relational skills and promote the supervisee's use of them;

- Preserve a supportive relationship that allows growth for both individuals;

- Seek suitable conflict resolution techniques;

- Assist graduate students in developing evidence based evaluative, interpretive, analytical, and problem solving skills;

- Understand and be aware of culture and language variances;

- Facilitate and promote an environment of continual improvement and long-term learning;

- Aid the graduate students with accurately completing clinical, federal, state, and/or funding documentation; and

- Model and act with ethical practices.

Appendix B

Graphic Illustration of Parallel Mixed Methods Research Study

Qualitative Conceptualization Stage	⟺	Quantitative Conceptualization Stage
↓		↓
Experiential Stage (Methodological)		Experiential Stage (Methodological)
↓		↓
Experiential Stage (Analytical)		Experiential Stage (Analytical)
		↓
↓		
Inferential Stage		Inferential Stage

Meta-Inference

(Teddlie & Tashakkori, 2009, p. 152)

Appendix C

Student Interview Informed Consent Form

An inquiry into the development of future speech-language pathologists: A mixed methods study

Informed Consent for Interviews or Interviews with Record Reviews
(Expedited Review with identifiers)

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

You are invited to participate in a research study about exploring the perceptions of second-year speech-language pathology students on their preparedness to meet ASHA's standards through clinical supervision and practicums as well as examine the impact that clinical supervision and practicum experiences have had on their development from a novice to independent graduate student clinician. In addition, examination into the impact of self-efficacy on second-year graduate students' preparation to enter the field of speech-language pathology will be conducted. This study is being conducted by researchers in the Department of Educational Leadership and Services at Rowan University. The Principal Investigator of the study is Dr. James Coaxum.

Participation in this study is voluntary. If you agree to participate in this study, you will be asked to participate in an interview. The number of participants in the student interview process is eight to ten individuals.

Interview appointments are expected to be an hour to an hour and a half in length. Therefore, your participation in the interview process is estimated to be one to one and a half hours. Interview questions will be presented to you for open discussion. At the interview appointment, you will also be asked to complete a brief graphic elicitation and self-efficacy scale (survey).

There is little risk in participating in this study. There will be no cost to you to take part in the study. If you agree to participate in the study, a $10 WaWa gift card will be given to you at your interview.

Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. No one other than the researchers would know whether you participated in the study. Study findings will be

presented only in summary form and your name will not be used in any report or publications.

Participating in this study may not benefit you directly, but it will contribute to data that can be used to enhance programming, standards, as well as supervision and clinical practicum practices. Your input will be valuable in answering research questions pertaining to the development of master's level students from novice to independent graduate student clinicians as well as preparedness to enter the field of speech-language pathology. *Your participation in this study is completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving.* You may skip any questions you don't want to answer and withdraw from the study at any time without consequences.

If you have any questions about this study, please contact Dr. James Coaxum, (856) 256-4500, x4779. If you have questions about your rights as a research participant, please contact the Rowan University Glassboro/CMSRU IRB at 856-256-4078.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Investigator: _____ Date: _____

Appendix D

Audiotape Recording Consent Form

An inquiry into the development of future speech-language pathologists: A mixed methods study

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

Principal Investigator: Dr. James Coaxum, College of Education

You have already agreed to participate in a research study conducted by Kimberly Plotts M.S., CCC-SLP. I am asking for your permission to allow me to audiotape you via a voice recorder as part of the research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recordings will be used for discussion with Dr. James Coaxum (Principal Investigator and dissertation Chairperson) and dissertation committee members (Dr. Monica Kerrigan and Dr. Herb Simmerman), for the purpose of data analysis and display in the dissertation, for publication, and/or education.

The recordings will include your responses and will be transcribed verbatim at a later time. The interviews will be represented by a number in chronological order of when the interviews take place. The recordings will be stored in a Sony voice recorder and upon transcription, in a Microsoft Word document saved on a flash drive. These items will be secured in a locked file cabinet and linked to your responses with an alphabetical letter and/or number. A transcriber may be sought to assist in typing the data gained from the interviews, but the aforementioned codes will be used for confidentiality. The flash drive will be obtained from the transcriber after each dictation session and secured in a locked file cabinet. The coded information will be destroyed upon completion of the dissertation. All other data will be destroyed six years after publication of the dissertation. This will provide the investigator an opportunity to publish the results in a journal or other periodical format.

