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## EXPERIENCES OF SPEECH-LANGUAGE PATHOLOGY GRADUATE STUDENTS: AN EXPLORATORY PHENOMENOLOGICAL STUDY

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Dr. John B. Nash, Director of Graduate Studies

EXPERIENCES OF SPEECH-LANGUAGE PATHOLOGY GRADUATE STUDENTS:  
AN EXPLORATORY PHENOMENOLOGICAL STUDY

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DISSERTATION

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A dissertation submitted in partial fulfillment of the  
requirements for the degree of Doctor of Education in the  
College of Education  
at the University of Kentucky

By

Anysia J. Ensslen, M.S., CCC-SLP

Lexington, Kentucky

Director: Dr. Lars Björk, Professor

Lexington, Kentucky

2013

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## ABSTRACT OF DISSERTATION

### EXPERIENCES OF SPEECH-LANGUAGE PATHOLOGY GRADUATE STUDENTS: AN EXPLORATORY PHENOMENOLOGICAL STUDY

Within the past decade little research has been conducted in the United States to examine the preparedness of beginning speech-language pathologists; the seminal article used for this research study comes from the United Kingdom (Horton, Byng, Bunning, & Pring, 2004). Literature from the past few decades indicates that there may be deficiencies in the way that beginning speech-language pathologists are being trained clinically.

The review of the literature suggests that the field may lack a clear and broadly supported learning theory or framework for the clinical supervision and training of speech-language pathology graduate students. The literature further supports the importance of work-embedded learning and problem-based learning, as well as suggests a theoretical framework that may be utilized for supervision and clinical training in the future.

The purpose of this exploratory phenomenological study is to understand and describe how speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements. The literature suggests that a framework for the transfer of theoretical knowledge into the clinical setting is often not present in graduate academic programs (Horton & Byng, 2000b). Models of highly effective practices that are grounded in adult learning theory and empirical research regarding clinical training and supervision should be taken into account. In this way, department-level leaders may be able to design more effective models for clinical training and supervision.

The data from participant interviews conducted for this study were organized into two over-arching themes: supervision and clinical experiences. The data in each theme were further organized into more specific categories. The theme of supervision includes five categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors. In addition, the theme of clinical experiences includes four categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework.

KEYWORDS: Speech-Language Pathology, Rehabilitation Sciences, Clinical Supervision, Work-Embedded Learning, Social Cognitive Learning Theory

Anysia J. Ensslen, M.S., CCC-SLP

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April 30, 2013

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EXPERIENCES OF SPEECH-LANGUAGE PATHOLOGY GRADUATE STUDENTS:  
AN EXPLORATORY PHENOMENOLOGICAL STUDY

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*For Speech-Language Pathology graduate students everywhere.  
Press on!*

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## CHAPTER ONE: INTRODUCTION

This chapter begins with a brief introduction of the study, as well as the purpose of the study. Next, the significance of the study is presented through a brief introduction of the relevant literature, which supports the notion that there may be deficiencies in the current methods used in the clinical training of beginning speech-language pathologists. Finally, the research questions and an overview of the research design are discussed.

The purpose of this exploratory phenomenological study is to understand and describe how speech-language pathology graduate students perceive their clinical training and supervision obtained during their graduate program prepared them for their first externship placements. A crucial accompaniment to coursework for a speech-language pathology (SLP) graduate student is a solid clinical education. The demands of a speech-language pathologist are becoming more and more involved, especially in the medical setting. Few studies have examined how speech-language pathology graduate students perceive their preparedness to enter a hospital, rehabilitation, or public school setting. Furthermore, the literature suggests that a framework for the transfer of theoretical knowledge into the clinical setting is often not present in graduate academic or clinical programs (Horton & Byng, 2000b).

Within the past decade little research has been conducted in the United States to examine the preparedness of new speech-language pathologists; the seminal article used for this research study comes from the United Kingdom (Horton et al., 2004). Literature from the past few decades indicates that there may be deficiencies in the way that beginning speech-language pathologists are being trained clinically (Byng & Black, 1995; Emm & Cecconi, 2011; Horton & Byng, 2000a, 2000b; Horton et al., 2004). New speech therapists, as well as seasoned speech therapists may have difficulties when

dealing with specific populations due to the nature of their clinical training. Parents and administrators have voiced frustrations with the less-than-adequate services that speech pathologists are able to provide to specific populations in the school setting (Kelly et al., 1997).

### **Significance of the Study**

When developing a framework for professional preparation that consists of principles of adult learning and the acquisition of professional knowledge, the importance of shifting instruction out of the classroom and into a work-embedded context becomes clear (Björk, 2001). Over the last few decades, teachers, university professors, and other educators have been exploring different approaches to teaching. These approaches may be included under the general headings of active and experiential learning. One of the more influential teaching strategies to emerge in the last few decades is problem-based learning. This teaching strategy is widely used in medical schools as well as in other professional schools. Problem-based learning allows students to learn in an environment that simulates actual working conditions as accurately as possible (Fink, 2003). As professionals, students will encounter real-life, open-ended problems and situations. Recent evidence in the literature has demonstrated that students can more effectively learn how to analyze and solve problems through problem-based learning, compared to the traditional curriculum of “book knowledge” for two or more years and only then moving forward to learn how to apply their knowledge (Duch, Groh, & Allen, 2001; Fink, 2003; Wilkerson & Gijsselaers, 1996).

Scholars have long attempted to develop a systematic framework for describing the processes that take place during therapy, specifically during therapy for those with

language impairments. One of the more recent studies aimed to further examine the idea of “clinical intuition” and more precisely define the therapy process (Simmons-Mackie & Damico, 1997). They concluded that unless more is known about how language therapy is implemented, and the specific interactions that occur during a therapy session it is difficult to answer questions and make conclusions about how effectively therapy is being carried out.

Stech (1973) and colleagues claim that a part of clinical training should be the teaching of methods to bring the process of professional skills into consciousness. In other words, student clinicians should be taught and encouraged to be aware of the skills required for the “on-line” processes that are involved in the face-to-face therapeutic setting (Stech, Curtiss, Troesch, & Binnie, 1973). The concept of “knowing in action” (Argyris, 1999) was once predominant through a framework that described the dynamic processes of therapy (Bond & Spurrirt, 1999). It is this very idea that may aid in more effectively teaching our student clinicians how to “do” therapy, and in the teaching of other practical skills required for face-to-face interactions with clients. The concept of “knowing in action” is very similar to tacit knowledge. Tacit knowledge also places emphasis on learning from direct experience, adapting to new environments, applying knowledge at complex levels, and solving problems that may arise in practice (Nestor-Baker & Hoy, 2001).

Furthermore, an important component of rehabilitation science is the translation of theory and scientific findings from the literature into clinical training and practice. The specialized field of translational science is one which focuses on the transmission of developed ideas and theories, products, or techniques from a research environment



(“bench”) to practical application in the realm of clinical training and practice (“bedside”). The world of rehabilitation science presents challenges that demand additional methods of transfer from “bench to bedside”. These challenges stem from the fact that much of the research conducted in rehabilitation science results in the use of therapeutic interventions, exercise techniques, and educational strategies which are utilized by professionals and therapists; the research conducted does not usually result in the use of drugs or equipment (Brandt & Pope, 1997).

A review of the literature suggests that the field may lack a clear and broadly supported learning theory or framework for the clinical supervision and training of speech-language pathology graduate students. The literature further supports the importance of work-embedded learning and problem-based learning, as well as suggests a theoretical framework that may be utilized for supervision and training in the future. Increasing the efficacy of clinical supervision and training requires standards and procedures, such as those set forth by the American Speech-Language-Hearing Association (ASHA). However, models of highly effective practices that are grounded in adult learning theory and empirical research regarding clinical training and supervision should also be taken into account. In this way, department-level leaders may be able to design more effective models for clinical training and supervision.

### **Research Questions and Design**

This study was guided by the following research questions:

- 1) How do speech-language pathology graduate students perceive their clinical training and supervision obtained during their graduate program prepared them for their first externship placements?

- 2) What aspect(s) of clinical training best prepare speech-language pathology graduate students for their first externship placements?
- 3) What are the main elements of the clinical supervision that speech-language pathology graduate students receive during clinical training at their university?
- 4) Which particular areas of evaluation and treatment do speech-language pathology graduate students think warranted more focus during clinical training at their university?

This study used a phenomenological design to explore and describe the clinical training and supervision that speech-language pathology graduate students receive in preparation for their first externship placements. Speech-language pathology graduate students were recruited for this multi-site study. Participants were recruited from two different Midwestern universities. Eight participants were recruited for this study (Creswell, 2007; Polkinghorne, 1989).

The primary method of data collection that was used for this study is a semi-structured interview. In this method of interviewing, a set of interview questions developed by the researcher was used; however, the questions were worded in a flexible manner, and some interview questions were more structured than others (Marshall & Rossman, 2006; Moustakas, 1994). During the semi-structured interviews, participants were invited to express their opinions regarding their clinical training and supervision during their graduate program, experiences regarding their clinical training and supervision, experiences regarding their first externship placement(s), difficulties faced during their clinical training and during their first externship placement(s), and positive experiences during their clinical training and during their first externship placement(s).

Prior to beginning the initial interview each participant was also asked to complete a survey, or questionnaire. A cover letter accompanied the survey and briefly described the items included in the survey, indicated a length of time for completion, and included contact information for the investigator. The survey provided the investigator with demographic information, information about the nature of the participants' graduate program and externship placement(s), and previous experiences with speech-language pathology prior to entering the graduate program. Most importantly, the participants were asked to rate their own knowledge and clinical skills for working with clients during their graduate training across different areas of speech-language pathology practice.

### **Overview of Chapters**

The review of the literature in chapter two explores the importance of a translation of theoretical knowledge to the clinical setting, as well as the utility of a theoretical framework for this translation. Broad learning principles and taxonomies are identified, with a focus on a shift to a taxonomy that emphasizes significant learning experiences. In order for significant learning experiences to occur, active learning must take place; the concepts of work-embedded learning and problem-based learning are examined as two examples of active learning. Then, literature related to clinical training and supervision in other disciplines in the rehabilitation sciences (physical therapy, occupational therapy, and athletic training) is presented. Next, literature that is specific to speech-language pathology is presented. This literature supports the notion that there may be deficiencies in the current methods of the clinical training of beginning speech-language pathologists. The current standards of clinical training and supervision are offered, as well as some suggested models for the acquisition of clinical competence.

Lastly, literature is presented related to the importance of the translation of theory and scientific findings from the literature to the clinical training and practice of speech-language pathology and other rehabilitation sciences. The review of the literature suggests that the field may lack a clear and broadly supported learning theory or framework for the clinical supervision and training of speech-language pathology graduate students. However, two widely recognized theories of adult learning are discussed including (1) social cognitive learning theory and (2) theory of self-efficacy which may be useful in framing the issue. These theories further support the importance of work-embedded learning and problem-based learning, as well as suggest a theoretical framework that may be utilized for supervision and training in the future.

Chapter three presents a description of the research methodology that was utilized in this study. The chapter begins with specific research questions, followed by a rationale for the use of a qualitative paradigm, the research design, a description of the research participants, a description of the graduate programs at the two universities which the participants attend, participant rights, specifics of data collection, data analysis methods, and reliability and validity information. Chapter three concludes with an explanation of the role of the investigator, and the limitations of the study.

Chapter four presents a detailed analysis of the data collected through in-depth interviews with eight study participants. The chapter begins with a background summary of individual participants including: a) information regarding their experiences in different clinical areas of speech-language pathology, b) information regarding the self-rating of knowledge and skills in different clinical areas of speech-language pathology, and c) relevant information that was obtained through field journaling by the researcher.

Next, results of the study are organized under two over-arching themes: supervision and clinical experiences. Several categories related to each theme are presented that help depict participant perspectives in greater detail. Direct quotes from individual interviews are utilized to support a descriptive narrative of each theme and related category.

Chapter five presents a detailed discussion of the two themes of supervision and clinical experiences, as well as a discussion of the more specific categories within each theme. Theories of adult learning, as well as relevant rehabilitation sciences and speech-language pathology literature are utilized to discuss the key research findings. The main discussion of the research findings is followed by recommendations for future research, recommendations for practice, and other closing thoughts.

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

A crucial accompaniment to coursework for speech-language pathology (SLP) graduate students is a substantive and highly relevant clinical education. This type of clinical education is essential in the training of competent professionals who need to engage in lifelong learning (Cross, 1995b). Clinical education may be defined as the act of assisting students to acquire the required knowledge, skills, and attitudes in clinical practice settings to meet the standards as defined by a professional accrediting board (Rose & Best, 2005). Common goals of clinical education include: aiding students in acquiring knowledge, evaluating theoretical and applied knowledge, refining clinical skills, familiarizing students with the clinical setting/workplace, and teaching time-management skills (Mannix, Faga, Beale, & Jackson, 2006; Radtke, 2008).

According to the Royal College of Speech and Language Therapists (*Communicating Quality 2*, 1996) the goal of a clinical education is to “develop relevant knowledge and skills, together with an ability to integrate and apply these in dealing with the pathologies encountered in the clinical setting” (p. 233). Generally, education of student speech-language pathologists takes place in a clinical setting where skills to apply theoretical knowledge are to be learned (Anderson, 2001). However, it has been reported that a conceptual framework for the transfer of theoretical knowledge into the clinical setting is often not present in graduate academic programs (Horton & Byng, 2000b).

### **Organization of the Literature Review**

The review of the literature explores the importance of a translation of theoretical knowledge to the clinical setting, as well as a possible theoretical framework for this translation. Broad learning principles and taxonomies are identified, with a focused shift to a taxonomy that emphasizes significant learning experiences. In order for significant

learning experiences to occur, active learning must take place; the concepts of work-embedded learning and problem-based learning are examined as two examples of active learning. Then, literature related to clinical training and supervision in other disciplines in the rehabilitation sciences (physical therapy, occupational therapy, and athletic training) is presented. Next, literature that is specific to the field of speech-language pathology is presented. General models of supervision are offered, as well as the current standards of clinical training and supervision of speech-language pathology graduate students. Then, literature is presented that is related to the importance of the translation of theory and scientific findings from the literature to the clinical training and practice of speech-language pathology and other rehabilitation sciences. The review of the literature suggests that the field may lack a clear and broadly supported learning theory or framework for the clinical supervision and training of speech-language pathology graduate students. However, two widely recognized theories of adult learning are discussed; (a) social cognitive learning theory and (b) theory of self-efficacy which may be useful in framing the issue. These theories further support the importance of work-embedded learning and problem-based learning, as well as suggest a theoretical framework that may be utilized for supervision and training in the future.

### **Learning Principles and Taxonomies**

The taxonomy of educational objectives was developed by Benjamin Moore and colleagues in the 1950's. These objectives were formulated to help educators describe what they want their students to learn from their courses, and to help educators assess student learning. While there are actually three taxonomies of educational objectives (cognitive, affective, and psychomotor), educators most often refer to the taxonomy in

the cognitive domain (Bloom, 1956). The cognitive taxonomy is made up of six different kinds of learning arranged hierarchically: evaluation, synthesis, analysis, application, comprehension, and knowledge (the ability to recall information).

While there is great value in Bloom's taxonomy, in more recent years individuals and organizations in higher education have voiced a need for other types of learning that are not easily achieved with the use of Bloom's taxonomy, such as: learning how to learn, leadership skills, communication skills, ethics, tolerance, and the ability to adapt to a significant change. This need for new kinds of learning suggests that learning at the level of higher education extends beyond the realm of cognitive learning, and the cognitive domain of Bloom's taxonomy. With these needs in mind a new taxonomy, a Taxonomy of Significant Learning was developed (Fink, 2003). As its name suggests, this new taxonomy focuses on various ways in which learning can be significant. This taxonomy was also developed with the guidance of a specific perspective on learning: learning is defined in terms of change. In other words, if learning is to occur, a change must occur in the learner. Furthermore, significant learning requires a lasting change that is important to the learner's life in some way. It should also be noted that this taxonomy, unlike Bloom's taxonomy, is interactive rather than hierarchical.

The taxonomy of significant learning includes the components of: foundational knowledge, application, integration, human dimension, caring, and learning how to learn. The first three components are of particular importance to the guidance of learning in higher education. Foundational knowledge refers to the students' ability to understand and recall specific information and ideas. In any field, it is crucial for students to have a basic working knowledge of major ideas and perspectives; this provides a solid base for



other types of learning. Students must also have the opportunity to apply what they have learned. With application, students can learn how to engage in a new action and in new kinds of thinking and problem solving. The concept of application also includes the development of specific skills, and learning how to manage complex tasks. Application learning allows for the students to realize that the knowledge they possess is useful and meaningful. Finally, the concept of integration occurs when the students are able to realize and fully understand the connections between concepts, specific ideas, and/or across different settings. When students make new connections with what they have learned and applied, it can give them a great sense of intellectual power (Fink, 2003). It may be said that through significant learning experiences, students can acquire tacit knowledge.

### *Tacit Knowledge*

For those wishing to enter a professional, administrative, or leadership position, the acquisition of tacit knowledge is crucial. Polyani's (1967) early discussion of this concept suggests that tacit knowledge is unconsciously acquired through reflection on an experience (Polyani, 1967). Since these early discussions it has been determined that tacit knowledge is actually acquired through direct experience, and that tacit knowledge is crucial to change behavior, achieve professional objectives, and solve practical problems (Argyris, 1999; Reber, 1989).

While academic problems are generally more clearly defined, are associated with limited strategies for working toward a solution, usually have one correct solution, and tend to be disconnected from the work environment, practical problems are more loosely

defined, are associated with a plethora of appropriate solutions, and are embedded in a work or practice environment (Wagoner & Carter, 1996).

**Table 2.1**

*Differences between Academic and Practical Problems*

Academic Problems	Practical Problems
Clearly defined	Loosely defined
Formulated by others	Unformulated by others
Full information provided	Little information available
Limited strategies for obtaining a solution	Multiple strategies for obtaining solutions
One correction solution	Multiple correct solutions
Disconnected from work experience	Embedded in work experience

(Björk, Kowalski, & Browne-Ferrigno, 2005). Adapted from Wagoner, R., & Carter, R. (1996). Research outside the field of education. In K. Leithwood, J. Chapman, D. Corson, P. Hallinger & A. Hart (Eds.), *International handbook of educational leadership and administration* (pp. 449). Boston: Kluwer.

Tacit knowledge places emphasis on learning from direct experience, adapting to new environments, applying knowledge at complex levels, and solving problems that may arise in practice (Nestor-Baker & Hoy, 2001). Rather than focusing on the acquisition of formal knowledge, or “knowing about”, practical intelligence places greater value on “knowing how” to perform various professional tasks (Björk, Lindle, & VanMeter, 1999). To summarize, tacit knowledge involves the acquisition of an understanding of how something works and using that knowledge to solve problems of practice (Björk, Kowalski, & Browne-Ferrigno, 2005). Furthermore, tacit knowledge involves a holistic understanding of a system or environment and has three major facets: a) It is related to knowing how to complete specific tasks, b) it is necessary to attain practical goals, and c) it is usually acquired in work-embedded contexts. Overall, tacit knowledge is related to an individual’s ability to successfully and competently perform real-world tasks, and to achieve personal goals (Sternberg, 1996). Over the past decade tacit knowledge has been researched across a variety of disciplines including management, sales, superintendency, the legal profession, the military, and medicine (Patel, Arocha, & Kaufman, 1999).

The research of Sternberg (1993) and colleagues formed some significant findings. A link was found between tacit knowledge, and experience in specific areas of an environment or organization. Additionally, those individuals with less experience in a specific domain demonstrated poor tacit knowledge. It is important to note that it was also found that the number of years of experience has less influence on an individual’s success in acquiring tacit knowledge than does what the individual learned from their experiences. Lastly, it was determined that measures of tacit knowledge are predictive of

an individual's future performance (Sternberg, Wagoner, & Okagaki, 1993). For those wishing to enter a professional or administrative career, the acquisition of tacit knowledge is vital. The literature suggests that tacit knowledge is best acquired through significant learning experiences which help individuals gain professional knowledge. Two examples of active, significant learning will be discussed.

### *Passive Learning vs. Active Learning*

For many decades, teachers and educators have followed a traditional approach to teaching. With this approach, teaching activities tend to primarily consist of presenting academic content material in an organized fashion (lecturing), leading occasional full-class discussions of the material, and asking questions of the students to both stimulate discussion and to assess the students' knowledge of the material. Over the past several decades the traditional approach to teaching has been called into question and has been disputed by the concept of active learning. Bonwell and Eison (p. 2) provide a concise definition of active learning. Active learning is "anything that involves students in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991). The literature in the areas of college teaching and higher education especially has posed important questions about the overall effectiveness of the more traditional approach to teaching. This body of literature also suggests that students will learn more material, learn it more efficiently, and retain it for a longer period of time if methods of active learning are utilized (Bonwell & Eison, 1991; Meyers & Jones, 1993; Sutherland & Bonwell, 1996).

While passive learning consists of the receiving of information and ideas, active learning involves "doing" and "observing" experiences, and reflecting on what has been

learned. “Doing experiences” refers to a learning activity in which the learners are actually doing what the teacher wants them to specifically learn how to do. In other words, through a “doing” experience the learner is doing what they need to do in order for them to use the material that they learned to perform specific tasks after the class/course is complete. “Observing experiences” can only occur when a learner listens to or watches someone else doing something that is directly related to what they are learning. Through observation, the learners have the opportunity to experience the reality of what they are learning. Reflection is the final major component of active learning and takes place when learners think about what they have learned and how they are learning. Reflection can occur alone (self-reflection) or with other learners. Reflection is an important component because as human beings, we have the capability to change our thinking about our ideas and experiences. However, it is only when we reflect on our ideas and experiences that we can alter our thinking about what those ideas and experiences mean to us (Bonwell & Eison, 1991; Meyers & Jones, 1993). In particular, this type of reflection influences how we think about the tasks we perform and how we alter and improve those tasks to accomplish work (Dewey, 1997).

#### *Work-Embedded Learning and Problem-Based Learning*

Task force reports have been carried out by professional associations, and other research has been conducted on the current efficacy of university-based professional preparation programs, and on the adequacy of standards-based licensure procedures (Duch et al., 2001; Wilkerson & Gijsselaers, 1996). The research findings and task force reports provide a framework for devising methods for professional preparation. When keeping in mind a framework for professional preparation that consists of principles of

adult learning and the acquisition of professional knowledge, the importance of shifting instruction out of the classroom and into a work-embedded context becomes clear (Björk, 2001). As one example, in the realm of superintendent preparation several themes have been identified to aid in the reconstruction of the programs that prepare these professionals. One of these themes is the modification of instructional strategies in order to utilize how an adult best acquires professional knowledge. These instructional strategies include, but are not limited to, work-embedded learning and problem-based learning (Björk, Kowalski, & Young, 2005).

Over the last few decades, teachers, university professors, and other educators have been exploring several different approaches to teaching. These new approaches may be included under a general heading of active and experiential learning. It may be said that the exploration of these teaching approaches has occurred in a rather unorganized fashion. Even so, teachers in a number of different educational settings have found these new ideas of teaching and learning to be valuable (Davis, 1993; Svinicki, 1999).

One of the more influential teaching strategies to emerge in the last few decades is problem-based learning. This teaching strategy is widely used in medical schools as well as in other professional schools. Problem-based learning allows students to learn in an environment that simulates actual working conditions as accurately as possible (Fink, 2003). As professionals, students will encounter real-life, open-ended problems and situations. In these situations, the students must learn to accurately analyze the problem, gather information, assess the relevance of that information, formulate an appropriate solution, and finally assess the outcomes of their solution. Recent evidence in the literature has demonstrated that students can more effectively learn how to analyze and

solve problems through problem-based learning, compared to the traditional curriculum of “book knowledge” for two or more years and only then moving forward to learn how to apply their knowledge (Duch et al., 2001; Fink, 2003; Wilkerson & Gijsselaers, 1996).

### **Rehabilitation Sciences Literature**

A concern commonly expressed throughout the rehabilitation sciences literature (occupational therapy, physical therapy, athletic training, speech-language pathology) is the idea that students and beginning clinicians and practitioners often perceive an inconsistency between theory and practice (Hegde & Davis, 2009; Steward, 1996). Students and beginning therapists may have difficulties making connections between coursework and fieldwork, between different forms of knowledge used in clinical practice, and between different areas of practice (Steward, 1996). This disconnection between theory and practice may be the result of inadequate development of clinical skills and theory building (Strohschein, Hagler, & May, 2002). In addition, the disconnect between theory and practice may suggest that both clinical educators and students do not place enough emphasis on identifying and refining theories to develop clinical practice (Steward, 1996; Strohschein et al., 2002).

An on-going focus in occupational therapy education has been to determine different ways to help students see the connections between theory and clinical practice (Mann & Banasiak, 1985; Sabari, 1985; Schwartz, 1984). The teaching of clinical reasoning is crucial to the preparation and training of occupational therapy students (Neistadt, 1996; Royeen, 1995). The development of clinical reasoning follows a hierarchy comprised of the following stages: novice, advanced beginner, competent, proficient, and expert (Dreyfus & Dreyfus, 1986; Dutton, 1995; Slater & Cohn, 1991).



Higher levels of clinical reasoning entail several years of clinical practice and continuing education; it is not feasible to expect occupational therapy students to graduate as expert, proficient, or even competent therapists (Neistadt, 1996). However, it may be more likely that students will enter into fieldwork as novices or advanced beginners who will be more apt to progress to more advanced levels of clinical reasoning if a portion of their academic preparation for fieldwork places an emphasis on the different types of clinical reasoning they will be using in practice (Benner, 1984).

As previously stated, the development of clinical reasoning follows a continuum: novice, advanced beginner, competent, proficient, and expert (Dreyfus & Dreyfus, 1986; Dutton, 1995; Slater & Cohn, 1991). A novice clinician tends to rigidly apply the rules, principles, and theories that they have learned in school, regardless of the circumstances of specific cases or patients. An advanced beginner begins to modify rules and principles in certain situations, but may still have difficulty prioritizing information that they have learned during an evaluation. A competent therapist is easily able to modify rules and principles as needed, as well as understand the relevance of important information that they have learned during an evaluation. However, a competent therapist may likely still have difficulty altering treatment plans so that they are more relevant for a specific patient. A proficient therapist can easily alter treatment plans as needed, and has a more holistic view of the patient, including physical and social aspects related to the patient's rehabilitation. A therapist who is proficient can effortlessly change a treatment activity as needed while working with a patient. Finally, an expert therapist is one who is able to prioritize their clinical treatment approach primarily from the patient's needs and cues, rather than from any preconceived ideas or expectations of therapeutic approaches.

Expert therapists are easily able to recognize new problems that arise with their patients by relying heavily on their clinical expertise and previous clinical experiences (Neistadt, 1996).

In the current ever-changing health care climate, occupational therapists must efficiently and effectively engage in clinical thinking in order to deliver quality services to their patients/clients. Therefore, beginning occupational therapists are required to advance quickly to at least the competent stage of clinical reasoning. At a competent stage of clinical reasoning, a therapist is able to efficiently make sound clinical decisions, to modify clinical procedures as needed, and correctly prioritize patient/client problems (Dutton, 1995; Neistadt, 1996). To meet these needs, teaching strategies which are utilized with occupational therapy students should be largely focused on improving clinical reasoning skills. In this way, occupational therapy students may be able to progress more quickly through the more advanced levels of clinical reasoning, and ultimately become more competent practitioners (Neistadt, 1996).

There is a need in the practice of occupational therapy for clearly stated and clearly understood visions and expectations regarding the process of clinical education. A framework is needed as a source of consistency and accountability in clinical education, especially as the profession of occupational therapy changes and develops (Opacich, 1995). Opacich further stated that “the essential ingredient missing in the fieldwork solution is a well-articulated educational philosophy that could link the tenets of occupational therapy with a viable, ideationally compatible fieldwork model” (p. 160). This same need is present in the profession of physical therapy.

Like occupational therapists, a large number of physical therapists work in health care settings which are complex, demanding, and rapidly-changing (Strohschein et al., 2002). Beginning physical therapists that are emerging from graduate programs may be lacking in particular areas of clinical practice. New physical therapists may require more than a foundational knowledge of clinical skills; they also require a theoretical foundation that includes attitudes and skills that will aid them in developing their professional practices. These attitudes and skills include aspirations for professional development, the ability to critically evaluate their own clinical skills, and the ability to identify the theories that form the foundation of the practice of physical therapy (Higgs, Glendinning, Dunsford, & Panter, 1991; Strohschein et al., 2002). A clinical education setting, in which students are able to learn within the context of clinical practice, may be the best setting to acquire these attitudes and skills (Strohschein et al., 2002).

Scholars who have contributed to the physical therapy literature have examined the perceptions of clinical educators, students, and faculty members regarding the current process of clinical education (Cross, 1995a; Jarski, Kulig, & Olson, 1990; Onuoha, 1994). However, there is little research in the physical therapy literature that seeks to classify and understand the specific processes being utilized in clinical education, or the possible outcomes of using different models of clinical education (Strohschein et al., 2002). Therefore, there is a need to determine specific goals and outcomes that may be used to develop and more clearly define the clinical education processes in physical therapy (Cranton & Kompf, 1989; Scully & Sheppard, 1983; Strohschein et al., 2002).

The importance of clinical training is also evident in athletic training education programs. The student athletic training experience, and the influence of the supervising

athletic trainer on the student athletic training experience are both crucial components of clinical education (Curtis, Helion, & Domsohn, 1998). The Education Council of the National Athletic Trainers' Association (NATA) has stated that clinical education is one of the most critical issues to be addressed within the discipline of athletic training (Starkey, 1997).

Little research exists in the literature that specifically addresses clinical education in athletic training (Weidner & August, 1997). Research that has specifically examined clinical education in athletic training has concluded that supervising athletic trainers are a very significant factor in the development of student athletic trainers. In addition, the supervisors' behaviors and actions were shown to affect the student athletic trainers' attitudes during their clinical education (Curtis et al., 1998).

It has been suggested in the rehabilitation sciences literature that a solid clinical education requires an underlying philosophy or theoretical framework that is clearly stated and embraced by all the individuals engaged in the process of clinical education (Cranton & Kompf, 1989; Geller & Foley, 2009; Strohschein et al., 2002). However, Cranton and Kompf (1989) advised against the development of educational frameworks for the rehabilitation sciences/health care professions in isolation. They recommended that an educational framework for the rehabilitation sciences should be devised from an interdisciplinary and holistic approach so that the needs of students as adult learners can be wholly met. This kind of educational framework would need to consider the inclusion of perspectives from all of the rehabilitation sciences, as well as the inclusion of theoretical foundations of cognitive psychology and adult learning theories (Cranton & Kompf, 1989; Strohschein et al., 2002).

## **Speech-Language Pathology Literature**

A review of the speech-language pathology literature provides insights into the current methods and standards by which speech-language pathology graduate students are being prepared clinically and professionally. The current methods and standards are presented along with two applicable adult learning theories which help to demonstrate the need for an increase in work-embedded and problem-based learning opportunities in the clinical and professional preparation of speech-language pathology graduate students.

Scholars have long attempted to develop a systematic framework for describing the processes that take place during therapy, specifically during therapy for those with language impairments. One of the more recent studies aimed to further examine the idea of “clinical intuition” and more precisely define the therapy process (Simmons-Mackie & Damico, 1997). The authors concluded that unless more is known about how language therapy is implemented and the specific interactions that occur during a therapy session, it is difficult to answer questions and make conclusions about how effectively therapy is being carried out.

For several years less than precise terms such as “art of therapy” and “clinical intuition” have been used to describe the practice of the speech-language pathologist and other various rehabilitation and clinical practices (Byng & Black, 1995; Goldberg, 1997). Particular individuals in the past have stated that non-specific terms such as these are “junk” (Schön, 1987) and are used to more easily define a phenomena that is not readily defined in a conventional way. Anecdotal evidence suggests that speech-language pathology graduate students in general feel that they are never actually taught how to “do” therapy. In this instance “doing” therapy refers to the completion of speech or

language tasks in face-to-face interactions, such as presenting and explaining tasks, modifying tasks as needed, and giving appropriate responses and feedback (Horton et al., 2004).

This topic has been examined in previous studies; past studies have examined the interaction between therapist and client in the specific area of those clients with aphasia. More specifically, the social roles of clinician and client (Simmons-Mackie & Damico, 1997) and the study of the dynamics and discourse of the actual therapy (Ripich, Hambrecht, & Panagos, 1985) have also been examined. Results of these studies and results of qualitative research conducted by Byng revealed the following common theme: “you get taught so much theory, but nobody ever teaches you how to do therapy”. These feelings of inadequacy have been found to have a direct effect on the delivery of speech and language therapy to specific populations. For instance, students in speech-language pathology master’s programs receive minimal clinical experience with the stuttering population, even though requirements are now in place for all graduate programs that wish to earn accreditation from the American Speech-Language-Hearing Association (ASHA).

Over the past twenty years practitioners and researchers have reported inadequacies in the clinical preparation of speech-language pathologists to provide services to the stuttering population (Kelly et al., 1997). With this population in particular speech-language pathologists may be poorly prepared both academically and clinically. It also seems that speech therapists have skewed beliefs concerning this clinical population due to poor knowledge and clinical experiences. Many have linked these feelings of reluctance towards the stuttering population with inadequate clinical preparation and poor

in-service training (Henri, 1994; Louis & Durrenberger, 1993; Mallard, Gardner, & Downey, 1988; Sommers & Caruso, 1995; Thompson, 1984). Speech-language pathologists in the workforce continue to express difficulties with this population, and they are failing to gain the skills needed to “keep up” while on the job (Kelly et al., 1997).

A study by Kelly et al. sought to collect data from speech-language pathologists about the quantity and quality of coursework and clinical experiences regarding the diagnosis and treatment of those who stutter. Data were collected from 157 school speech-language pathologists in the state of Indiana through a series of open-ended interviews; data from the interviews were later transformed into surveys (Kelly et al., 1997). The authors of this study speculated that speech-language pathology students receive limited clinical training, particularly with stuttering and fluency. Roughly half of the respondents reported that they did not obtain an adequate number of clinical hours in graduate school working with the stuttering population.

In an article published in 1974 it was found that speech therapists who have just graduated and those who have been working for several years all have feelings of inadequacy when dealing with those who stutter, and consequently try to avoid working with this population (Sommers & Caruso, 1995). Other scholars have also explored this topic and have concluded that graduate students received minimal coursework and insufficient clinical opportunity with those who stutter (Curlee, 1985; Leith, 1971; Louis & Lass, 1980; Mallard et al., 1988; Starkweather, 1995).

Over the past decades the American Speech-Language-Hearing Association’s Special Interest Group for fluency and stuttering (SIG-4) created a task force to study the

delivery of services in schools to those with fluency disorders and found that namely, parents of these students felt that their children's speech therapy needs were not being met in the schools. Indeed, clinicians, administrators, parents, teachers, and consumers have all voiced frustrations with a mediocre level of evaluation and treatment in this area (Healey, 1995).

Schon's (1987) term "knowing-in-action" refers to a skilled clinician's ability to anticipate a client's needs, adjust tasks and verbal directions accordingly, detect errors, and provide feedback and correction to the client. These skills must be able to be implemented instinctively and efficiently; the therapist must implement these skills "on-line", so to speak (Schön, 1987). This particular skill or idea of thinking "on-line", modifying behavior as needed, and reflecting on one's own skills while in action are essential and it is these skills that are the trademark quality of a student who is moving from an intermediate to an advanced clinician (Lincoln, Stockhausen, & Maloney, 1997). To be a professional, one must acquire skills and concepts related to expertise, competence, and even artistry. This type of skilled practice, and integration of these skills into practice is not readily explained or taught (Bond & Spurrirt, 1999). Even though it may be difficult to teach these specific skills, they must not only be taught, but must become automatic and "second nature".

The concepts of "knowing-in-action" and thinking "on-line" may be closely related to the definitions of a proficient therapist and an expert therapist on the continuum of clinical reasoning that is mentioned in the occupational therapy literature (Dreyfus & Dreyfus, 1986; Dutton, 1995; Slater & Cohn, 1991). A proficient therapist can easily alter treatment plans as needed, and can effortlessly change a treatment activity as needed



while working with a patient. Expert therapists are easily able to recognize new problems that arise with their patients by relying heavily on their clinical expertise and previous clinical experiences (Neistadt, 1996).

Stech (1973) and colleagues claim that a part of clinical training should be the teaching of methods to bring about the process of professional skills into consciousness. In other words, student clinicians should be taught and encouraged to be aware of the skills required for the “on-line” processes that are involved in the face-to-face therapeutic setting (Stech et al., 1973). The concept of “knowing in action” (Argyris, 1999) was once predominant through a framework that described the dynamic processes of therapy (Bond & Spurrirt, 1999). It is this very idea that may aid in more effectively teaching our student clinicians how to “do” therapy, and in the teaching of other practical skills required for face-to-face interactions with clients. The concept of “knowing in action” is very similar to tacit knowledge. Tacit knowledge also places emphasis on learning from direct experience, adapting to new environments, applying knowledge at complex levels, and solving problems that may arise in practice (Nestor-Baker & Hoy, 2001).

A study by Horton et al. (2004) aimed to determine whether and how aspects of the teaching of clinical skills could be addressed in an academic setting rather than the clinical setting. Two groups of graduate students participated in the study. The experimental group received teaching-learning intervention, while the control group received a placebo intervention; both interventions consisted of sixteen hours of additional teaching. The teaching-learning intervention curriculum focused on planning for therapy, choosing relevant materials for therapy sessions, devising a strategy to “do” therapy, and learning strategies to manage difficulties that arise during therapy.

Additional components of the curriculum also included taking part in “teaching simulations” and teaching the students to reflect and improve upon their skills. Results of this study indicated that the teaching-learning intervention program had a significant impact on the students’ perceptions of their understanding of how to “do” therapy (Horton et al., 2004). The curriculum utilized in this study adopted several components of problem-based learning, which allows students to learn in an environment that simulates actual working conditions as accurately as possible (Fink, 2003).

Within the past decade little research has been conducted in the United States to specifically examine the preparedness of beginning speech-language pathologists. Research from the United Kingdom by Horton et al. was utilized to help frame this dissertation study (Horton et al., 2004). Literature from the past few decades indicates that there may be deficiencies in the way that beginning speech-language pathologists are being trained (Byng & Black, 1995; Emm & Cecconi, 2011; Horton & Byng, 2000a, 2000b; Horton et al., 2004). New speech therapists, as well as seasoned speech therapists may face difficulties when dealing with specific populations due to the nature of their clinical training. Parents and administrators have voiced frustrations with the less than adequate services that speech pathologists are able to provide to specific populations (Kelly et al., 1997).

**Table 2.2*****Differences across Disciplines***

Term	Description	Discipline	Reference
Tacit knowledge	Acquired through direct experience	Education	(Polyani, 1967) (Argyris, 1999; Reber, 1989)
Active learning	Involves students in doing things, encourages students to think about tasks they are performing	Education	(Bonwell & Eison, 1991) (Meyers & Jones, 1993; Sutherland & Bonwell, 1996)
Work-embedded learning	Allows students to acquire professional knowledge in a work environment, rather than in a classroom	Education, rehabilitation sciences	(Björk, Kowalski, & Young, 2005) (Björk, 2001) (Davis, 1993; Svinicki, 1999)
Problem-based learning	Allows students to learn in an environment that simulates actual working conditions as accurately as possible	Education, medicine, rehabilitation sciences	(Fink, 2003) (Duch et al., 2001; Fink, 2003; Wilkerson & Gijsselaers, 1996)
Clinical intuition, art of therapy	The completion of tasks in face-to-face interactions, such as presenting and explaining tasks, modifying tasks as needed, and giving appropriate responses and feedback	Rehabilitation sciences: speech-language pathology	(Horton et al., 2004)
Knowing-in-action	A clinician's ability to anticipate a client's needs, adjust tasks and verbal directions accordingly, detect errors, and provide feedback to the client	Rehabilitation sciences: speech-language pathology	(Schön, 1987)
Thinking "on-line"	Modifying behavior as needed, and reflecting on one's own skills while in action	Rehabilitation sciences: speech-language pathology	(Lincoln et al., 1997)
Clinical reasoning	Making connections between coursework and fieldwork and between areas of practice	Rehabilitation sciences: occupational therapy	(Steward, 1996)

## **Translation from Theory to Clinical Training**

An important component of rehabilitation science is the translation of theory and scientific findings from the literature into clinical training and practice. The specialized field of translational science is one which focuses on the transmission of developed ideas and theories, products, or techniques from a research environment (“bench”) to practical application in the realm of clinical training and practice (“bedside”). The field of rehabilitation science presents challenges that demand additional methods of transfer from “bench to bedside”. These challenges stem from the fact that much of the research conducted in rehabilitation science results in the use of therapeutic interventions, exercise techniques, and educational strategies which are utilized by professionals and therapists; the research conducted does not usually result in the use of drugs or equipment (Brandt & Pope, 1997).