Your signature on this form grants Kimberly Plotts M.S., CCC-SLP permission to record you as described above during participation in the above-referenced study. The co-investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Investigator: _____ Date: _____

Appendix E

E-mail to University Faculty Members and Field Supervisors

Dear Supervisor,

My name is Kimberly Plotts and I am a doctoral candidate student at Rowan University in Glassboro, New Jersey. I have been a speech-language pathologist for 21 years. I am conducting a mixed methods study in the field of speech-language pathology. The purpose of the study is to explore the perceptions of second-year speech-language pathology students on their preparedness to meet ASHA's standards through clinical supervision and practicums as well as examine the impact that clinical supervision and practicum experiences have had on their development from a novice to independent graduate student clinician. In addition, examination into the impact of self-efficacy on second-year graduate students' preparation to enter the field of speech-language pathology will be conducted. This research will be completed under the supervision of Dr. James Coaxum as part of my doctoral dissertation.

I am contacting you to inquire if you would like to participate in the mixed methods study. I would like to know if you would be interested in being interviewed by me for the study. The dissertation data collection process with staff is anticipated to begin in July/August of 2016 and be open for appointments through May 2017 on the University's campus or a mutually agreed upon setting if better feasible for the participant. Interviews may take place during the week or on weekends, if needed. Interview appointments are expected to be an hour to an hour and a half in length each. Therefore, your participation is estimated to be one to one and a half hours. Your participation in the study would provide data and information that will be used to contribute to the fields of educational leadership and speech-language pathology.

All efforts will be made to keep your personal information in your research record confidential, but complete anonymity cannot be guaranteed. Your participation in the study, and eventual consent form signature, denotes that you agree that any information obtained from the study may be used in any way thought best for discussion with Dr. James Coaxum (Principal Investigator and dissertation Chairperson) and dissertation committee members (Dr. Monica Kerrigan and Dr. Herb Simmerman), for the purpose of data analysis and display in the dissertation, for publication, and/or education provided that your name is not used as well as any other personal information.

There are no physical or psychological risks involved by your participation in the study. You are free to withdraw your participation in the study at any time without penalty.

Please see the form that is attached to this e-mail as it provides further details regarding the study process and is a consent form that you will eventually be asked to sign if you agree to participate in the research.

If you are interested in participating in the study, please notify me via e-mail. My e-mail address is plotts84@students.rowan.edu. Thank you for your time and consideration.

Sincerely,

Kimberly Plotts M.S., CCC-SLP
Doctoral Candidate at Rowan University
plotts84@students.rowan.edu

Appendix F

Staff Interview Informed Consent Form

An inquiry into the development of future speech-language pathologists: A mixed methods study

**Informed Consent for Interviews or Interviews with Record Reviews
(Expedited Review with identifiers)**

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

You are invited to participate in a research study about exploring the perceptions of second-year speech-language pathology students on their preparedness to meet ASHA's standards through clinical supervision and practicums as well as examine the impact that clinical supervision and practicum experiences have had on their development from a novice to independent graduate student clinician. In addition, examination into the impact of self-efficacy on second-year graduate students' preparation to enter the field of speech-language pathology will be conducted. This study is being conducted by researchers in the Department of Educational Leadership and Services at Rowan University. The Principal Investigator of the study is Dr. James Coaxum.

Participation in this study is voluntary. If you agree to participate in this study, you will be asked to participate in an interview. The number of participants in the staff interview process is three to five individuals.

Interview appointments are expected to be an hour to an hour and a half in length. Therefore, your participation in the interview process is estimated to be one to one and a half hours. Interview questions will be presented to you for open discussion.

There is little risk in participating in this study. There will be no cost to you to take part in the study.

Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. No one other than the researchers would know whether you participated in the study. Study findings will be presented only in summary form and your name will not be used in any report or publications.

Participating in this study may not benefit you directly, but it will contribute to data that can be used to enhance programming, standards, as well as supervision and clinical practicum practices. *Your participation in this study is completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving.* You may skip any questions you don't want to answer and withdraw from the study at any time without consequences.