An effective and efficient transfer of rehabilitation interventions, especially forms of therapeutic exercise from research findings to clinical practice presents various problems that are not present with the transfer of drug interventions or equipment. Drugs and equipment tend to be more discrete entities that can be more easily regulated by the federal government, while rehabilitation interventions tend to be more generic and are less easily regulated by the Food and Drug Administration (FDA) (Brandt & Pope, 1997). In recent decades many rehabilitation interventions are “grandfathered”. Despite slight changes in practice regimen, delivery approach, and other aspects, most rehabilitation interventions are still considered “exercise” and are not subject to more strict regulation.

Due to this, initiatives have been taken over several decades to offer more structure to rehabilitation interventions. An example of this is the stroke care guidelines

of the Agency for Health Care Policy and Research. These guidelines strive to provide crucial federal guidance to rehabilitation practitioners through uniform structure of the best evidence-based practices that will ensure equivalent care for all individuals following a stroke (Gresham, Duncan, & Stason, 1995). These guidelines and others are important, as rehabilitation delivery and reimbursement relies partly on the dissemination and use of evidence-based practices.

Currently, no organized system exists for the dissemination of research findings in rehabilitation science to those who are providing services. This may be due to several factors. Few scholarly journals focus on interdisciplinary research, although this has improved over the past decade. For example, the U.S. Department of Veterans Affairs (VA) publishes and distributes a free publication, *The Journal of Rehabilitation Research and Development*. However, the VA acknowledges that it is not able to publish all of the information that is available. This may be due to the fact that this journal (as well as others) is consistently underfunded. In turn, the delay between the time of research submission and the time of publication is greater than one year on average. In addition, *The Journal of Rehabilitation Research and Development* lacks the prestige of other major journals and is not as widely distributed. In general, better funding may help to increase the journal's prestige and would improve the turnaround time for research findings. Yet another problem exists that hinders the dissemination of research findings in rehabilitation science. Rehabilitation professionals and therapists tend to be taught according to the criteria, standards, and traditions of their individual profession. In educational, and especially in medical settings there may be fewer opportunities for interaction and collaboration. As a potential result, professions are not as knowledgeable

about the science, standards, and scope of practice of the other rehabilitation professions. Hence, models to increase trans-disciplinary communication would also be beneficial.

### **Current Standards**

A comprehensive review of the American Speech-Language-Hearing Association (ASHA) standards and procedures was conducted. This review suggests that standards and procedures are in place to help guide and standardize the training of speech-language pathology graduate students. This document outlines standards for the following procedures: earning the Master's degree, the accreditation of the institution of higher education from where the Master's degree is earned, the program of study's knowledge and skills outcomes, assessment, and maintenance of certification. Standard IV presents standards and procedures for the program of study-skills outcomes. More specifically Standard IV-E states that "supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate area of practice. The amount of supervision must be appropriate to the student's level of knowledge, experience, and competence. Supervision must be sufficient to ensure the welfare of the client/patient" (pp. 9). All clinical supervision must be in real-time and must never be less than 25% of the student's contact with each client/patient. Lastly, direct supervision must take place periodically throughout the entire practicum ("2005 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology," 2009; Havens, 2011). The most recent position statement from ASHA regarding clinical supervision states that the process of supervision includes a variety of activities and behaviors, which should be specific to the needs and strengths of the supervisee.

Supervisor expectations and requirements of the practice setting also should be taken into account (O'Connor et al., 2008).

Within these standards there are currently no procedures to guide the amount of supervision that must take place in a face-to-face environment. While it is stated that supervision must be in real-time, this supervision can either occur face-to-face, through observation via a one-way mirror in the therapy room, or through observation via live video and audio recording. As previously stated, the translation of the best evidence to clinical training and practice is an important aspect of the rehabilitation sciences professions. Here, in ASHA's standards and procedures for the program of study's skills outcomes there may be a lack of translation. It seems that research findings regarding best practices for adult learning have not been used to create models of professional preparation, particularly models that guide implementation of ASHA Standards in the area of clinical supervision.

ASHA has several Special Interest Groups (SIG's) for those ASHA members who have an interest in specific areas of speech-language pathology. SIG 11 focuses on administration and supervision in speech-language pathology. An article from the SIG 11 newsletter stated that the scope of practice in the profession has expanded rapidly in recent years. Keeping this in mind, it is more important than ever that training programs enable speech-language pathology graduate students to apply their learning in real-world situations with clients and patients (Lefkowitz, 1996). Clinical supervision and training of adult learners may be more consistently applied to the training and supervision of speech-language pathology graduate students by examining several models of supervision.

## **Models of Supervision**

Clinical education may be defined as the transfer of knowledge, skills, abilities, and ideas from instructor/supervisor to student during direct interaction with patients (Daggett, Cassie, & Collins, 1979; DeClute & Ladyshevsky, 1993). When thinking about clinical education in this way, great importance is placed upon the role of the supervisor/clinical instructor, and the characteristics of effective supervisors/clinical educators (Daggett et al., 1979; Emery, 1984; Jarski et al., 1990; Scully & Sheppard, 1983; Stritter, Hain, & Grimes, 1975)

While many models of supervision have surfaced over the past thirty years (Ladany, Ellis, & Friedlander, 1999), it has been suggested that these models have yet to be consistently implemented in the practice of supervision (Spence, Wilson, Kavanagh, Strong, & Worrall, 2001). Despite differing professional and theoretical backgrounds, supervisors across several areas of clinical practice (speech-language pathology, occupational therapy, social work, psychology) tend to engage in similar methods of supervision (Hart, 1982; Rich, 1993). Typically, the supervisee presents some form of work example, which is followed by discussion, review, and feedback from the supervisor. In certain instances, the supervisor may also provide training of a specific skill in the form of demonstration, followed by practice of the skill by the supervisee (Spence et al., 2001).

Certain models of supervision are developed based on the idea that the process of the supervision should be directly based on the same theoretical principles as a particular type of therapy or practice. Such models of supervision are solution-focused (Rita, 1998), humanistic (Farrington, 1995), psychodynamic (Rodenhauser, 1995), and counseling



(Leddick & Bernard, 1980). Some models of supervision are based on logistical and structural considerations in the delivery of the supervision, rather than philosophical or theoretical assumptions. For example, the dual-focus supervision model (McBride & Martin, 1986) involves two equal-status supervisors who provide supervision to more junior colleagues in one-to-one and/or group settings. The mentor-protégé model (Nolinske, 1995) places an emphasis on multiple mentors, rather than one supervisor. This supervision model is based on the idea that multiple mentors are able to provide more specific information based on their areas of expertise and interest. Other approaches to supervision are the peer supervision or peer group consultation models (Powell, 1996). These supervision models are best used with experienced clinicians and practitioners, or with clinicians for whom there is not an available senior staff member.

Cognitive-behavioral models of supervision utilize techniques which are related to theories of human behavior in order to develop the knowledge, skills, and attitudes of the supervisee. Aspects of cognitive-behavioral models of supervision include: modeling (learning through demonstration of a supervisor), role-playing and/or practice of new skills, feedback and reinforcement from the supervisor, self-evaluation, and goal setting. Supervision greatly focuses on behaviors, feeling, and attitudes of the supervisee before, during, and following clinical experiences (Spence et al., 2001).

### **The Journey to Clinical Competence**

As with any form of knowledge, clinical knowledge is acquired over time. The five phases of clinical knowledge are novice, transitional, competence, mastery, and expert (Pena & Kiran, 2008). Pena and Kiran have created a “cookbook” of clinical strategies and techniques for novice clinicians. Their work offers “recipes” to help novice

clinicians complete a therapy session. It is thought that having a “recipe” will allow new clinicians to put less worry and energy into deliberation over strategy development and focus more on the understanding of appropriate strategy usage with a client. The first three phases of clinical knowledge (novice, transitional, and competence) are the three phases that are most frequently exhibited and developed in students in a Master’s program. When a student is still a novice it is recommended that scripts and models should be developed for them. It is suggested that providing novice students with an outline for a therapy session instills a greater sense of self-confidence when they are attempting to implement various clinical strategies with which they have little experience. In this way novice clinicians can focus more on *when* and *why* specific strategies are being used, rather than focusing on choosing *what* strategy they should use (Pena & Kiran, 2008). In other words, the novice clinician is told what to do during the session; they are not responsible at this time for selecting appropriate therapy goals and activities. The novice clinician is only expected to implement therapy goals and activities with supervision; they are only responsible at this time for learning when specific strategies are to be used, how they are implemented, and why they should be implemented with specific types of clients.

When students are in the transitional phase they are able to implement strategies more automatically and use learned strategies with a wider variety of clients. In this phase supervisor feedback is essential and helps the student to reflect on their performance while simultaneously learning to expand their strategy use with clients. During the transitional phase it is also crucial that supervisors provide feedback during the actual therapy session, rather than waiting until the session is completed. This can aid

students in learning the appropriate steps to help correct an error, or to change a strategy so it can be used more effectively with a particular client (Madix & Oxley, 2009).

Finally, when students are in the competence phase they begin exhibiting self-guidance and self-regulatory behaviors in their style of intervention. In this phase students are able to generate new scripts for themselves, form hypotheses of the effectiveness of a new script, and test the effectiveness of the script (Pena & Kiran, 2008). During the competence phase the supervisor is no longer a mediator, but a mentor. Students will still make errors during this phase, but they should have ample knowledge from their past experiences to make appropriate corrections. In the competence phase, students should be resourceful with their own knowledge base (Madix & Oxley, 2009; Pena & Kiran, 2008).

A recent study sought to determine the development of clinical and metacognitive thinking skills in first-year graduate students enrolled in a graduate level speech-language pathology program during their first semester of clinical in-house practicum (Madix & Oxley, 2009). Results indicated that while speech-language pathology graduate students were still participating in their in-house clinical practicum with supervision they felt a general lack of knowledge, and felt that they had not yet learned specific strategies that they needed to utilize with their respective clients. Many students were exhibiting skills that coincide with the novice or transitional phase; they were not yet performing tasks that would be expected in the competence phase. Conclusions of the study indicated that learning styles, the ability to integrate knowledge, etc. would certainly affect the acquisition of clinical knowledge across individuals. However, despite abilities that vary

from student to student, it was determined that supervisors can best facilitate clinical growth by modeling strategy usage in the clinical setting (Madix & Oxley, 2009).

Goldhammer's (1993) model of clinical supervision briefly outlines six components that should be addressed in clinical supervision. These six components are: lesson planning, interaction techniques, reinforcement, response rate, cues, and prompts/stimulation. These components can only be taught through direct clinical supervision and modeling, (Goldhammer, Anderson, & Krajewski, 1993) not through mentoring and reflective practice. Despite ASHA's standards that outline procedures for clinical supervision, it does not appear that there is a consistent framework in place as a foundation for the clinical supervision and training of speech-language pathology graduate students. The presented literature suggests that graduate students and beginning speech-language pathologists may not be adequately prepared for various aspects of speech-language pathology clinical practice. The following sections will present two theories that may be employed as a framework to direct the clinical supervision and training of speech-language pathology graduate students. These theories attempt to account for the deficiencies that have been noted in the literature regarding the clinical preparation of speech-language pathology graduate students.

### **(Social) Cognitive Learning Theory**

The cognitive learning theory is comprised of a combination of behavioral and cognitive learning components. In general, the cognitive learning theory posits that human learning occurs in a social environment and that knowledge, skills, and strategies are acquired by observing others. Lastly, learning occurs by observing models and consequences of modeled behaviors (Merriam, Caffarella, & Baumgartner, 2007;

Schunk, 1996). The cognitive learning theory has its roots in the work of Miller and Dollard (1941) who stated that individuals learn through observation of behaviors; however, individuals must also imitate the observed behaviors in order for those behaviors to be reinforced (Miller & Dollard, 1941). These ideas were expanded upon by Rotter in the 1950's to include facets of behaviorism, cognitivism, and personality theory (Rotter, 1954). Rotter's expansion on the theory presumes that most human behavior takes place in some kind of meaningful environment, and that behaviors are acquired through social interactions with others (Merriam et al., 2007).

Bandura's (social) cognitive learning theory is a blend of both cognitive and behavioral concepts. This theory states that learning occurs in a social setting and that learning occurs through the observation of others. According to cognitive learning theory, learning is a function of the person, the environment, and behavior. Cognitive learning theory also states that learning occurs by observing models of the desired behaviors, and by observing the consequences of the modeled behavior (Bandura, 1986, 1988; Merriam et al., 2007). Bandura's theory has specific relevance for adult learners. His theory accounts for both learning and the environment in which learning occurs. Cognitive learning theory states that there is a reciprocal relationship between individuals and the environment. In general, social learning theories contribute well to adult learning by emphasizing the importance of social context, modeling, and mentoring (Merriam et al., 2007). Some opposition to cognitive learning theory exists. In particular, it has been proposed that an individual can learn simply from observation without having to imitate the behavior that was observed or modeled (Lefrancois, 1999). Even within the opposition to cognitive learning theory, the idea of observation is still present; even

though an individual does not necessarily have to imitate what was observed, a model of the behavior still needs to be present.

### **Theory of Self-Efficacy**

Self-efficacy has been defined in various ways: as the belief that one is capable of performing in a manner to attain specific goals (Ormrod, 2006), or as a person's belief about their own capabilities to produce a desired level of performance so as to influence events that affect their lives (Bandura, 1977). Self-efficacy has also been described as the sense of belief that one's own actions have an effect on their environment (Steinberg, 1998). Self-efficacy may also be based on a person's judgment of their capabilities within specific mastery criteria, or a person's assessment of their abilities to perform desired tasks in relation to goals and standards, rather than in comparison with another individual's capabilities. It has been proposed that an individual's ideas of self-efficacy greatly affect their social interactions.

Bandura defined self-efficacy as one's belief in one's ability to succeed in specific situations (Bandura, 1977). An individual's sense of self-efficacy can be crucial in affecting how one approaches goals, tasks, and challenges. The concept of self-efficacy is central to Bandura's social cognitive theory, which highlights the role of observational learning and social experience in the development of personality and behavior (Bandura, 1977). One of the main concepts in social cognitive theory is that an individual's actions in almost every social or learning situation are influenced by the actions that the individual has observed in others. What the individual has observed is remembered and helps to shape social behaviors and cognitive processes. Self-efficacy is developed from external experiences and can be influential in guiding behavior and in determining the

outcome of many events; therefore, it is an important aspect of social cognitive theory. It may be said that self-efficacy is the personal perception of one's behavior in the external environment. According to Bandura's theory of self-efficacy, those individuals with high self-efficacy—those who believe they can perform well in a given situation—are more likely to have a desire to master a difficult task, rather than avoid it (Bandura, 1988; Miller & Dollard, 1941; Mischel & Shoda, 1995).

#### *Factors that Affect Self-Efficacy*

According to Bandura's work there are several sources that can affect self-efficacy. Experiences or *mastery experiences* can affect an individual's sense of self-efficacy. Quite simply, successes increase a sense of self-efficacy while failures decrease a sense of self-efficacy. Modeling or *vicarious experiences* have an effect on self-efficacy as well. When an individual observes someone else succeeding at something, their own self-efficacy increases. Conversely, when an individual observes someone else failing at something, their own self-efficacy decreases. This process has a greater effect when the individual perceives themselves to be similar to those they are observing. Observing a model is not as influential as a personal experience, although it can be an extremely powerful positive (or negative) influence to an individual who is unsure of themselves. *Social persuasions*, or encouragements and discouragements can also have a robust influence on self-efficacy. In almost every environment an individual's confidence can be influenced by encouragements and discouragements. Positive social persuasions increase self-efficacy, while negative social persuasions decrease self-efficacy. It should be noted that it is generally easier to decrease an individual's self-efficacy than it is to increase an individual's self-efficacy (Bandura, 1977, 1986).

## Summary

Within the past decade little research has been conducted in the United States to examine the preparedness and clinical supervision of beginning speech-language pathologists; however, the article that was utilized to frame this proposed study is the result of a line of research that is currently being conducted in the United Kingdom (Horton et al., 2004). Literature from the past few decades indicates that there may be deficiencies in the way that beginning speech-language pathologists are being trained clinically. New speech therapists, as well as seasoned speech therapists may face difficulties when dealing with specific populations due to the nature of their clinical training. Parents and administrators have voiced frustrations with the less than adequate services that speech pathologists are able to provide to specific populations in the school setting (Kelly et al., 1997).

Presently, the demands of a speech-language pathologist are becoming more and more involved, especially in the medical setting. Few studies have examined how speech-language pathology graduate students perceive their preparedness to enter a hospital or rehabilitation clinical setting, based on the clinical training and supervision that they have received. It is crucial to examine this concept as it is now a requirement of most graduate programs that students have at least one externship placement in a medical setting following their in-house clinical practicum.

Clinical education may be defined as: learning by doing specific tasks and skills in the presence of a clinical model with an emphasis on the active participation of the learner (DeClute & Ladyshevsky, 1993; Emery, 1984). It has been suggested that these characteristics of clinical education (the presence of a model and active participation of



the learner) are the most influential factors of effective clinical learning; these factors may be more crucial than the learner's present level of knowledge and ability (Griffiths, 1987; Stritter et al., 1975).

The theories presented may account well for the deficiencies, conclusions, and recommendations that have been noted in the literature regarding the supervision and clinical preparation of speech-language pathology graduate students. If using cognitive learning theory and the theory of self-efficacy as a framework, more attention would be given to purposeful, problem-based interactions between supervisors and student clinicians throughout the clinical practicum experience. Clinical training opportunities would be enhanced to target how student clinicians organize and interpret information during clinical interactions with clients. Feedback and behavioral models from supervisors could possibly be provided directly to students during the actual therapy session, rather than waiting until the session is completed. Supervisors and student clinicians may also engage in pre-planning for therapy sessions on a regular basis to ease the students' apprehensions and increase positive feelings about their own abilities. By engaging in pre-planning, especially with novice student clinicians, supervisors can help create scripts for therapy sessions, choose appropriate materials, plan to use appropriate strategies for the client, and discuss how to address difficulties that might arise during a therapy session with a client (Moses & Shapiro, 1996).

Increasing the efficacy of clinical supervision and training requires standards and procedures, such as those set forth by the American Speech-Language-Hearing Association (ASHA). However, models of highly effective practices that are grounded in adult learning theory and empirical research regarding clinical training and supervision

should also be taken into account. Taken together, this information may enable department-level leaders to design more effective and evidence-based models for clinical training and supervision, and also inform them as to which supervisory methods may be most efficacious.

## **CHAPTER THREE: RESEARCH METHODS**

This chapter presents a description of the research methodology that was utilized in this study. The purpose of this study was to understand and describe how speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements. This chapter begins with background regarding the purpose of the study, specific research questions of this study, followed by the rationale for the use of a qualitative paradigm, the research design, a description of the research participants, participant rights, data collection, and data analysis. The chapter concludes with an explanation of the role of the researcher, and the limitations of the study.

### **Purpose of the Study and Specific Research Questions**

Within the past decade little research has been conducted in the United States to examine the clinical preparedness and supervision of beginning speech-language pathologists; the seminal article used for this research study comes from the United Kingdom (Horton et al., 2004). New speech therapists, as well as seasoned speech therapists may face difficulties when dealing with specific populations due to the nature of their clinical training. For example, parents and administrators have voiced frustrations with the less than adequate services that speech pathologists sometimes provide to specific populations in the school setting (Kelly et al., 1997).

A crucial accompaniment to coursework for a speech-language pathology (SLP) graduate student is a solid clinical education. Presently, the demands of a speech-language pathologist are becoming more and more involved, especially in the medical setting. Few studies have examined how speech-language pathology graduate students

perceive their preparedness to enter a hospital, rehabilitation, or public school setting. Furthermore, the literature suggests that a framework for the transfer of theoretical knowledge into the clinical setting is often not present in graduate academic programs (Horton & Byng, 2000b). The purpose of this study was to understand and describe how well speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements. This study was guided by the following research questions:

- 1) How do speech-language pathology graduate students perceive their clinical training and supervision obtained during their graduate program prepared them for their first externship placements?
- 2) What aspect(s) of clinical training best prepare speech-language pathology graduate students for their first externship placements?
- 3) What are the main elements of the clinical supervision that speech-language pathology graduate students receive during clinical training at their university?
- 4) Which particular areas of evaluation and treatment do speech-language pathology graduate students think warranted more focus during clinical training at their university?

### **The Qualitative Paradigm**

A brief review of different types of approaches to qualitative research enabled the researcher to situate this study in a phenomenological design, or approach. Within the qualitative research paradigm, there are five different approaches to qualitative inquiry. These approaches are (a) narrative, an approach that focuses on exploring the life of an individual; (b) phenomenology, a method that focuses on understanding and describing a

lived phenomenon; (c) grounded theory, an approach that aims to develop a theory grounded in data that is collected; (d) ethnography, a field-based approach that seeks to describe the shared culture of a group; and (e) case studies, a method that provides an in-depth understanding of one single case or multiple cases (Creswell, 2007).

When utilizing a qualitative paradigm, the researcher makes certain philosophical assumptions. These assumptions are ontological, epistemological, axiological, rhetorical, and methodological (Creswell, 2007; Guba & Lincoln, 1988). When researchers utilize a qualitative paradigm they adopt the idea of multiple realities. The ontological assumption relates to the nature and characteristics of those realities. Each researcher embraces different realities, as do the individuals being studied, and those individuals reading a qualitative study. The adoption of multiple realities includes the use of multiple quotes which are based on the actual words of various individuals, thus presenting the perspectives of the individuals. For example, when using a phenomenological design the researcher reports how the individuals participating in the study view and describe their experiences differently (Moustakas, 1994).

The epistemological assumption states that when utilizing a qualitative paradigm, the researcher tries to get as close as possible to the participants being studied. Typically, qualitative researchers conduct their research in locations where participants live, work, learn, and in other settings that are important for understanding what the participants are saying. Based on the epistemological assumption, the longer the researcher stays in the field and spends time learning about the participants, the more able they are to gather firsthand information (Guba & Lincoln, 1988; Wolcott, 1999).

According to the axiological assumption of qualitative research, researchers explicitly specify the values that they bring to a research study. When using a qualitative paradigm, the researcher admits their values and biases, the value they place in the nature of the study, and the value they place in the information they will gather from the study participants. Within a qualitative paradigm it is imperative that the researcher acknowledges their values and biases, and that the data presented only represents an interpretation of the information provided by the research participants (Creswell, 2007; Denzin, 1989).

Those who utilize a qualitative paradigm also rely on the rhetorical assumption that their writing within the study should be personal and literary (Creswell, 2007). Researchers tend to provide labels and names for certain aspects of the methods within a qualitative paradigm (Koro-Ljungberg & Greckhamer, 2005). For example, qualitative researchers may use metaphors, may tell stories in a narrative format with a beginning, middle, and end, and may refer to themselves using a first-person pronoun. Rather than using quantitative terms such as “internal validity” and “generalizability”, within the qualitative paradigm the researcher may use terms such “credibility” or “validation” (Angen, 2000). Terms such as “understanding” and “meaning” make up the glossary of relevant terms and are important when writing purpose statements and research questions (Creswell, 2007).

Finally, there are certain methodological assumptions that are made when conducting research within a qualitative paradigm. The methodology within a qualitative paradigm is inductive, emerging, and shaped by the researcher’s experiences as they collect and analyze the data. The researcher follows inductive logic from the ground up

instead of entirely following a theory or other perspective. Often, the research questions change in the middle of the study in order to better reflect the questions that are needed to best understand the research problem. In turn, the data collection strategies may need to be modified to include new questions. Furthermore, the researcher's goal during data analysis is to develop the most detailed knowledge possible of the topic being studied (Creswell, 2007).

It may be said that the assumptions of the qualitative research paradigm mirror a particular perspective that researchers have when they conduct their research. After researchers make their assumptions, they utilize other paradigms and ideas to further shape their research. A paradigm may be defined as a set of beliefs that direct actions (Lincoln & Guba, 2000). Paradigms used in qualitative research are varied and continuously evolve over time. Qualitative researchers often utilize several paradigms in their research that are similar and compatible. The following four different paradigms help to inform the overall paradigm of qualitative research: (1) postpositivism, (2) constructivism, (3) advocacy/participatory, and (4) pragmatism (Creswell, 2007). Each of these paradigms guides the practice of qualitative research in a different way.

A researcher who utilizes a postpositivist paradigm tends to take a scientific approach to research. This approach to research is logical, has an emphasis on empirical data collection, and is more cause-and-effect oriented. This paradigm may be often utilized in the field of health sciences. The health sciences are fields in which the qualitative paradigm is a relatively new approach to research. Therefore, the qualitative paradigm must be approached in ways that are more acceptable to quantitative researchers, funding agencies, and peer-reviewed journals in the field (Barbour, 2000).

Researchers who employ a postpositivist paradigm typically view inquiry in a series of logical steps, trust in several perspectives from study participants rather than a single view of reality, and use rigorous methods of qualitative data collection and analysis. Furthermore, they may utilize computer programs to assist their data analysis, maintain the use of various validity approaches, and write their qualitative study much like a scientific report, with a structure that is similar to a quantitative study report (Creswell, 2007).

In the paradigm of constructivism, individuals aim to understand the world in which they live. Through living in their world, they develop personal meanings of their experiences, and of objects and things in their environment. Through this paradigm the researcher can look for complex views of a topic, rather than narrowing the meaning of a topic into a few categories. According to the paradigm of constructivism, the researcher relies heavily on the participants' views and opinions of a given situation. Unlike postpositivism, a researcher using the paradigm of constructivism does not start with a pre-determined theory, but rather the researcher develops a theory as the study progresses (Lincoln & Guba, 2000; Schwandt, 2001). The more open-ended the questions are, the better the researcher can listen carefully to what the participants say and do in their life settings. Within a constructivist paradigm, the researcher tends to focus on specific contexts in which people live, work, and learn so that they may better understand the setting of the participants. The researcher recognizes that their own past experiences shape their interpretation, and the researcher acknowledges that their interpretation of the data will be influenced by their experiences. Thus, the researcher's intent is to interpret the meanings that others have about their world. The constructivist paradigm particularly



becomes apparent in the phenomenological research design, in which participants describe their life experiences (Moustakas, 1994).

According to the advocacy/participatory worldview, research includes an action agenda for reform that will affect the lives of the study participants, the settings where the participants live, work, learn, and perhaps even the life of the researcher. Through studying important issues such as domination, alienation, and oppression the researcher can provide a voice for the study participants, and can raise awareness of these issues through their research (Kemmis & Wilkinson, 1998). Unique to this worldview is the idea of ensuring that the “voice” of the participants is heard. Researchers may ask their participants to help design the research questions, collect and analyze the data, and participate in shaping the final research report. It should also be noted that the final research report usually contains an action plan for reform in order to improve the lives and situations of the participant group.

The paradigm of pragmatism focuses on the outcomes of the research, rather than the precursor to the research. This paradigm is concerned with applications of research findings and solutions to problems (Patton, 1990). Rather than placing emphasis on methods, the focus is placed on the problem being studied and the research questions (Cherryholmes, 1992). When utilizing this worldview the researcher tends to use multiple methods of data collection so that they can best answer the research questions, will use both quantitative and qualitative (mixed) methods of data collection, and will tend to focus on the most practical application of their research findings.

The qualitative research paradigm itself has several characteristics. First, it takes place in a natural setting. Data is usually collected in the field, in settings where the

participants experience the problem or issue that is being studied (Hatch, 2002; LeCompte & Schensul, 1999; Marshall & Rossman, 2006). Second, the researcher is the key instrument of data collection. The researcher collects data themselves by interviewing participants, examining key documents, and observing behavior (Creswell, 2007; Hatch, 2002). Third, multiple data sources are utilized. Those who utilize the qualitative paradigm gather multiple forms of data through interviews, observations, documents, etc. After the data is gathered, the researcher thoroughly reviews the data, organizing them into common categories or themes (LeCompte & Schensul, 1999; Marshall & Rossman, 2006). Fourth, research within the qualitative paradigm relies on inductive data analysis. Researchers construct categories and themes in a “bottom-up” manner; data is organized into increasingly abstract units. This requires the researcher to work back and forth between the themes and the data until a comprehensive set of themes is created (Hatch, 2002; LeCompte & Schensul, 1999; Marshall & Rossman, 2006). Fifth, research within the qualitative paradigm focuses on the participants’ perspectives, views, and meanings. Throughout the entire research process, the researcher focuses on learning the truest perspectives that the participants have about the issue that is being studied. The researcher does not focus on the perspectives that they themselves bring to the research, nor on the perspectives presented in the relevant literature (Hatch, 2002; LeCompte & Schensul, 1999).

Sixth, the qualitative paradigm uses an emergent design. In other words, the initial research plan is not static; any phase of the research process may be altered as needed after the researcher begins to collect data in the field. The research questions may change, the forms of data collection may be modified, and the participants and data collection

sites may differ from the original study design (Hatch, 2002; Marshall & Rossman, 2006). The seventh characteristic of research that is situated within the qualitative paradigm is the use of a theoretical lens. Often, studies are viewed through the lens of a theoretical framework. Furthermore, a study that utilizes a qualitative paradigm may be centered around identifying a social or political context of the issue being studied (LeCompte & Schensul, 1999). Eighth, is the employment of interpretive inquiry. Within a qualitative paradigm, researchers form an interpretation of what they see, hear, and understand. These interpretations cannot be detached from the researcher's background, past experiences, or prior understandings (Marshall & Rossman, 2006). Lastly, the qualitative paradigm utilizes a holistic view of the social phenomena being examined. The researcher attempts to create a complex picture of the issue under study. To accomplish this, the researcher must report multiple perspectives, identify key factors involved, and describe the "big picture" that emerges from the data. Rather than being limited to a rigid cause-and-effect relationship between factors, the researcher is free to identify and expand upon complex interactions in any given situation or setting (Hatch, 2002; Marshall & Rossman, 2006).

Within the qualitative paradigm, the researcher must be willing to commit a substantial amount of time to being in the field collecting data and establishing rapport with the study participants. The process of data analysis is also extremely time-consuming, as the researcher must sort through vast amounts of data, and reduce that data to a small number of themes. The methods of various qualitative research designs also demand that the researcher writes a very thorough, detailed account of the multiple perspectives that were expressed by the study participants. Furthermore, a researcher who

uses a qualitative research design must be willing to immerse themselves in a form of social/human science research that not only does not have firm guidelines and procedures, but is also constantly evolving (Creswell, 2007).

To summarize, a qualitative paradigm is utilized when an issue or problem needs to be explored in great depth and detail or when the researcher wants to empower a specific group of individuals to share their experiences. A qualitative paradigm is also appropriate when the researcher wishes to write in a more literary, flexible style without the restrictions of more formal academic styles of writing. In addition, a qualitative paradigm is used to help develop theories for certain samples of the population when theories do not exist, or when the existing theories fail to capture the complexities of the issue being studied. A qualitative paradigm can also be used when quantitative methods of data collection and statistical analysis do not fit the issue or problem that is being examined. Lastly, a qualitative paradigm is fitting when the researcher wants to fully understand the setting in which the study participants experience the problem or issue being studied; what participants say cannot be separated from the context in which they say it (Creswell, 2007).

### **The Phenomenological Design**

It should be noted that a phenomenological research design has strong philosophical elements. It is heavily based on the writings of the German mathematician, Edmund Husserl. His views have been expanded upon and phenomenology has become widely used in other fields. In particular, phenomenology is prevalent in sociology, psychology, nursing, health sciences (Nieswiadomy, 1993), and education (vanManen, 1990). Phenomenology is associated with four philosophical perspectives: (1) traditional

goals of philosophy; (2) a lack of presupposition; (3) a focus on the intention of one's consciousness; and (4) an absence of a subject-object dichotomy (Stewart & Mickunas, 1990).

Associated with phenomenology is the return to more traditional goals of philosophy; in a phenomenological research design there is a search for wisdom, which coincides with a traditional Greek concept of philosophy. Phenomenology is a "philosophy without presupposition" (Creswell, 2007a, p. 58). The researcher does not make judgments about the reality of a situation or issue until it can be supported by data from the study participants. A phenomenological research design is also associated with the "intentionality of consciousness" (Creswell, 2007a, p. 59). This concept states that an individual's consciousness is always directed toward an object, problem, issue, etc. Therefore, the reality of an object, problem, issue, etc. is based on an individual's consciousness of it. Lastly, phenomenology is not based on a subject-object dichotomy. In other words, the reality of an object, problem, issue, etc. is perceived only by examining an individual's experience of an object, problem, issue, etc.

A phenomenological design was chosen for this study. A study that utilizes a phenomenological design seeks to "describes the meaning for several individuals of their lived experiences of a concept or phenomenon" (Creswell, 2007a, p. 57). With a phenomenological design, the researcher focuses on what all the participants have in common as they "live through" the phenomenon. The overall purpose of phenomenology is to discover individual experiences with a phenomenon, and condense them to a more concise description of the universal essence (vanManen, 1990). Therefore, the researcher first identifies a phenomenon that they wish to study. The researcher then collects data

from individuals who have experienced the phenomenon. From the data, the researcher is able to develop a holistic description of the essence of the experience for all of the individuals. The final description is comprised of what the individuals experienced and how they experienced it (Moustakas, 1994). One of the main aims of a phenomenological design is to discover individual experiences of a phenomenon, and condense them to a more concise description of the universal essence.

A phenomenological design was utilized to explore and describe the clinical training and supervision that speech-language pathology graduate students received in preparation for their first externship placements. In the phenomenological approach to qualitative research, data is collected through semi-structured, in-depth interviews with participants who have experienced the phenomena that the researcher seeks to describe. A qualitative paradigm, and specifically a phenomenological design, was appropriate for this study because the researcher's primary aim was to explore and describe the subjective perceptions of the participants' lived experiences (Creswell, 2007).

### **Research Sample and Participants**

Speech-language pathology graduate students were recruited from two Midwestern universities for this multi-site study. The two universities will be referred to as West Welton University and Lone Lake University. The actual names of the two Midwestern universities will not be used in this study to further ensure the privacy of all participants. These two universities were selected largely because of their relatively close geographical location to the researcher, and because both universities had a fairly large number of speech-language pathology graduate students who had completed at least one externship at the time of planned data collection.

The researcher contacted the universities' Speech-Language Pathology Clinic coordinators via e-mail to discuss the purpose of the study, the data collection techniques, the timeframe of the study, the inclusion criteria for the study participants, and the methods that would be used to ensure confidentiality for the students being interviewed. The researcher received an informal e-mail from the clinic coordinators at each site to conduct the study upon approval from the University of Kentucky Institutional Review Board (IRB).

Following IRB approval (Appendix A), the researcher contacted the clinical coordinators at each university. A flyer that explained the study (Appendix B) was mailed to the clinical coordinators, so that they could distribute it to the students in their speech-language pathology graduate programs. The clinical coordinators then provided the researcher with names and contact information of students who were interested in participating in the study. Then, the researcher contacted interested participants to schedule the first interview. At this time, the researcher also informed the participants that they should bring a copy of their transcripts and the records of their accrued clinical hours with them to the first interview session. This helped to ensure that the participants could more accurately recall courses that they completed in the past, as well as more accurately estimate the number of clinical hours they earned across various areas of speech-language pathology. The participants were required to have this information readily available for certain aspects of the data collection process, namely completing a brief survey/questionnaire prior to the initial face-to-face interview. Interested participants were considered if they experienced the phenomena that the researcher sought to describe, and if they met the inclusion and exclusion criteria listed below. The

researcher's goal was to recruit six to ten participants (three to five participants from each site) for this study (Creswell, 2007; Polkinghorne, 1989).

Participants were required to meet the inclusion and exclusion criteria prior to their inclusion in the study. To be included in the study, participants were to: (1) be currently enrolled in a graduate speech-language pathology program, (2) have completed at least one externship placement as per the requirements of their respective graduate program, (3) have hearing sufficient to participate in the interview process, (4) be competent in English, and (5) have completed their undergraduate degree and/or speech-language pathology pre-requisite courses at the same university where they were currently enrolled in a graduate speech-language pathology program. This fifth criterion was added to ensure that all participants from West Welton University and Lone Lake University were each held to the same standards and requirements for their undergraduate and graduate studies at their respective universities.

Participants were excluded from this study if they: (1) had a hearing loss that may have interfered with participation in a semi-structured interview, (2) had not completed at least one required externship placement, and (3) had not completed their undergraduate degree and/or speech-language pathology pre-requisite courses at the same university where they were currently enrolled in a graduate speech-language pathology program.

### **Context of the Study**

The speech-language pathology graduate programs at West Welton University and Lone Lake University were quite different in terms of expectations for in-house clinic and externship placements, and in terms of the students' typical progression through the graduate program. For the purposes of this study, an *internship* may be



defined as a clinical experience that takes place within the university that the graduate student attends. An in-house clinic experience may be considered to be an internship. An *externship* may be defined as a clinical experience that takes place outside of the university that the graduate student attends.

*West Welton University*

In addition to coursework, during undergraduate studies in speech-language pathology, all students complete 25 clinical observation hours and two semesters of an in-house clinical experience during their senior year. During these semesters, the students are responsible for two to three adult or pediatric clients in the university's speech-language pathology clinic with guidance from a clinical supervisor. The number and type of clients that is available to the students during the in-house clinical experiences depends upon the particular clients within the community who require speech and language services during a given semester.

It should be noted that one participant, speech-language pathology student eight (SLP 8) from West Welton University was not a speech-language pathology (communication disorders) major during her undergraduate years. This student was required to complete three semesters of pre-requisite courses, totaling seven courses and 21 credit hours. All pre-requisite courses were completed online, and were required before this student was permitted to participate in the first two semesters of the in-house clinical experience.

During graduate school, the students complete three semesters of clinical experiences. During the first semester of graduate school, one half of the graduate class completes an externship in a school setting (preschool, elementary school, junior high

school, or high school). Simultaneously, the other half of the graduate class completes another semester of an in-house clinical experience. The in-house clinical experience in graduate school is more intense than the in-house clinical experience that occurs in the undergraduate program; the students are responsible for three to four adult or pediatric clients with guidance from a clinical supervisor.

During the second semester of graduate school, the students “switch” their clinical experiences. Those students who were in a school setting move to the in-house clinical setting, and those who were in the in-house clinical setting move to a school setting. The final clinical experience is an externship in a medical/rehabilitation setting (rehabilitation hospital, acute care hospital, skilled nursing facility, pediatric hospital, etc.).

All in-house clinical experiences range from 12-16 weeks, depending on the length of the academic semester in which the in-house clinical experience is being completed. All externships may range from nine to sixteen weeks, depending on whether the students are at their externship sites on a full-time or part-time basis. The students’ externship placements are determined based on the number of students that participating sites are accepting during a given semester, and on how many students that a participating site can realistically supervise during a given semester. Students’ preferences (location of site, students’ interest in specific clinical settings, etc.) are taken into account as much as possible. At West Welton University all coursework and clinical experiences are completed simultaneously throughout the entire graduate program.

*Lone Lake University*

All participants from Lone Lake University were not speech-language pathology majors during their undergraduate years at the university. Hence, all participants from

Lone Lake University were required to complete pre-requisites for the speech-language pathology graduate program. Pre-requisite coursework consisted of approximately 30 credits, depending upon courses already completed during undergraduate studies that were able to be credited to the speech-language pathology graduate program. All students entering the speech-language pathology graduate program are required to complete at least 25 hours of clinical observation across varied areas and populations of speech-language pathology. At Lone Lake University, no additional clinical experiences other than clinical observation are required prior to entering the graduate program.

During graduate school, the students complete four semesters of clinical experiences. All clinical experiences are considered to be externships because they are completed outside of the university. Lone Lake University does not have an in-house speech-language pathology clinic. This university is located in a city that has several public schools, hospitals, specialty hospitals, private practices, and skilled nursing facilities. With the availability of these resources, it was difficult to maintain adequate clientele in the university clinic. In addition, there are a multitude of clinical sites that are located in relatively close proximity to the university that can accommodate students for their clinical experiences.

The first externship is referred to as a “mini practicum”. This type of externship is called a “mini practicum” because it is completed over a shorter period of time. Most externships are completed over the course of eight to twelve weeks. The “mini practicum” is completed in a public school setting on a part-time basis over the course of four to five weeks. The second externship is completed over eight to twelve weeks on a full-time basis and is completed in a medical setting (rehabilitation hospital, acute care

hospital, skilled nursing facility, pediatric hospital, etc.). The third and fourth externships are also completed over eight to twelve weeks on a full-time basis. These externships usually take place in a medical setting, and may involve experiences with an adult and/or pediatric population based on the students' interests and the availability of sites during that particular semester.

During the fourth externship placement (the semester prior to graduation) the students have the option to complete the externship outside of the general area of the university, or even out-of-state if they so desire. At Lone Lake University, coursework and clinical experiences are completed simultaneously throughout the graduate program until the last semester. No courses are taken during the last semester of graduate school, allowing the students to gain out-of-town or out-of-state clinical experiences if they so desire.

**Table 3.1*****Comparison of Graduate Programs***

	West Welton University	Lone Lake University
Pre-requisite requirements	21 credit hours (online courses)	Approximately 30 credit hours
Undergraduate clinic requirements	25 hours clinical observation + 2 semesters of in-house clinic	25 hours clinical observation
Semesters of in-house clinic/internships	2 (undergraduate) 1 (graduate)	No in-house clinic at this university
Semesters of externships	3	4
Length of clinical experiences	12-16 weeks	4-12 weeks
Coursework and clinical experiences	Taken simultaneously throughout graduate program	Taken simultaneously until last semester of graduate school

## **Participants**

A total of eight participants were recruited for this study; five participants were recruited from West Welton University and three participants were recruited from Lone Lake University. Each participant was assigned a label of “SLP” (speech-language pathologist) and a participant number (1 through 8). All participants who were recruited for this study participated in the initial interview, as well as all necessary follow-up interviews.