If you have any questions about this study, please Dr. James Coaxum, (856) 256-4500, x4779. If you have questions about your rights as a research participant, please contact the Rowan University Glassboro/CMSRU IRB at 856-256-4078.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Investigator: _____ Date: _____

Appendix G

Student Interview Questions

1. What is your first and last name?

2. How old are you?

3. Are you in your first or second year of graduate school at the University?

4. How many clinical practicums have you completed at this time?

5. What skills do you believe you, as a graduate speech-language pathology student, need to move from a novice to independent graduate student clinician? (RQ2)

6. What opportunities did you have as preparation to meet ASHA's standards for evaluation and intervention in the areas of communication, language, fluency, voice, feeding/swallowing, and/or hearing? (RQ3)

7. What characteristics and skills do you believe are important for a supervisor to exhibit? (RQ2)

8. Out of the field supervisor/supervisee relationships that you experienced during your clinical practicums, please pick one and describe the supervisor/supervisee relationship you had. (RQ2)

9. In what ways do you believe supervision may have prepared you for the speech-language pathology field? (RQ3)

10. What aspects of clinical practicums do you believe are important for preparation for the speech-language pathology workforce? (RQ2)

11. In what ways do you believe clinical practicum experiences may have prepared you to enter the field? (RQ3)

12. How has supervision impacted your level of confidence as an upcoming graduating speech-language pathology individual? (RQ4)

13. In what ways have practicum experiences impacted your level of confidence as an upcoming graduating speech-language pathology individual? (RQ4)

14. How has your level of self-confidence impacted your preparedness to enter the speech-language pathology workforce? (RQ4)

15. In what ways do you believe reflecting on your therapeutic sessions and performance assists in your development as a speech-language pathologist? (RQ2)

Appendix H

Staff Interview Questions

1. What is your first and last name?

2. How many years have you been teaching at the University (for University faculty)? or How many years have you been a field supervisor with the University (for field supervisors)?

3. How many years have you been supervising graduate students?

4. Are you currently supervising graduate students? If not, how long has it been since you supervised graduate students?

5. What skills do you believe graduate speech-language pathology students need to move from a novice to independent graduate student clinician? (RQ2)

6. What opportunities does the University's program offer to meet ASHA's standards for evaluation and intervention in the areas of communication, language, fluency, voice, feeding/swallowing, and/or hearing? (RQ1)

7. What characteristics and skills do you believe are important for a field supervisor to exhibit? (RQ2)

8. What aspects of clinical practicums do you believe are important for student preparation for the speech-language pathology workforce? (RQ2)

9. What factors are important in a field supervisor/supervisee's working relationship? (RQ2)

10. As a supervisor, what steps do you take to build a supervisor/supervisee relationship? (RQ2)

11. In what ways do you oversee the clinical practicums that the graduate students participate in? (RQ1)

12. In what ways do you think university speech-language pathology programs utilize supervision and practicums to prepare graduate students to meet ASHA's Knowledge and Skills Standards? (RQ1 and RQ3)

13. In what ways do you believe supervision and clinical practicums impact a student's level of self-efficacy? (RQ4)

14. What factors do you believe enhance a students' confidence in their knowledge and therapeutic skills? (RQ4)

15. In what ways do you think reflection in- and on- therapeutic practice assists the students' skill development and performance? (RQ2)

Appendix I

New General Self-Efficacy Scale

<u>Directions</u>: Please use the scale below to rate your agreement (or disagreement) with each of the following statements about yourself.

1. I will be able to achieve most of the goals that I have set for myself.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

2. When facing difficult tasks, I am certain that I will accomplish them.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

3. In general, I think that I can obtain outcomes that are important to me.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

4. I believe I can succeed at most any endeavor to which I set my mind.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

5. I will be able to successfully overcome many challenges.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

6. I am confident that I can perform effectively on many different tasks.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

7. Compared to other people, I can do most tasks very well.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

8. Even when things are tough, I can perform quite well.

1	2	3	4	5
Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*

Appendix J

Graphic Elicitation

Please place in order of importance to you the <u>supervisor skills</u> below, with 1 being the most important and 9 being the least important.

____ Relational

____ Supportive

____ Empathetic

____ Intuitive

____ Realistic

____ Instructional

____ Communicative

____ Reflective

____ Collaborative

Please place in order of importance to you the aspects below that <u>clinical practicums</u> can provide, with 1 being the most important and 8 being the least important.

____ Problem solving opportunities

____ Reflection/Self-evaluation

____ Application of academic knowledge

____ Time management occasions

____ Collaboration with other professionals

____ Learning from practicum/site supervisor

____ Increased therapeutic skills and competency

____ Increased self-confidence in speech-language pathology skills