SLP 1 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. At the time of data collection, she had completed her first eight-week externship at a middle/junior high school and was currently completing a second externship in a medical/rehab setting.

SLP 2 was a 22-year old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 21 and began her graduate studies later that same year. At the time of data collection, she had completed her first nine-week externship at an elementary school and was currently completing a clinical internship at the university’s in-house speech-language pathology clinic.

SLP 3 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. At the time of data collection, she had completed her first eight-week externship at a preschool and was

currently completing a clinical internship at the university's in-house speech-language pathology clinic.

SLP 4 was a 30-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Fine Arts (B.F.A.) degree in Fine Arts/Theatre at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 28. At the time of data collection, she had completed her first 12-week externship at an elementary school and was to begin a second externship in a medical/rehab setting within two to three weeks.

SLP 5 was a 28-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Arts (B.A.) degree in English Literature at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 26. At the time of data collection, she had completed her first 8-week externship at an elementary school and was to begin a second externship in a medical/long-term care setting within two to three weeks.

SLP 6 was a 23-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Science (B.S.) degree in Finance at age 21 and began her graduate studies/prerequisite courses in speech-language pathology at age 22. At the time of data collection, she had completed her first 10-week externship at an elementary school and was to begin a second externship in a medical/private practice setting within two to three weeks.

SLP 7 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. At the time of data

collection, she had completed her first 9-week externship at a skilled nursing facility (nursing home) and was currently completing a second externship in a medical setting (pediatric hospital).

SLP 8 was a 28-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Arts (B.A.) degree in Public Relations at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 27. At the time of data collection, she had completed her first 8-week externship at an elementary school and was currently completing a second externship in a preschool setting.

### **Participant Rights and Ethical Considerations**

Prior to initiation of the protocol, the proposed study was submitted to the IRB at the University of Kentucky for review and approval; approval was obtained on February 8, 2012. It should also be noted that an extension of the protocol was granted on February 4, 2013 (Appendix A). Prior to data collection, the principal investigator completed Collaborative Institutional Training Initiative (CITI) and was therefore qualified to obtain informed consent and to participate in the data collection portion of this study. The principal investigator was also knowledgeable about the basic background information of the study, the set-up of the interview environment, the procedures of the semi-structured interview (Appendix C), the audio-recording of the interviews, and the maintenance of confidentiality of collected data.

No deception was utilized in any part of this study. The participants were fully aware of the ways in which all information was to be utilized. There are no harmful effects identified for participating in this study. When the researcher interacted with



participants, she emphasized open conversation to build trust and rapport with the participants. Privacy issues were discussed with the clinical directors at West Welton University and Lone Lake University, and permission was obtained to conduct the study. The researcher informed the participants individually before each interview of the steps that would be taken to ensure that confidentiality was maintained throughout the study. Real student names were not presented in any part of the study.

All data were kept confidential. Only the researcher had access to the identity of the participants. The researcher collected and kept the recorded data from each site participating in this study. Informed consent forms, audio-recordings, and transcripts were maintained in a secure and/or locked location. A participant log was generated that contained the participant's name, age, and other pertinent demographic information. Each participant was given a participant number, which was also included in the participant log. All data and other collected information included only the participant's number. Identifying information was not kept with the transcripts, informed consent forms, or audio-recordings.

The informed consent included information that each participant needed to be made aware of before agreeing to take part in the study. The informed consent outlined important information such as: the purpose of the study, what participants would be asked to do, benefits and risks of participating in the study, the confidentiality of participant information, and contact information for the principal investigator and for the Office of Research Integrity at the University of Kentucky (Appendix D).

The informed consent also included information regarding rewards for taking part in the study. Each participant was informed that they would receive a monetary reward

(in the form of a \$25 gas card) for taking part in the study. Each participant was also informed that in order to receive the reward, they must participate not only in the initial interview, but in the one to two follow-up interviews as well. It was the intention of the researcher that this incentive would aid in the prevention of attrition and help to increase the likelihood that all participants would participate in one to two follow-up interviews as needed. The researcher obtained informed consent from each participant prior to administering the survey/questionnaire, and beginning the first interview.

## **Data Collection**

### *Semi-Structured Interviews*

In-depth interviews are vital to a phenomenological design and can exist in various forms: formal interviews, informal conversation, creative interviewing, and open-ended (McMillan & Schumacher, 2001). Within a phenomenological design, data collection very often consists of in-depth interviews, as well as multiple interviews with each participant (Creswell, 2007). Other forms of data may also be collected, such as observations, taped conversations, formally written responses to relevant questions, and descriptions of vicarious experiences (Creswell, 2007; vanManen, 1990).

The primary interview method that was used for this study was semi-structured interviews. In this method of interviewing, a set of interview questions developed by the researcher were used; however, the questions were worded in a flexible manner, and some interview questions were more structured than others (Marshall & Rossman, 2006; Moustakas, 1994). The semi-structured interviews were used to aid the researcher in establishing a conversation with the participants regarding their experiences, and to develop an understanding of the lived experience of the participants. Although a semi-

structured interview consists of a list of specific questions to be answered, the semi-structured format allows the interviewer the flexibility to alter the sequence of questions, or to probe for more in-depth responses as deemed appropriate by answers and comments of the participants (Merriam, 1998). When using a phenomenological design, it is customary for the researcher to ask the participants two broad, general questions. Other open-ended questions may also be asked; however, the two broad, questions are meant to focus the data collection procedures so that the researcher may ultimately understand the common experiences of the participants (Moustakas, 1994). In this study, the researcher deviated slightly from the phenomenological design; the participants were asked three broad questions. Other open-ended questions (sub-questions) were also asked, but the three broad questions were intended to aid the researcher in gathering data that lead to a detailed, textural description of the phenomenon being studied (Creswell, 2007; Moustakas, 1994).

All interviews were conducted in a private setting that was natural to the participants (e.g., individual therapy room, private office, conference or meeting room). All interviews were audio-recorded and lasted for 45 minutes to one hour. The researcher collected and kept all recorded data confidential. The first interview session began with a brief reiteration of the purpose of the study. Prior to any data collection procedures, informed consent (Appendix D) was obtained by the researcher after the potential participant was fully informed via verbal and written information of the nature of the research, the risks involved, and their rights as a research participant.

Instructions were given at the onset of the interview and followed a protocol similar to the following: “We are going to have a conversation for about 45 minutes. We

are going to talk about your clinical training and supervision and how they affected the experiences that you had during your first externship placement(s). Feel free to give lots of examples and descriptions about this topic because I'm interested in your opinions and experiences.”

During the semi-structured interviews, participants were invited to express their opinions and experiences regarding their clinical training and supervision during their graduate program, significant experiences regarding their clinical training and supervision, significant experiences regarding their first externship placement(s), difficulties faced during their clinical training and during their first externship placement(s), and positive experiences during their clinical training and during their first externship placement(s). Participants were encouraged to offer narratives, anecdotes, and descriptions of these topics. When additional elaboration was needed, participants' responses were followed up by the researcher with additional questioning or probing, including: “Can you expand on what you just said?” and “Tell me more about that.” The researcher provided as little interjection as possible and introduced a new topic only when the participant had finished answering the question or finished responding to a probe. The interview questions were developed by reviewing pertinent literature, and through personal experiences. The protocol for the semi-structured interview was developed by the researcher in consultation with dissertation committee members who are experienced with similar research methods.

The grand tour question for this study is: “How do speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements?” Sub-questions were

formulated to address the grand tour question. The sub-questions include: 1) Describe the clinical supervision you received during your clinical training at your university. 2) What aspect(s) of clinical training best prepared you for your first externship placement? 3) What would have helped you to be more prepared to enter your first externship placement? Additional sub-questions emerged as the study progressed (Appendix C).

Initial face-to-face interviews were conducted with the participants between March 2012 and May 2012 and were scheduled at the convenience of the researcher and participants. Initial face-to-face interviews were completed over the course of 45 minutes to one hour. The initial face-to-face interviews and follow-up interviews were intentionally scheduled in order to collect the most accurate data to answer the research questions. All interviews were scheduled during a semester when the participants had completed at least one externship placement. The researcher did not want to interview graduate students who had completed all graduate clinical experiences and coursework. In this way, the participants were able to draw on experiences from both their clinical and coursework experiences at the university, as well as experiences at their externship(s). However, the students were not so far removed from their university experiences that they had difficulty recalling relevant information from specific time periods in their graduate training.

Prior to beginning the interview each participant was also administered a survey/questionnaire. The survey instrument will be discussed in a subsequent section of this chapter. Following the initial interview, follow-up face-to-face interviews were scheduled with each participant in order to gain more in-depth information, or to gain further clarification of data collected during the initial interview. During the follow-up

interviews no time was needed to complete the survey instrument, as the survey was completed by the participants prior to the first interview. Follow-up interviews were conducted with the participants between April 2012 and June 2012 and were scheduled at the convenience of the researcher and participants.

### *Survey Instrument*

Prior to beginning the interview each participant was also administered a survey/questionnaire. A cover letter accompanied the survey and briefly described the items included in the survey, indicated a length of time for completion, and included contact information for the researcher (Appendix E). The survey provided the investigator with demographic information, information about the nature of the participants' graduate program and externship placement(s), and previous experience with speech-language pathology prior to entering the graduate program. It was not the intent of this study to analyze the survey results in a quantitative manner. Most importantly, the participants were asked to rate their own knowledge and clinical skills for working with clients across different areas of speech-language pathology practice. The personal perception of one's own knowledge and skills is an important construct that will be examined through the use of the survey/questionnaire.

An individual's self-efficacy, or the personal perception of one's own abilities and behaviors is an important aspect of social cognitive learning theory. An individual's sense of self-efficacy can be crucial in affecting how one approaches goals, tasks, and challenges. The concept of self-efficacy is central to Bandura's social cognitive theory, which highlights the role of observational learning and social experience in the development of personality and behavior (Bandura, 1977). It may be said that self-

efficacy is the personal perception of one's behavior in the external environment. According to Bandura's theory of self-efficacy, those individuals with high self-efficacy—those who believe they can perform well in a given situation—are more likely to have a desire to master a difficult task, rather than avoid it (Bandura, 1988; Miller & Dollard, 1941; Mischel & Shoda, 1995).

After obtaining informed consent, the survey was administered in person by the researcher during the first face-to-face interview meeting. A personal interview method of data collection was utilized with the administration of the survey instrument. The participants completed this paper survey in the presence of the researcher/interviewer. By utilizing the personal interview method of data collection, the presence of the interviewer influenced the amount of control the participants had over the delivery order of the survey questions, helped to ensure that clarification regarding the completion of the survey was able to be provided by the researcher as needed, and also increased the level of social interaction and rapport that the researcher had with the participants (Dillman, D.A., Smyth, J.D., & Christian, L.M., 2009). Though the interviewer was present, the survey was self-administered; the respondents answered the survey items at their own pace, but were instructed to answer the surveys items in the order in which they were visually presented on paper.

The development of the survey was loosely based on the survey developed by Kelly et al. (1997), entitled *Academic and Clinical Preparation and Practices of School Speech-Language Pathologists with People Who Stutter*. Their survey was developed from a series of interview responses. Five speech-language pathologists in Lafayette and West Lafayette, IN were initially interviewed about their academic and clinical

preparation, current clinical practices, and perceived clinical competence for working with those who stutter. Their responses to several open-ended questions were used to develop a survey. The authors also adapted and utilized selected items from questionnaires developed by Mallard et al. (1988) and Curlee (1985) to assess clinical training in the area of stuttering (Curlee, 1985; Mallard et al., 1988). For this dissertation study, many survey items were completely omitted; many survey items were not applicable for this study. For example, specifics about the participants' caseloads were not applicable, as the participants were still graduate students without a working caseload.

The survey largely consists of closed-ended questions, which allowed participants to answer questions pertaining to demographic information, indicate their educational degrees, the number of courses they have taken in specific areas, the number of clinical training hours they have accrued, and the type of site(s) where they completed their previous externship placements. Closed forms allow for more specific answers, call for less interpretation from researchers, and improve the ease of data collection. Closed forms include ranked items, check lists, and response scales (J. H. McMillan & S. Schumacher, 2010).

The survey also included rating scale items, which asked participants to rate their own knowledge and clinical skills in the diagnosis and treatment in various areas of speech-language pathology on a Likert-type scale ranging from 1 to 5. The literature indicates that it is beneficial to include both numeric and verbal labels on a response scale. Respondents rely on the labels of a response to determine how to accurately answer each question using a response scale. Providing labels for the response scale allows the



respondents to create meaning for the scale points (Klockars & Yamagishi, 1988). For any scale to have meaning, it is necessary to have the endpoints of a scale labeled at a minimum. Numeric labels are used to give value to the response scale to identify intensity. Utilizing numeric labeling can be more precise and less complex than verbal labels (Krosnick & Fabrigar, 1997). Although numeric labels help to provide a value for the components of the scale, research has shown that creating an effective response scale requires the use of appropriate verbal labels to clearly define the range of responses. Respondents have found that verbal labeling is a more natural and easy way to express their beliefs or opinions (Krosnick & Fabrigar, 1997).

The survey instrument (Appendix F) consisted of four major sections which were clearly delineated by a heading at the top of each new section. The first section of the survey consisted of seven items that relate to the participants' degree of knowledge. These items asked the participants to rate their degree of knowledge for working with clients in various areas of speech-language pathology (aphasia, fluency disorders, motor speech disorders, articulation/phonological disorders, cognitive disorders, voice disorders, and swallowing disorders). The participants were to indicate their degree of knowledge on a response scale, ranging from 1 to 5. An indication of "1" coincides with "least knowledge", and an indication of "5" coincides with "most knowledge". For each area of speech-language pathology the participants were asked to rate their degree of knowledge before beginning their first externship placement, after completing their first externship placement, and currently.

The second section of the survey consisted of seven items that related to the participants' clinical skills. These items asked the participants to rate their clinical skills

for working with clients in various areas of speech-language pathology (aphasia, fluency disorders, motor speech disorders, articulation/phonological disorders, cognitive disorders, voice disorders, and swallowing disorders). The participants were to indicate their clinical skills on a response scale, ranging from 1 to 5. An indication of “1” coincides with “complete supervision”, and an indication of “5” coincides with “independent”. For each area of speech-language pathology the participants were asked to rate their clinical skills before beginning their first externship placement, after completing their first externship placement, and currently.

The third section of the survey gathered information regarding the participants’ education and clinical training. The first item in this section asked the participants to indicate the degree(s) they have, the field of study in which they hold a degree, and the date the degree was earned/expected date. The participants were also asked to indicate the number of courses that they had taken at the Bachelor’s and Master’s level in various areas of speech-language pathology (aphasia, fluency disorders, motor speech disorders, articulation/phonological disorders, cognitive disorders, voice disorders, and swallowing disorders). The third item in this section required the participants to estimate the number of clinical training hours they received in graduate school, at their first externship placement, and at their second externship placement in the diagnosis and treatment of clients across various populations (aphasia, fluency disorders, motor speech disorders, articulation/phonological disorders, cognitive disorders, voice disorders, and swallowing disorders). For each of these areas the participants were asked to indicate the estimate of diagnostic and treatment hours (less than 10, 10-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, 91-100, greater than 100). The last item in this section asked participants to

indicate the type of clinical setting of their externships (preschool, elementary school, middle/junior high school, high school, acute care, skilled nursing facility, rehab hospital, other). The participants were asked to indicate the number of placements that they had in each type of setting, and to indicate for how many weeks the placement lasted.

The final section of the survey gathered demographic information. The participants were asked to indicate their age, gender, their age when they earned their Bachelor's degree, and their age when they began working on their Master's degree. Throughout the survey when participants were asked to indicate their knowledge, clinical skills, etc. at different points in time, these items were presented in chronological order; the participants were asked to think about a time that happened first, second, and then last chronologically.

#### *Informal Field Testing of the Survey Instrument*

The survey instrument underwent informal field testing with a convenience sample of three speech-language pathology graduate students who were completing their second or third externship placement of their graduate program at a rehabilitation hospital in the same mid-western state in which interview data was collected. All participants verbalized their interest in participating in the field testing of the survey to the researcher. The participants completed this paper survey in the presence of the researcher/interviewer. The field testing was completed over the course of one to two weeks, during 30 minute sessions at the participants' and researcher's convenience. The cover letter (Appendix E) and informed consent document (Appendix D) were also included to ensure that presentation and wording of these documents was clear and concise. The field testing sample represents 37.5% of the final sample.

**Table 3.2**

*Field Testing Sample*

Population	West Welton University	Lone Lake University	Total	Field Testing
SLP graduate students	4	4	8	3

### *Cognitive Testing/Interviews*

When designing this survey instrument, the researcher utilized cognitive interviews as a mode of testing individuals items included in the survey. Cognitive interviewing is an acceptable method of determining whether respondents will be able to comprehend the survey items as intended, whether the items will be answered accurately, and whether respondents can navigate through the survey correctly (Dillman, Smyth, & Christian, 2009; Forsyth & Lessler, 1991). One clinical supervisor, and two licensed/certified speech-language pathologists who are employed at a rehabilitation hospital were asked to participate in cognitive interviews related to the survey instrument. The two licensed/certified speech-language pathologists were recent graduates from their Master's programs (May 2011). Cognitive interviews were conducted individually between the researcher and each of the three therapists being interviewed.

The individuals who participated in the cognitive interviews were given a paper copy of the survey instrument and were asked to respond to the survey items in the presence of the researcher. More specifically, the researcher instructed the therapists to “complete the survey while telling me everything you are thinking as you read each item and give me your answer” (Dillman et al., 2009). The therapists were also instructed to 1) “think out loud” as they went through the survey from start to finish, 2) tell the researcher what they thought the item/question was asking, and 3) form the answer to the question out loud. The researcher probed further as needed in order to understand how each survey item was being interpreted, and if the survey item was being interpreted as intended.

Per the feedback from the cognitive interviews, the researcher made changes to the visual formatting of the survey instrument. Each of the first three sections of the

survey instrument was moved so that they each began on the top of a new page. In section three, each of the items for the various areas of speech-language pathology were placed in a box/table for better visual organization. No other clarification was needed regarding wording of survey items and questions.

### *Results of Field Testing of Survey Instrument*

No changes needed to be made regarding the allotment of time for completion of the survey instrument; the three participants were able to complete the survey within 15 to 20 minutes. In the dissertation study, semi-structured interviews were conducted with all participants. Due to this, the “additional comments” sections were removed from the survey instrument since the researcher was able to collect open-ended responses during the interviews. Since the survey instrument asked the participants to recall past information regarding their education and clinical training, the participants were instructed to bring documentation with them to the interviews, which helped them to more accurately complete the survey instrument. The participants were instructed to bring their transcripts with them so that they were able to more accurately recall courses that they had taken in the past. In addition, they were instructed to bring documentation of their accrued clinical hours so that they could more accurately estimate the number of hours they had earned across various areas of speech-language pathology.

Through completing the informal field testing, it was also determined that changes should be made to the overall inclusion/exclusion criteria of the full dissertation study, so that all participants were held to the same standards and requirements for their undergraduate and graduate studies at their respective universities. Participants were required to be (1) currently enrolled in a graduate speech-language pathology program,

(2) have completed at least one externship placement as per the requirements of their respective graduate program, (3) have completed their undergraduate degree and/or speech-language pathology pre-requisite courses at the same university where they were currently enrolled in a graduate speech-language pathology program. This third criterion was added to ensure that all participants from West Welton University and all participants from Lone Lake University had each been held to the same standards and requirements for their undergraduate and graduate studies at their respective universities.

### **Data Analysis**

Data was analyzed by the researcher over a period of approximately two to three months (July 2012-September 2012). Data analysis utilized several related strategies including: a literal analysis of the exact data, an interpretive analysis of what the researcher thought the data meant, and a reflexive analysis, which emphasized the researcher's role in the data interpretation (Creswell, 2007). Data analysis began during the face-to-face interviews with the participants; the researcher listened to the verbal responses, and also utilized sub-questions and formulated follow-up questions as needed. Following the interviews (usually within a few hours) the researcher listened to the audio recordings several times and took notes. During each interview the researcher took field notes of facial expressions, vocal inflections, gestures, and any additional factors that may have aided the researcher in understanding the comprehensive meaning of the responses provided.

Data from the semi-structured interviews (audio files) were transcribed by a professional transcriptionist verbatim. The interview transcripts and field notes were filed under the participant number. An inductive and constant comparative process of data

analysis was used. The researcher: a) conducted interviews; b) reviewed the responses from the participants; c) examined the interview transcripts while concurrently reviewing pertinent literature; and d) found connections between previous findings and the theoretical framework, and participants' responses. By utilizing a constant comparative process of data analysis the researcher was able to gain a more global sense of the participants' responses and how they related to the overall purpose of the study (Creswell, 2007).

Qualitative coding software (Nvivo) was utilized to aid in the organization of the data. Data was analyzed using a psychological phenomenological method (Moustakas, 1994; Polkinghorne, 1989). The researcher read through the data from the interview transcriptions and underlined or highlighted specific statements, sentences, or quotes that helped to explain how the participants experience the phenomenon being studied. This process is referred to as horizontalization (Moustakas, 1994). From the specific statements, sentences, or quotes the researcher then developed "clusters of meaning" (Creswell, 2007a, p. 61). By examining the "clusters of meaning", the researcher was able to detect patterns and relationships in the data. In turn, patterns and relationships in the data were used to organize the data into two over-arching themes. The data in each theme were further organized into more specific categories. The researcher then utilized the themes and categories to write a detailed description of what the participants experienced. This is known as a "textural description" (Creswell, 2007a, p. 61). The themes were also used to write an explanation of the context that may have influenced how the participants experienced the phenomenon in question. This is known as a "structural description" (Creswell, 2007a, p. 61).



Lastly, the researcher employed the textural and structural descriptions to write a thick, rich description that presents the “essence” of the phenomenon being studied. This thorough description emphasizes the common experiences of all the study participants and will enable the reader to understand what it is like for someone to experience the phenomenon in question (Polkinghorne, 1989). The description or essence of the phenomenon was related to relevant theories and literature, so as to best answer the significant research questions of this study. Finally, data findings were displayed in the form of charts, tables, graphs, and/or diagrams to more easily draw conclusions from the data (Wolcott, 1994).

### **Reliability and Validity**

Reliability and validity of the results of this study was an ongoing process and was considered through each step of the study. Within a qualitative paradigm, reliability is defined as the consistency and dependability of the data that is collected during the study (Guba & Lincoln, 1988). Within the qualitative research paradigm, reliability often refers to the stability of the responses of multiple individuals analyzing a data set (Creswell, 2007; Silverman, 2005). This particular practice of reliability is extremely beneficial within the qualitative paradigm, as it provides external checks on data analysis processes that are largely based on researcher interpretation. Specific procedures for these reliability measures are somewhat lacking in the literature. For example, it is not specified as to whether multiple individuals should seek agreement of data based on codes, themes, or both codes and themes. Certainly, there is much flexibility in the process of inter-rater reliability within a qualitative paradigm. Therefore, it is suggested that the researcher determine a more precise approach that coincides with their resources

and timeframe in which they have to complete their research (Armstrong, Gosling, Weinman, & Marteau, 1997).

For this study, the researcher chose to complete inter-rater reliability of the data at the category level. From the transcribed interviews, the researcher highlighted specific statements, sentences, or quotes which were used to develop “clusters of meaning”. By examining the “clusters of meaning”, the researcher was able to detect patterns and relationships in the data. In turn, patterns and relationships in the data were used to organize the data into two over-arching themes. The data in each theme were further organized into more specific categories. After these categories within the two larger themes had been determined, the researcher implemented procedures to complete inter-rater reliability.

Three speech-language pathologists, who have experience conducting research using a qualitative paradigm agreed to participate as external raters for this study. The three external raters were given the same verbal instructions, and were also given identical documents that contained the names of the themes and categories. The inter-rater reliability procedures were completed in a face-to-face setting with the researcher, and were completed with one external rater at a time. The researcher provided each of the external raters with a document that contained the names of the two large, over-arching themes and the names of the nine categories that were being used to organize the data. The three external raters were instructed to closely examine the nine categories and place them into one of the two larger themes by writing the name of the category underneath the appropriate theme. The researcher strived to establish an 80% agreement between

herself and the three external raters; an 83% agreement was achieved (Miles & Huberman, 1994).

The validity of the study was strengthened by triangulation; multiple sources, methods, and theories were utilized (Creswell, 2007). Data gathered from multiple sources were constantly compared and analyzed; this enhanced the validity and reliability of the data by ensuring that the researcher developed complete interpretations of the study data. Validity was also enhanced by keeping field notes throughout the research process, as well as by participating in review and reflection with the researcher's dissertation adviser. The researcher employed the views of the participants to ensure credibility of the findings and interpretations of the findings. This technique is known as member checking and is regarded to be a critical technique for maintaining credibility when utilizing a qualitative design (Lincoln & Guba, 1985). The participants, setting, and phenomena of this study are presented with thick, rich description. Through detailed description, the readers will be more able to transfer and apply the findings of this study to other settings, as appropriate (Lincoln & Guba, 1985; S. Merriam, 1988).

#### *Theory Grounded in Data*

The aim of a study conducted using a phenomenological design is to describe an event or phenomenon from the perspective of participants who have experienced it. Therefore, the resulting theory that emerges from the research study is grounded in data. Grounded theory requires detailed accounts of a specific phenomenon. Grounded theory focuses on broad, general questions that address what the participants experienced, why the participants think they experienced it in the context that the experience occurred, and what meaning that the participants attached to the experience (McMillan & Schumacher,

2010). Those that were interviewed were provided with a printed copy of the transcribed interviews. By reviewing the transcripts, each participant had the opportunity to ensure the accuracy of the information that they provided during the initial interview. Through this process, the researcher also had the option to collect additional data as the participants completed their previous thoughts and/or had the chance to recollect additional relevant information.

In order to develop a grounded theory, the researcher collected data from semi-structured interviews and then utilized a constant comparative method when analyzing data. Once the data themes and categories were completely saturated, the researcher developed a description of the “essence”, and provided specifics about the consequences that influenced the phenomenon (McMillan & Schumacher, 2010).

It should be noted that the results of studies that utilize a phenomenological design do not typically generalize well. Instead, this design aims to expand the understanding of the phenomenon being studied to similar situations. Thus, the findings of a study conducted using an exploratory phenomenological design may be able to be applied to future studies, future practice, or to the generation of theoretical explanations of issues and events. In addition, the findings may be used to guide future studies with similar research questions, and to provide an overall explanation and general understanding of the phenomenon (McMillan & Schumacher, 2010).

### **Role of Researcher/Researcher Bias**

As the principal investigator, I cannot remain completely unbiased due to my past experiences as a speech-language pathology graduate student. I graduated from an American Speech-Language-Hearing Association (ASHA) accredited speech-language

pathology graduate program in 2007 and am currently practicing as a certified speech-language pathologist in a home care setting. I also currently serve as an adjunct faculty member at a university in the North-Eastern region of the United States and am assigned to teach graduate-level distance learning courses. These experiences gave me preconceived notions about possible responses during the semi-structured interviews. As the primary researcher for this study, I acknowledge the existence of these biases. By being aware of these biases, they were less likely to influence my observations during interactions with participants, and less likely to influence the analysis of the data.

### **Limitations of the Study**

There were a limited number of participants in this research study, which utilized an exploratory phenomenological design. All participants did not have similar levels of background and experience regarding their graduate clinical training. Differences that exist among the participants in terms of years in school, nature of the graduate program, and previous experiences in the field of speech-language pathology may have had an effect on the data that were collected. Information regarding background and experience with these elements was collected from each participant, so as to more closely examine any effects that prior experiences may have had on the data.

In addition, all participants did not have similar demands, expectations, or externship placements as they were enrolled in two different universities. Each graduate program also had different requirements in terms of hours of participation in various clinical areas regarding both evaluation and treatment. Information regarding these requirements was collected from each participant and from each graduate program, so as

to more closely examine any effects that different requirements may have had on the data.

The questionnaire/survey for this study was developed by the principal investigator along with other experienced consultants; hence, there is no validity or reliability data for this tool as of yet. The tool was designed to enhance the study by providing demographic and background information of the study participants, as well as detailed information regarding their clinical coursework and experiences in speech-language pathology.

### **Summary**

The purpose of this study was to understand and describe how speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements. This chapter presented a description of the research methodology that was utilized in this study. This chapter included information regarding the purpose of the study, specific research questions of this study, the rationale for the use of a qualitative paradigm, the research design, a description of the research participants, participant rights, data collection, and data analysis. The conclusion of this chapter included an explanation of the role of the researcher, and the limitations of the study.

## CHAPTER FOUR: RESULTS

This chapter presents the results of the dissertation research study. In collecting data the researcher used a sequence procedure that included a brief survey, which was administered immediately before the first interview. A follow-up interview was also conducted with each participant on a later date. The researcher provides a background summary of individual participants including: a) information regarding their experiences in different clinical areas of speech-language pathology, b) information regarding the self-rating of knowledge and skills in different clinical areas of speech-language pathology, and c) relevant information that was obtained through field journaling by the researcher. These data may prove useful to both orient the reader to this study, but also to inform future studies regarding the nature and characteristics of the population studied by illuminating important factors that contributed to the data collection process.

Next, results of the study are organized under the structure of two over-arching themes: supervision and clinical experiences. Several categories related to each theme are presented that help depict participant perspectives in greater detail. The theme of supervision includes five categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors. In addition, the theme of clinical experiences includes four categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework. Direct quotes from individual interviews are utilized to support a descriptive narrative of each theme and related categories. Consequently, the rich, descriptive narrative of each theme is intended to

reconstruct the lived experience of the participants and thus better understand the phenomena under investigation.

### **Summary of Individual Participant Backgrounds**

Prior to beginning the interview each participant was administered a survey/questionnaire. The survey provided the investigator with demographic information, information about the nature of the participants' graduate program and externship placement(s), and previous experience with speech-language pathology prior to entering the graduate program. Most importantly, the participants were asked to rate their own knowledge and clinical skills for working with clients across different areas of speech-language pathology practice. The following summaries of individual participant backgrounds present information derived from the survey/questionnaire that each participant completed prior to the initial face-to-face interview. Other information related to individual participant backgrounds was also gleaned from the researcher's field notes.

#### *SLP 1*

SLP 1 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. Before the interview began, I made it clear to the participant that all recorded information would be kept private and confidential. SLP 1 stated that she was "relieved to learn that anything she said would not go beyond this room". She seemed to be reassured and subsequently answered interview questions with confidence and candor. The participant indicated that in her clinical training thus far she had gained the most experience with the diagnosis and treatment of adult language disorders (aphasia) and articulation/phonological disorders.



She had not yet had a chance to work with many clients with motor speech disorders (dysarthria), cognitive deficits, voice disorders, and swallowing disorders (dysphagia). She felt that she had the most degree of knowledge and clinical skills for working with clients with articulation/phonological disorders, and that she knew the least about working with clients with swallowing disorders (dysphagia).

### *SLP 2*

SLP 2 was a 22-year old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 21 and began her graduate studies later that same year. The questionnaire was completed prior to beginning the interview. As she was completing the questionnaire, she informed the researcher that “she might rate herself higher in the knowledge section” not because she had had these experiences in her externship, but because she was currently taking courses in those specific areas of speech-language pathology.

The initial interview with SLP 2 was conducted on the same day as the initial interview with SLP 1. SLP 2 stated that she was “excited” to participate in this interview because she had “a lot of thoughts to share”. She would often pause and seemed to give a lot of thought to the interview questions before responding. She did not hesitate to ask for clarification if she did not fully understand the nature of a particular interview question. When the researcher provided clarification, SLP 2 continued with her answer. She felt that she had the most experience with the diagnosis and treatment of adult language disorders (aphasia) and articulation/phonological disorders. She felt that she had limited experience in several areas of speech-language pathology: fluency disorders (stuttering), motor speech disorders (dysarthria), cognitive deficits, voice disorders, and

swallowing disorders (dysphagia). At the time of data collection, SLP 2 felt most confident working with clients with adult language disorders (aphasia) and articulation/phonological disorders, since she had the most experience in these areas. She thought that her knowledge for working with clients with motor speech disorders (dysarthria), cognitive deficits, and voice disorders was lacking in comparison to other areas of speech-language pathology. Her clinical skills for working with clients with motor speech disorders (dysarthria), cognitive deficits, voice disorders, and swallowing disorders (dysphagia) were minimal, since she did not have a lot of clinical experience in these areas.

### *SLP 3*

SLP 3 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. The initial interview with SLP 3 was conducted on the same day as the initial interviews with SLP 1 and SLP 2. SLP 3 understood that the interview information would be kept private and confidential, but she stated that she was “nervous about being recorded”. The researcher explained that the recorder would be placed in the middle of the table and would run continuously throughout the interview. The researcher also reassured the participant that they would just be “having a conversation”. As the interview progressed the researcher noted that SLP 3 became less nervous when responding to interview questions. After the interview was over, she stated that she “forgot she was being recorded after the first couple questions”.

She indicated that in her clinical training thus far she had gained the most experience with the diagnosis and treatment of adult language disorders (aphasia) and articulation/phonological disorders, and the least experience with the diagnosis and treatment of motor speech disorders (dysarthria), cognitive deficits, voice disorders, and swallowing disorders (dysphagia). She felt the most comfortable working with clients with articulation/phonological disorders. She had the least degree of knowledge and clinical experience for working with clients with motor speech disorders (dysarthria) and voice disorders. As she was completing the questionnaire, she had to change her responses for the sections that asked her to rate her knowledge and clinical skills. She explained to the researcher that she did not initially differentiate between these two sections because she “didn’t read the directions”. She took additional time to complete the section and appeared satisfied with her responses when she returned it to the researcher.

#### *SLP 4*

SLP 4 was a 30-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Fine Arts (B.F.A.) degree in Fine Arts/Theatre at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 28. Since SLP 4 was not a speech-language pathology major during her undergraduate studies, she was either currently taking, or had not taken some of the speech-language pathology courses. She made a significant amount of written notes on her questionnaire as to why numbers of accrued clinical hours were so low, and why ratings of degree of knowledge had not changed over time during her graduate studies.

Like a few of the other study participants, she had the most clinical experience with the diagnosis and treatment of adult language disorders (aphasia) and articulation/phonological disorders. She indicated that she did not get a lot of experience with the diagnosis and treatment of voice disorders and swallowing disorders (dysphagia). SLP 4 said that she was the most comfortable working with clients with articulation/phonological disorders. She felt her knowledge and clinical skills for working with clients with fluency disorders (stuttering), voice disorders, and swallowing disorders (dysphagia) was lacking. SLP 4 had forgotten to bring documentation with her to the interview regarding coursework, number of clinical hours, etc. However, she felt that her questionnaire responses were accurate.

#### *SLP 5*

SLP 5 was a 28-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Arts (B.A.) degree in English Literature at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 26. Since SLP 5 was not a speech-language pathology major during her undergraduate studies, she was either currently taking, or had not taken some of the speech-language pathology courses. She also made a significant amount of written notes on her questionnaire as to why numbers of accrued clinical hours were so low, and why ratings of degree of knowledge had not changed over time during her graduate studies.

She stated that she had the most clinical experience with the diagnosis and treatment of articulation/phonological disorders, and the least amount of clinical experience with the diagnosis and treatment of voice disorders and swallowing disorders (dysphagia). At the time of data collection, she indicated that she had the most

knowledge and clinical skills for working with clients with articulation/phonological disorders, which is the area of speech-language pathology with which she had the most clinical experience. SLP 5 indicated that she had the least degree of knowledge and clinical skills for working with clients with fluency disorders (stuttering), voice disorders, and swallowing disorders (dysphagia). At the time of data collection, SLP 5 had only accrued 10 hours or less of diagnosis and treatment across various areas of speech-language pathology. At the time of data collection she had only completed a “mini-practicum”, allowing for less clinical training hours to be accrued.

#### *SLP 6*

SLP 6 was a 23-year-old female, and a graduate student at Lone Lake University. She earned a Bachelor of Science (B.S.) degree in Finance at age 21 and began her graduate studies/prerequisite courses in speech-language pathology at age 22. Since SLP 6 was not a speech-language pathology major during her undergraduate studies, she was either currently taking, or had not taken some of the speech-language pathology courses. She also informed the researcher as to why numbers of accrued clinical hours were so low, and why ratings of degree of knowledge had not changed over time during her graduate studies.

In her clinical training so far she had gained the most experience with the diagnosis and treatment of articulation/phonological disorders, and the least experience with the diagnosis and treatment of voice disorders and swallowing disorders (dysphagia). She felt that she had the most degree of knowledge and clinical skills for working with clients with articulation/phonological disorders, which is the area of speech-language pathology with which she had the most experience. SLP 6 specified

that she had the least degree of knowledge and clinical skills for working with clients with voice disorders and swallowing disorders (dysphagia). It should be noted that she had only accrued 10 hours or less of diagnosis and treatment across various areas of speech-language pathology. At the time of data collection she had only completed a “mini-practicum”, allowing for less clinical training hours to be accrued.

#### *SLP 7*

SLP 7 was a 23-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Science (B.S.) degree in Communication Disorders at age 22 and began her graduate studies later that same year. As SLP 7 was completing her questionnaire, she informed the researcher that she had not yet had an externship experience in a school setting. She stated that she would gain more experience with the diagnosis and treatment of fluency disorders (stuttering) and articulation/phonological disorders during her externship placement in a school setting.

Since she had the experience of an externship in a medical setting, she had gained the most experience with the diagnosis and treatment of cognitive deficits and swallowing disorders (dysphagia). She had the least amount of experience with the diagnosis and treatment of fluency disorders (stuttering), articulation/phonological disorders, and voice disorders, most likely because she had not yet had an externship experience in a school setting. She pointed out that she had the most knowledge and clinical competence for working with clients with adult language disorders (aphasia) and cognitive deficits. She did not feel she had enough knowledge and clinical training to work with clients with fluency disorders (stuttering) and articulation/phonological

disorders. After the interview was completed, she stated that she “likes the idea of this research because she feels supervision is important”.

#### *SLP 8*

SLP 8 was a 28-year-old female, and a graduate student at West Welton University. She earned a Bachelor of Arts (B.A.) degree in Public Relations at age 22 and began her graduate studies/prerequisite courses in speech-language pathology at age 27. Since SLP 8 was not a speech-language pathology major during her undergraduate studies, she was either currently taking, or had not taken some of the speech-language pathology courses. Through written notes on her questionnaire, she indicated to the researcher as to why numbers of accrued clinical hours were so low, and why ratings of degree of knowledge had not changed over time during her graduate studies.

Similar to other participants, she pointed out that she had gained the most experience with the diagnosis and treatment of adult language disorders (aphasia) and articulation/phonological disorders. She had the least amount of experience with the diagnosis and treatment of: motor speech disorders (dysarthria), cognitive deficits, voice disorders, and swallowing disorders (dysphagia). She felt that she had the highest degree of knowledge and clinical skills in the areas of speech-language pathology in which she had the most experience: adult language disorders (aphasia) and articulation/phonological disorders. She felt the least equipped to work clinically with clients with motor speech disorders (dysarthria) and voice disorders. She did not initially have documentation with her regarding coursework, number of clinical hours, etc. After beginning to complete the questionnaire, SLP 8 asked the researcher if she could print the necessary documentation from a computer in the room where the

interview was being conducted to ensure accuracy of her responses. The researcher agreed, and the participant was able to print all necessary documentation.

This section provided a background summary of individual participants that included information regarding their experiences in different clinical areas of speech-language pathology, self-ratings of their knowledge and skills in different clinical areas of speech-language pathology, and relevant information that was obtained about each participant by the researcher. Table 4.1 presents a summary of each participant's self-ratings of their knowledge and skills in various clinical areas of speech-language pathology. This background information may be useful to both orient the reader to this study, and to highlight important factors that contributed to the data collection process.



**Table 4.1*****Summary of Individual Participants***

	Most clinical experience	Least clinical experience	Most knowledge and clinical skills	Least knowledge	Least clinical skills
SLP 1	Adult language disorders (aphasia), articulation/phonological disorders	Motor speech disorders (dysarthria), cognitive deficits, voice disorders, swallowing disorders (dysphagia)	Articulation/phonological disorders	Swallowing disorders (dysphagia)	Swallowing disorders (dysphagia)
SLP 2	Adult language disorders (aphasia), articulation/phonological disorders	Fluency disorders (stuttering), motor speech disorders (dysarthria), cognitive deficits, voice disorders, swallowing disorders (dysphagia)	Adult language disorders (aphasia), articulation/phonological disorders	Motor speech disorders (dysarthria), cognitive deficits, voice disorders	Motor speech disorders (dysarthria), cognitive deficits, voice disorders, swallowing disorders (dysphagia)
SLP 3	Adult language disorders (aphasia), articulation/phonological disorders	Motor speech disorders (dysarthria), cognitive deficits, voice disorders, swallowing disorders (dysphagia)	Articulation/phonological disorders	Motor speech disorders (dysarthria)	Voice disorders
SLP 4	Adult language disorders (aphasia), articulation/phonological disorders	Voice disorders, swallowing disorders (dysphagia)	Articulation/phonological disorders	Fluency disorders (stuttering), voice disorders, swallowing disorders (dysphagia)	Fluency disorders (stuttering), voice disorders, swallowing disorders (dysphagia)

**Table 4.1 (continued)**

SLP 5	Articulation/ phonological disorders	Voice disorders, swallowing disorders (dysphagia)	Articulation/ phonological disorders	Fluency disorders (stuttering), voice disorders, swallowing disorders (dysphagia)	Fluency disorders (stuttering), voice disorders, swallowing disorders (dysphagia)
SLP 6	Articulation/ phonological disorders	Voice disorders, swallowing disorders (dysphagia)	Articulation/ phonological disorders	Voice disorders, swallowing disorders (dysphagia)	Voice disorders, swallowing disorders (dysphagia)
SLP 7	Cognitive deficits, swallowing disorders (dysphagia)	Fluency disorders (stuttering), articulation/ phonological disorders, voice disorders	Adult language disorders (aphasia), cognitive deficits	Fluency disorders (stuttering), articulation/ phonological disorders	Fluency disorders (stuttering), articulation/ phonological disorders
SLP 8	Adult language disorders (aphasia), articulation/ phonological disorders	Motor speech disorders (dysarthria), cognitive deficits, voice disorders, swallowing disorders (dysphagia)	Adult language disorders (aphasia), articulation/ phonological disorders	Voice disorders	Motor speech disorders (dysarthria), voice disorders

## **Themes**

Interview data were transcribed verbatim. The data were analyzed inductively, and patterns and relationships in the data were organized into two large, over-arching themes: supervision and clinical experiences. Once the over-arching themes were formed, the data were reviewed inductively to determine more specific categories that were supported by the dataset. The individual categories within each theme are used to discuss the main themes in greater detail.

Within the theme of supervision, there are five categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors. Within the theme of clinical experiences, there are four categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework.

### **Theme One: Supervision**

#### *Most Helpful Supervisor Characteristics*

In their interview responses, all eight of the study participants discussed various characteristics and qualities that are helpful for a clinical supervisor to possess. Many of the participants emphasized the importance of a supervisor who helps to build their confidence as they are learning how to be a speech-language clinician. Several of the study participants discussed that being encouraged by their supervisor is critical to building the confidence that they have in their clinical skills. In particular, SLP 2, SLP 3, SLP 6, and SLP 7 discussed the concept of being encouraged by their supervisor. As

explained by these study participants, when they feel more confident in their knowledge and clinical skills, they are more likely to advance in the clinical decision-making process. If a supervisor is encouraging to their students, they tend to feel more confident about using their emerging knowledge and clinical skills in new clinical situations. SLP 2 said, “I think a lot of encouragement helped. Just knowing that I can do this and to have the self-confidence to go to that first externship.” SLP 3 stated, “When I first started clinic, my confidence was really low and I didn’t do very well because I was so nervous. The more encouragement I got, the more confidence I got.” SLP 6 discussed, “I like someone who is really encouraging. If you’re not getting the encouragement from your supervisor, it’s more difficult to feel confident about using the knowledge that you have.” According to SLP 7, “It helps me as the student to feel successful and move on and feel confident and competent. Then, I feel like I can go out there and work alone and make the right decisions.”

Aside from providing encouragement, students may respond well to a supervisor who is approachable and personable. A supervisor who shows they are caring and understanding throughout the learning process also helps the students to feel more comfortable and confident, thus nurturing the students as they gain hands-on clinical knowledge and skills. SLP 4 said, “I think that the best thing is when a supervisor shows their caring and understanding side and they motivate you and they help build your confidence.” If a student feels comfortable with their supervisor and feels that they are approachable, they are more likely to have the confidence to ask questions throughout the clinical learning process. In turn, when students feel as if they can ask questions of their supervisors, they gain the confidence and the competence to make the correct clinical

decisions on their own. SLP 7 stated, “I definitely like a supervisor that I feel comfortable with, who I can go to to ask questions.” SLP 8 discussed, “I like someone who reinforces and praises you.”

While reinforcement and praise is important for the graduate students to receive from their supervisors, feedback that is constructive and focused is also important. Three of the study participants also discussed the importance of a supervisor who gives specific, constructive criticism. SLP 5 stated, “I like a lot of constructive criticism. Or when someone questions my logic behind what I am doing or where I am going with it.” When graduate students receive specific and constructive criticism, it aids them in refining their clinical decision making skills because it forces them to think about the logic behind their therapy practice with clients. As SLP 3 said, “Don’t tell me I did a good job just to make me feel good. That’s not going to help me in the long-run. If I can do something better, tell me.” While the graduate students may benefit from constructive criticism, the criticism is better received when it is delivered in a tactful way. It is helpful to graduate students when a supervisor facilitates ways to improve a student’s clinical skills, without being overly critical and negative. SLP 8 said, “I think that a supervisor needs to appreciate that everyone has a different style and that’s a good thing. There may be more than one right way to do things. Tell me what I’m doing wrong, but tell me nicely. ”

A helpful supervisor is also one who is actively involved with their graduate students and their clients, and gives appropriate support as needed. Two of the study participants discussed the role of a more active supervisor. A more passive supervisor, who observes therapy sessions and provides more indirect, written feedback, may not often be preferred by graduate students. One of the study participants alluded to the fact

that she prefers a clinical supervisor who actively collaborates to solve clinical problems. SLP 2 stated, “I like someone who seems really active in their role as a supervisor...someone who is always helping me think of ways to improve what I am doing.” The supervisors should be involved enough with their students’ clients that they can offer knowledgeable suggestions regarding new therapy ideas and techniques. If a clinical supervisor has taken a more passive supervisory role, they are not always as familiar as they should be with their graduate student clinicians’ caseloads and clients. Furthermore, if a clinical supervisor has taken a more active role, they may be more aware of the amount of support that their graduate students’ need in clinical situations. SLP 1 said, “They need to know what I’m struggling with. I think they should be willing to step in and help out if necessary, but also willing to let me learn on my own.”

According to one study participant, it is also helpful if a supervisor states their expectations and guidelines for the clinical experience before the clinical experience begins. When graduate students are aware of what is expected of them in the clinical setting, they may be able to better gauge their supervisors’ personal expectations. Different supervisors may expect that they will be providing different levels of supervision to their students, and may have different expectations for when their students should become more independent with certain clinical skills. Different supervisors may also have different ideas regarding the feedback that they will be providing for their students. SLP 6 discussed, “I would prefer someone who gave me their guidelines, and if they had expectations for me.” When providing their expectations, it is also important that the supervisors understand and remember that the graduate students will still require a certain amount of help and feedback, especially during early clinical experiences.

Lastly, a clinical supervisor may be most helpful to graduate students when they are willing to be a model for their students. This idea is closely related to an idea that was previously presented: students enjoy when a supervisor takes on a more active supervisory role. Not only should a supervisor be knowledgeable about clinical practices and techniques, but they should also be eager to clinically train their students in a more hands-on way. SLP 4 discussed, “Supervisors should be passionate about what they’re doing with therapy, but they also have to be excited about being a part of training. There are a lot of people who love what they do, but are not into training.” SLP 3 discussed, “My ideal supervisor would be someone who does more examples, more models, more hands-on, and shows me how they would do it.” When graduate students are able to actively observe a clinical supervisor performing evaluation and therapy tasks, they are able to obtain a more holistic view of the clinical tasks that are required during an assessment or treatment session with a client.

All eight of the study participants discussed various characteristics and qualities that are helpful for a clinical supervisor to possess. Many of the participants emphasized that a helpful supervisor is one who helps to build confidence, is approachable and personable, and gives specific, constructive criticism. They are also actively involved with their graduate students and their clients, and give appropriate support as needed. A supervisor who states their expectations and guidelines to the students before the clinical experience begins is also helpful, according to the study participants. Lastly, clinical supervisors may be most helpful to graduate students when they are willing to be a model for their students.

### *Least Helpful Supervisor Characteristics*

All eight of the study participants also discussed various characteristics and qualities that are least helpful for a supervisor to possess. In particular, SLP 1, SLP 3, and SLP 7 mentioned that supervisors who do not provide good feedback are not helpful to the overall learning process. Especially in the early stages of their clinical education, the graduate students need thorough feedback after each therapy session. When the students do not receive good written or verbal feedback from their clinical supervisor, they feel as if they are not learning how they can change what they're doing with their clients during a therapy session. Furthermore, when students do not receive feedback they are not as easily aware of what they may be doing wrong in a therapy session. If the graduate students are not made aware of ways that they can improve their clinical skills and practices during a therapy session, they may miss out on a chance to polish their skills and to acquire new clinical knowledge. SLP 1 stated, "I guess I would dread working with someone who doesn't give me any advice or feedback of what to do differently." SLP 3 discussed, "I like getting feedback on things that I can change or some different things that I can do in therapy." SLP 7 said, "If I don't get feedback, I don't learn anything day after day."

As previously stated, graduate students expressed that a helpful supervisor is one who is approachable and personable. Conversely, a supervisor who is unapproachable and less personable is not viewed as being helpful to graduate students. Six of the eight participants provided discussion on this topic: SLP 2, SLP 3, SLP4, SLP5, SLP 7, and SLP8. A clinical supervisor who has an overly negative demeanor seems difficult for graduate students to deal with. SLP 8 explained, "If a supervisor always has a negative



attitude about their students or their job, that's exhausting." SLP4 said, "I'm afraid to go up to her and tell her that I don't know what she's talking about in case she makes me look stupid. So, that's been hard."

If a supervisor relates to their students in a negative way, the student may begin to feel negatively about themselves as a person, and possibly as a beginning clinician. If a supervisor gives a student negative comments, without being constructive or somewhat positive, a student can begin to feel as if they are being attacked by their supervisor on a personal level. SLP 2 stated, "I wouldn't like if a supervisor was really negative. Or if they were always down on me without making it constructive. I think I would have a hard time with that. I would probably cry." SLP 3 discussed, "After I hear enough negative comments about what I'm doing wrong and I don't hear anything that I'm doing right, I start to think that maybe my supervisor doesn't like me. Or I think that I'll never be a good clinician." While graduate students appreciate constructive criticism, it is important that supervisors remember that their students also need an amount of positive feedback. A student may be easily discouraged when their supervisor provides feedback that is mostly negative in nature. SLP 7 said, "A bad supervisor would be someone who just constantly made you feel like you were doing everything wrong." SLP 5 discussed, "And I think that if they really didn't think you were doing well, it would be good if they could present that to you in a nice way instead of being mean about it." SLP6 mentioned, "I don't want someone yelling at me about something that I've never done before. That just makes me want to give up."

A supervisor who is more rigid and inflexible is also not helpful to graduate students while they are acquiring clinical skills. SLP 8 stated, "A poor supervisor would

be overly controlling, would have a negative attitude, and complain all the time.” SLP 5 said, “I think it would be horrible if a supervisor was so stiff and hard-headed that they think their way is the only way to do it.” As graduate students are acquiring clinical skills, it is helpful if they feel more comfortable trying new therapy techniques and activities with their clients. If a supervisor is more inflexible and demands that their graduate students perform therapy tasks in precisely the same way that they themselves would, it is more difficult for the student to develop their own personal clinical skills and style. By being allowed the freedom to try new therapy tasks and techniques, while still being supervised, the graduate students gain confidence in their clinical skills. SLP 6 discussed, “It’s not helpful when a supervisor doesn’t trust you enough to let you take initiative to create your own ideas and styles and techniques. That wouldn’t give me the confidence to move forward.”

Lastly, five of the eight participants conveyed that a clinical supervisor is not helpful when they appear impatient with their graduate students during the clinical training process. SLP 8 stated, “Also, it’s horrible if a supervisor doesn’t have the patience to deal with someone who is still learning.” Especially when learning how to utilize new, complex clinical skills graduate students may feel more relaxed during the learning process when their supervisors are more patient with them as they are learning. Furthermore, graduate student clinicians require a supervisor who can spend a fairly significant amount of time answering their questions and explaining or demonstrating various clinical skills and techniques. Since this is a key aspect of the clinical learning process, it may be very frustrating to graduate students if their supervisor were not able to take the time to explain things to them. SLP 8 added, “I have a supervisor now who is so

smart, but she can't take the time to explain on a level that I can understand." SLP 6 said, "So, someone who is more hurried and impatient wouldn't be good. Maybe I would feel like they didn't care about investing in making me a better clinician."

At times, graduate students perceive that their clinical supervisors are impatient with them because they do not possess the level of clinical knowledge that their supervisors do. Graduate students who are learning to be clinicians are well aware that they do not know as much as their supervisors do about being a speech-language pathologist. In fact, many graduate students enter into their first clinical experience feeling nervous, partly because they know that their clinical supervisors have many more years of knowledge and clinical experience than they do. Under ideal circumstances, there is much that a student clinician can gain from being exposed to their supervisors' more advanced clinical expertise. However, sometimes graduate students perceive that their clinical supervisors grow impatient with them as they are acquiring their new clinical skills at a slower pace. SLP 3 stated, "It's not great if a supervisor gets annoyed or upset with me when I don't know as much as they do. Clearly, I'm not going to know as much as you because I'm still a student." SLP 5 commented, "If they could understand that any student who is trying to become a speech therapist is honestly just trying to do what they think is best at the time..." As the graduate students are acquiring their clinical skills, a supervisor who appears impatient can possibly be detrimental to building the graduate students' confidence in the clinical setting. SLP 5 said, "Sometimes I feel like some of the supervisors I have had make me feel like I should already know what I'm doing, that I should already be a professional. I'm still learning and they need to take time to help build my confidence." SLP 4 discussed, "I think there are some supervisors who,

whereas instead of trying to help someone, it seems like they are just trying to show how much they know. That's not helpful to anybody, especially not to a student.”

All eight of the study participants discussed various characteristics and qualities that are least helpful for a supervisor to possess. According to the study participants, supervisors who do not provide good feedback are not helpful to the overall learning process. A supervisor who is unapproachable, less personable, and relates to their students in a negative way is not viewed as being helpful to graduate students. Furthermore, a supervisor who is more rigid and inflexible is also not helpful to graduate students throughout the clinical learning process. Lastly, several of the study participants conveyed that a clinical supervisor is not helpful when they appear impatient with their graduate students.

#### *Differences in Supervision*

In their interview responses, six out of the eight study participants shared experiences related to differences in the nature of the supervision that they received during their clinical training in graduate school. SLP 1, SLP 2, and SLP 6 considered the supervision that they received to be more direct; the supervision took place in the same room where evaluations and therapy were taking place. The students who received more direct supervision spoke positively about the experience. When the students were beginning to conduct therapy sessions with their very first clients, it was helpful for the supervisor to be more accessible so that they could more easily provide direct assistance. SLP 1 stated, “The supervisor was in the room with me, which was nice for my first client because I didn't really know what I was doing at all. So, she could easily step in if I needed some help or guidance.” If the graduate students had pressing questions during a

therapy session, or if the graduate student was performing a task completely incorrectly, it was helpful to have more direct supervision. SLP 1 also stated, “I think it was a good thing that she was right in the room with me so I could just always ask questions if I needed to. And she was right there to interject if I was doing something totally wrong.” One participant in particular found that more direct supervision allowed for her supervisor to provide more specific suggestions about ways that she could improve as a clinician during a therapy session. SLP 2 said, “My supervisor was really good as far as always being in the room with me and she would watch certain sessions specifically and write down certain things that she liked or didn’t like and ways that I could improve it.”

Three of the participants commented that they received more direct supervision initially, but that their supervisors were quick to “back off” and begin providing more indirect supervision. SLP 6 stated, “She would give me ideas and feedback, but after the first few observations I was sort of on my own. It’s not like she threw me out there. I feel like it helped me to know how to approach therapy and how to adapt a lot better.” SLP 1 discussed, “In the beginning I had close supervision, and then after I got the hang of things, they could step back a bit to where I didn’t see them.” SLP 8 said, “After a while, the supervisors sat back and didn’t involve themselves a whole lot. If things got a little rocky, then they kind of let me deal with it, then they would intervene if they felt like they were reading from me that they needed to.”

The participants seemed to also speak positively about more direct supervision, closely followed by more indirect supervision. More direct supervision early on made the students feel assured that if something went wrong during a therapy session, or if the student did not know what to do next with a client that they could easily call upon their

supervisor's expertise. A quick withdrawal of more direct supervision after the student reached a certain comfort level helped the student to more quickly gain some confidence in their clinical skills.

Four out of the eight graduate students expressed that the supervision that they received was more indirect; the supervisors observed the graduate students from outside of the therapy room and provided verbal or written feedback after the therapy session was completed. One particular participant mentioned that the supervision she received was more direct when she was evaluating a new client, and more indirect during a therapy session with a client. SLP 7 said, "My supervisor sat in the room with me the whole time when I evaluated a client. As far as my other client...my supervisor would come in towards the end of the session for about 10 to 15 minutes and that was it." This combination of direct and indirect supervision was helpful for this particular student. She felt that her supervisor was present in the room during an evaluation, which was a more foreign task for her. During a more familiar task, such as a therapy session with a known client, the student felt that more indirect supervision was adequate.

Two of the participants spoke somewhat negatively about receiving more indirect supervision during their clinical training. With more indirect supervision, graduate students may feel somewhat detached from their supervisors during, and after a therapy session. When a supervisor is watching and listening to a therapy session from outside of the therapy room, they are obviously not physically present during the therapy session. Therefore, suggestions and feedback cannot be conveyed to the students at that exact time. SLP 3 expressed that even though her supervisors observed almost all of her therapy sessions, she would have preferred if they observed more of her sessions from

inside the therapy room. She said, “You’re in the therapy room, there’s a double-sided mirror, and you and the client can’t see into the viewing room. The supervisors can see what you’re doing “incognito”. They watch your session. They probably observed me about 90% of the time, but they hardly ever came into the room. They were always writing stuff.” Another student expressed that the written feedback that she received from her supervisor was very helpful; however, she felt that the feedback would have been more helpful to her if it was received verbally during the therapy session. She thought that if she received the feedback during the therapy session, that she would be more able to readily apply her supervisors’ feedback and suggestions. SLP 8 stated, “During the session the supervisors would watch us, and after the session, they would give us a pink sheet that said what we did well, other things that we could work on... But, they didn’t tell us any of this during the actual session.”

One student in particular discussed that since her supervisors observed her more indirectly, she sometimes felt uneasy conducting some of her earlier therapy sessions alone. Often, she felt that if something went wrong with a client, or if a situation became uncomfortable with a client that she couldn’t be sure if her supervisors would be readily aware that there was a problem. In her experience, a supervisor was usually aware of a significant problem that was occurring in the therapy room, but her supervisor was not always easily aware of less serious problems that she was experiencing. She discussed, “The supervisors are not actually in the room with you. They come in and help you out if they have to, but for the most part, you kind of feel like nobody is watching you. If there is a huge problem, they will step in.”

As a final point, two participants pointed out that while they preferred direct supervision to indirect supervision, they didn't receive direct supervision from their supervisors very often. Due to this, they were very unsure of how they should perceive direct supervision when they did receive it. For these two graduate students, a supervisor providing direct supervision came to be viewed as a negative thing. Since their supervisors so rarely provided direct supervision, the students began to feel that if one of their supervisors happened to come into the therapy room, it was because they were doing a poor job clinically and required more direct supervision. Direct supervision was rarely provided unless the students were having a significant amount of difficulty with their clients, so it was rare for these students' supervisors to provide direct supervision when therapy sessions were going well. SLP 3 said, "I had direct supervision happen to me and it kind of made me feel like I was doing something wrong." SLP 7 said, "The supervisors came in and I feel like they only came in to correct you. I feel like it was a way of them telling me that I was doing something wrong and I needed to change what I was doing."

In their interview responses, the study participants shared experiences related to differences in the nature of the supervision that they received during their clinical training. Some students considered the supervision that they received to be more direct, and they spoke positively about these experiences. Other graduate students expressed that the supervision that they received was more indirect. As a final point, two participants pointed out that they did not receive direct supervision from their supervisors very often. Due to this, they were very unsure of how they should perceive direct supervision when they did receive it



### *Feedback from Supervisors*

During the interviews, the participants discussed feedback that they received from their supervisors during their clinical training in graduate school. All eight of the study participants discussed the importance of supervisor feedback in one form or another. Whether feedback is provided in verbal or written form, it is clear that feedback from supervisors is important to the graduate students who participated in this study. Two participants voiced an opinion of how frustrating it is when they do not receive sufficient feedback from their supervisors. SLP 2 said, “All the supervisors I had during in-house clinic weren’t really good with feedback. After the majority of my sessions, my supervisor(s) didn’t give me *any* feedback, so I don’t know what else to do other than the same things over and over.” SLP 3 had a similar opinion: “So, it’s difficult and I don’t know what would be better to do without feedback. And maybe the supervisor doesn’t know either.”

Some of the students commonly received only written feedback from their supervisors. A few students pointed out what they enjoyed about receiving written feedback. If the students were provided with thorough written feedback, it was very helpful to the students. Thorough feedback provided the students with enough suggestions and critiques that could be applied to the students’ next therapy session. Written feedback also provided the students with a written record of their supervisors’ comments. This was extremely beneficial for the students because they could refer back to the feedback forms at a later date in order to recall certain activities and techniques that they might apply in a future therapy session. Especially with multiple clients, and at least a few days between therapy sessions with clients, a written record of feedback is useful.

SLP 7 stated, “I really enjoyed the evaluation feedback forms because my supervisor took up the whole page writing back good ideas. Maybe I prefer written feedback because I could refer back to that and I could keep those after evaluations and therapy sessions.”

SLP 2 discussed, “My supervisor always gave written feedback sheets with pointers and recommended different materials. And I thought that was really beneficial because from those suggestions I could really go and do some more digging.”

While written feedback has its positive points, one student mentioned that written feedback was sometimes not provided to her in a timely manner. SLP 7 discussed, “I liked the written feedback forms, but there were some that my supervisor would hand to me at the very end of the semester and say, ‘Oh, here. I forgot about these feedback forms. ...just kind of lost them in my desk.’ So, that wasn’t very helpful.” Obviously, feedback is most helpful when it is received in a timely fashion. A student cannot readily apply feedback that is received if they are not made aware of the feedback until several days or weeks later. Hence, they are not as easily able to advance their clinical skills through the application of supervisor feedback.

Two of the students who were interviewed preferred receiving more immediate verbal feedback from their supervisors, rather than written feedback. As previously discussed, students need to be able to apply feedback in a timely manner in order to advance their clinical skills. Students find it very helpful if they can apply feedback to their client’s therapy session while that therapy session is still going on. Furthermore, the more immediately that feedback is received the easier it is for students to correct clinical skills that require improvement. SLP 1 said, “I kind of like immediate feedback because if I got in the habit of doing something wrong through a whole session, it might be harder

to break during the next session.” SLP 8 stated, “I like the verbal feedback during the session, so sometimes I would chase my supervisor down just so I could have that immediate feedback. A lot of times, the written feedback left me wanting more.”

A few of the students pointed out that they preferred to receive both written and verbal feedback from their supervisors. There are clear benefits to both written and verbal feedback. Verbal feedback can be generated more quickly by the supervisors, and also conveyed relatively quickly to the students. SLP 2 said, “I like verbal and written feedback. Just something real quick that my supervisor can tell me that doesn’t put me down, but is just a quick suggestion.” Written feedback takes longer for the supervisors to generate, but it can contain more specific and detailed feedback for the students to refer to immediately or at a later date. SLP 2 continued, “As well as verbal feedback, if they have time to write out more ideas or more specifics about what they really liked, what I shouldn’t do again, or what could be adjusted. So, I like to have both.” SLP 7 stated, “I like written feedback because I could refer back to that and I could keep those forms. But, I also like to ask them face-to-face and they can explain it on the spot. In an ideal clinic supervision setting, I would want both equally provided to me.”

One participant pointed out that she preferred to receive immediate feedback from a supervisor who was present in the same room during a therapy session. However, this student specified that she only likes to receive direct verbal feedback if she feels comfortable with her supervisor. If a student does not feel as comfortable around their supervisor, they may prefer to receive feedback, especially negative feedback, in a more indirect way. When students must receive negative feedback from a supervisor that they are not comfortable with, it is less stressful when students receive written feedback,

rather than having to receive verbal feedback through direct contact with their supervisor. In addition, a student who does not have a comfortable relationship with their supervisor may feel more uneasy if their supervisor is directly observing them from within the same therapy room. SLP 1 said, “It just depends on the relationship I have with the supervisor. If I’m not comfortable with the supervisor, it’s better if they’re where I can’t see them, rather than them staring me down. If I was comfortable with my supervisor, I liked the fact that they were there. I could ask questions and get immediate feedback.”

Four other students discussed that the kind of feedback that they receive depends upon the nature of the feedback that their supervisor is giving them. SLP 6 stated, “I don’t mind to get good feedback in written form. I think if it’s bad feedback, I would prefer for it to not be in front of a client. On the other hand, tell me soon after the session because it would help me to remember more of what I’m doing.” Since positive feedback tends to be less complicated and easier to digest, students may not mind receiving positive feedback through more indirect means; students rarely need to ask their supervisors for clarification regarding positive feedback.

While it is helpful for students to receive suggestions and critiques from their supervisor directly, and in a timely fashion, some students prefer not to receive more negative feedback in front of their client because it causes them to feel more uncomfortable and self-conscious about their clinical performance. SLP 5 said, “I prefer feedback *after* the session. Afterwards is really nice because I get extremely flustered when I get disrupted in the session. I’m really thrown off.” SLP 4 discussed, “Because if they interrupt in the middle of a session with bad feedback, you’re a little uneasy because the patient is still there. And I don’t want the patient to feel nervous about me as a

therapist.” One student had a somewhat opposite opinion. SLP 3 mentioned, “If you’re going to give me good feedback, then you can tell me later. But, if it’s something I’m doing wrong, then I’m more personally likely to remember if you tell me at the moment. It will stick in my mind.” So, other students may prefer to receive feedback from their supervisor as soon as possible, even if the supervisor is providing more negative feedback in front of a client.

Whether feedback is provided in verbal or written form, it is clear that feedback from supervisors is important to the graduate students who participated in this study. Some of the students commonly received only written feedback from their supervisors. A few of the students pointed out that they preferred to receive both written and verbal feedback from their supervisors. Some students only like to receive direct verbal feedback from their supervisor if they have a comfortable relationship with their supervisor. If a student does not feel as comfortable around their supervisor, they may prefer to receive feedback in a more indirect way. Finally, some students prefer not to receive more negative feedback in front of a client because it may cause them to feel more uncomfortable and self-conscious about their clinical performance.

#### *Working with Different Supervisors*

During the interviews, four of the eight study participants talked about their experiences working with different supervisors during their clinical training in graduate school. Some of these experiences were described in a more negative light. One student expressed that having different supervisors was frustrating because she never knew what to expect from different individual supervisors. Different supervisors have different expectations, different ways of conducting therapy sessions, and different ways of

providing feedback to their students. SLP 1 stated, “I have had a lot of supervisors during in-house clinic and they are all very different. Some of them will give you a lot of feedback, but some of them don’t give you much feedback at all, which is frustrating because there is no consistency.” In many cases, each supervisor at the in-house clinic was responsible for supervising many graduate students within a given semester. SLP 7 commented by saying, “I feel like I had enough supervision, but I feel like-maybe because they had a lot of other students-I was doing a lot of things on my own as far as treatment...I feel like sometimes I was guessing and making up things...” With many different students to supervise, the supervisors may not have been able to provide enough consistent support to all of the graduate student clinicians.

In addition, another student discussed that she often did not know which clinical supervisor would be supervising her at any given time. SLP 8 said, “It would have been better if we had the same supervisor all the time, or at least the same supervisor for the same client all the time, but we didn’t. We basically just got whichever supervisor was available. That’s not good consistency for us or for the clients.” If the student had no idea who their supervisor was going to be on a given day, or for a given client there was very little carry-over or consistency for all involved. The student sometimes felt that the supervisor had no idea what had happened during past therapy sessions with a particular client. Therefore, the supervisor was not fully aware of the client’s background, diagnoses, and strengths and weaknesses. Furthermore, the supervisor also may not have had an accurate picture of how the student clinician’s clinical skills were progressing, or of the nature of the feedback and support that the student required.

Two participants offered a more positive view of the experience of working with different supervisors. One student thought that working with different supervisors provided her with many diverse experiences, and chances to observe many different models during her clinical training. SLP 3 stated, “I just had so many different models in front of me and I was able to pick and choose some things that I liked and didn’t like to use during my therapy sessions.” SLP 4 discussed, “With each supervisor that I worked with, I was able to observe how they worked with each client and their tone, body language, and pacing of how they adjusted to each different client. I think that gave me a lot of insight into the kind of therapist that I want to be.” By observing different supervisors in action during therapy sessions, these students were exposed to many different models of therapy techniques and many different ways of conducting a therapy session. Hence, they were more easily able to build their own repertoire of therapy tools and techniques to utilize with a number of different types of clients and diagnoses.

During the interviews, several of the participants talked about their experiences working with different supervisors during their clinical training in graduate school. Some of these experiences were described in a more negative light; one student expressed that having different supervisors was frustrating because she never knew what to expect from different individual supervisors. Other participants offered a more positive view of the experience of working with different supervisors. Working with different supervisors may provide students with many diverse experiences, and the chance to observe many different models during their clinical training.

The first large, over-arching theme that helped to organize the data was the theme of supervision. The theme of supervision included five main categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors. Each of these categories was discussed with thick, rich description and was supported by direct quotes from the study participants. The second large, over-arching theme that helped to organize the data was the theme of clinical experiences.

### **Theme Two: Clinical Experiences**

#### *Differences between In-House Experiences and Externship Experiences*

During the interviews, five of the eight participants discussed differences between their in-house clinical experiences and their externship clinical experiences. These differences were only discussed by those participants who attended West Welton University, as the participants who attended Lone Lake University did not have an in-house speech-language pathology clinic at their university.

Three of the participants stated that they received more direct supervision from their supervisors at their externship sites in comparison to the in-house clinic. SLP 1 stated, "In externship, the supervisor was always in the room with me. She was at her desk in the room with me so she could listen to everything I was saying and she could watch." SLP 2 said, "She was more easily accessible. If I had a question in the middle of a session, I could ask her. So that was more helpful than supervision during in-house clinic." SLP 3 made a similar statement about supervision at her externship. She said, "I feel like I got more help with her because I was in the classroom with her and it was just me and her. I talked with her all the time and I could talk with her right after group and



ask her how she thought I did.” According to these three students, the supervision that they received at their externship sites was more direct as compared to the supervision that they received at in-house clinic. Since the supervisors tended to be in the therapy room while the graduate student was working with a client, the graduate student could more easily ask questions and receive feedback.

Four of the participants explained that they thought their overall clinical experience during their externship placement was more realistic than their overall clinical experience while at in-house clinic. SLP 1 discussed that her caseload of clients at her externship site was much more realistic than it was at in-house clinic. SLP 1 said, “You just have so many more kids in the school setting than you do in the in-house clinical setting. You would never see only one kid at a time in the schools.” At on-campus, or in-house clinics the number of clients tends to be somewhat limited. Therefore, it is very difficult to give graduate student clinicians a more realistic number of clients on their caseload because there are often only enough clients for each graduate student to work with one to three clients per semester.

Five of the students discussed that the amount of planning and paperwork was very different between the in-house setting and various externship settings. SLP 1, SLP 2, SLP 3, and SLP 7 all commented that they spent much more time planning for therapy sessions and completing paperwork at in-house clinic than they did while at their externships. Often at an externship, the graduate students can spend more time gaining direct clinical experience with clients, rather than spending hours preparing for a session and completing paperwork. SLP 1 said, “I feel like in the clinic you spend so much time planning and so much paperwork afterwards. So I like the school setting because I felt

like I spent so much more time with the kids than doing the planning and paperwork.” SLP 7 stated, “In in-house clinic, I felt like it was paperwork, paperwork, paperwork. I felt like I was doing more paperwork than I was actually seeing the client. At my externship, we would be with residents for like, an hour session and then we would quickly do a note in less than 10 minutes.” SLP 1 discussed, “I felt like I was getting more actual face-to-face time with residents doing therapy, than I was doing paperwork. And that makes sense if I’m trying to learn how to be a therapist.” Paperwork and documentation is a necessary component in all settings that a speech-language pathologist may work; however the amount and type of paperwork that is required at in-house clinic may be completely different from what is expected at an externship setting.

After completing their first externship, four of the students reflected and realized that the amount of planning for therapy sessions that was expected of them at in-house clinic was not realistic compared to what was expected of them in the “real world”. SLP 2 thought, “With in-house clinic, it’s an hour session with each child. When you’re planning an hour with one person, you need a lot of materials. And that’s just not realistic.” SLP 7 offered, “In the schools, you only get 30 minutes with four kids. So, you really have to know exactly what you are going to do so that time isn’t wasted. You don’t really learn how to do that in in-house clinic.” SLP 3 said, “I probably spent a good three to four hours planning for just one client at in-house clinic because you have such a long session. When you have a caseload of 40 students in schools, you can’t sit there and plan for three hours for each kid.” SLP 1 stated, “Planning at the in-house clinic was a lot harder and it’s not how it really is in other settings.” Learning how to plan and organize a therapy session is an extremely important skill for beginning clinicians to learn. While

the graduate students should certainly be required to thoroughly plan for their therapy sessions at in-house clinic, the amount of planning that they are required to do may not be realistic for the “real world” settings that they encounter on their externships.

Five of the students also stated that they received more models and demonstrations from their supervisors in their externship settings versus the in-house clinic setting. SLP 3 said, “I feel like I didn’t get eased into in-house clinic. I feel like I just got thrown into it and I didn’t know what I was doing. It helped me a lot in the schools because I watched the supervisor conduct therapy before I did it myself.” SLP 2 added, “We were shown a video of someone giving an assessment, but it was a video. It’s not real. In the schools, when I watched my supervisor, she gave a lot of assessments. I watched an SLP do it, so that helped a lot.” SLP 8 stated, “At the in-house clinic, the first day that I met the children was the first day that I did therapy. It was like they pushed me off the dock, sink or swim. In the schools, I was eased into it.” Finally, SLP 1 stated, “It’s easier to learn when you can watch somebody who knows what they’re doing.” These students were given the opportunity to more gradually become accustomed to what it was like to conduct a therapy session at their externship placements. Conversely, these students felt that they did not have the option to become comfortable over time at the in-house clinic; they were expected to conduct entire therapy sessions without watching a supervisor demonstrate first.

SLP 7 mentioned, “At my externship, I got more supervision and models. I felt like I had more control over what I was doing and it made me feel like I was almost a speech-language pathologist. During in-house clinic, I felt like a student. I felt like I was more worthy, or useful at my externship.” Therapy practices and techniques require the

correct application of knowledge and skills. Conducting evaluations and treatment sessions with clients is a highly complex skill that is learned and perfected over time. Observing a model is essential to acquiring any new and complex skill. When a supervisor models various skills and techniques for their students, the students may feel as if they have more control over their own skills. If the students feel a greater sense of control over their clinical skills, they may in turn feel more confident in their clinical skills and may think more positively about themselves as a beginning speech-language pathologist.

During the interviews, a majority of the participants discussed differences between their in-house clinical experiences and their externship clinical experiences. Some students stated that they received more direct supervision from their supervisors at their externship sites in comparison to the in-house clinic. Other participants explained that they thought their overall clinical experience during their externship placement was more realistic than their overall clinical experience at in-house clinic. After completing their first externship, some students realized that the amount of paperwork and planning for therapy sessions that was expected of them at in-house clinic was not realistic compared to what was expected of them on their externships. Lastly, several participants also stated that they received more models and demonstrations from their supervisors in their externship settings versus the in-house clinic setting.

#### *Significant Aspects of Clinical Training*

All eight of the study participants discussed several significant aspects of their clinical training. For example, all participants except SLP 4 discussed that hands-on clinical experiences were significant in their overall clinical training. SLP 1 talked about

the benefits of having clinical experiences at the in-house clinic at the undergraduate level. She said, “I was nervous enough starting the externship at the schools, but it helped a lot having experience with real clients. I really like that experience. I’m so glad we got to do that in undergrad.” SLP 3 similarly said, “The thing that absolutely helped me the most was basically just doing therapy – getting the hands-on experience.” SLP 6 discussed, “The whole process of doing things and going through different procedures has definitely helped. I got to try doing different things for real.” SLP 7 stated, “I feel like I learn best when I have hands-on experience. Otherwise, it just doesn’t sink in and stick in my brain.” Through hands-on experience, the students are gaining the kind of experience that they need in order for them to use the knowledge that they learned to perform specific clinical tasks.

Hands-on clinical experiences are important for several reasons. They provide graduate student clinicians with the opportunity to “do” therapy; they have a chance to learn how to conduct an entire therapy session with an actual client. While conducting the therapy session, the students also have the opportunity to try using different practices and procedures that they have learned about in their coursework. Furthermore, hands-on clinical experience enables the student clinician to make a stronger and more efficient connection between theory and practice. By being able to embed themselves in highly relatable clinical scenarios, the students are able to mesh knowledge with clinical skills. SLP 5 explained, “I know that we’ve had so many classes, but clinical practice is a lot different than reading your textbook.” SLP 2 said, “We were learning all these things in our classes, but it didn’t really connect in my mind until I started using some of the

theories and techniques on my clients. So that was just the best learning experience for me because I could actually put the things I was learning into practice.”

Three of the students discussed the importance of clinical observation hours prior to beginning hands-on clinical training. Through observation, the learners have the opportunity to experience the reality of what they are learning. SLP 5 stated, “I love observation hours. I think that’s the biggest thing that you do, personally. I felt a lot more confident about things. I’m a very visual person, too. So when I see people doing things, I think, ‘Oh, that’s what they’re talking about.’” SLP 6 said, “I think the main thing that I got out of observation was understanding how to conduct a therapy session. It was the first time that I got to see how a speech therapy session actually works.” SLP 8 pointed out, “Observation hours helped me a lot, but it only helped me in the areas that I observed. I wish that I had observed in many different kinds of settings. That would have been very beneficial for me.”

By engaging in observation hours, especially early on in an undergraduate or graduate program the students have a chance to gain a better perspective on what the profession of speech-language pathology actually entails. Students can also gain confidence by observing seasoned speech-language pathologists. When students observe others completing unfamiliar tasks, they may feel more confident that they too can complete various clinical tasks. Completing observation hours may be the first time that students are able to see a clinician conduct an entire therapy session from start to finish before they are expected to do it themselves at in-house clinic.

All of the study participants discussed significant aspects of their clinical training. Most of the graduate students who were interviewed discussed that hands-on clinical

experiences were significant in their overall clinical training. Hands-on clinical experiences are important for several reasons. Students have a chance to learn how to conduct an entire therapy session with an actual client, and they have the opportunity to try using different practices and procedures that they have learned about in their coursework. Furthermore, hands-on clinical experience enables the student clinician to make a stronger and more efficient connection between theory and practice. In addition, a few of the students discussed the importance of gaining clinical observation hours prior to beginning hands-on clinical training. By engaging in observation hours, students have a chance to gain a more holistic view of the profession of speech-language pathology.

#### *Limitations of Clinical Training*

During the interviews seven out of eight graduate students discussed some particular limitations that they experienced during their graduate clinical training. Namely, the participants expressed that more varied caseloads and more opportunities to complete evaluations would have been beneficial. SLP1, SLP 2, SLP 3, and SLP 5 discussed that they would have liked to have had more varied caseloads during their clinical training. Three students felt that the chance to work with more varied diagnoses and disorders would have been helpful. SLP 1 stated, “At in-house clinic I just had articulation and language clients. I didn’t have that much variety. So, when I got to the schools and I had fluency and motor speech and all those different types of things, I was pretty unprepared for those. I knew nothing about stuttering before I went to my externship.” SLP 5 mentioned, “I only had articulation therapy during in-house clinic and whenever I got to the schools, I was kind of shocked at what language therapy really was.”

SLP 3 discussed similar ideas: “I only had two clients, so getting more experience and seeing more of a variety would have helped. I feel like a lot of the clients that I had were language and articulation and nothing more severe than that.” Another student thought that having the opportunity to work with clients with a wider range of ages would have been beneficial. SLP 2 said, “I wish I would have had a more broad range of ages. I only had preschoolers, but never got any experience with older kids or adults. I had the same two clients both semesters of undergrad.”

Four of the participants in particular thought that more experience with evaluating clients would have been valuable. SLP 7 stated, “A lot of us didn’t get a lot of evaluation experience, and that would have been something that I would have liked to have. But, I think as far as like, deciding and evaluating and knowing if clients need treatment is something that I’m lacking.” SLP 2 said, “So, I would have liked more opportunities to assess and determine whether or not clients should have speech or language treatment.” SLP 6 discussed, “I would have liked more experience giving assessments. We talk about the different tests and assessments in class, but I think the only way to learn is obviously real-life experience.” SLP 8 provided some insight into her lack of experience with clinical evaluation. She said, “It’s hard to get those opportunities to evaluate new clients because a lot of our clients are returning clients each semester. I wish they would have given me at least one client that would have warranted an evaluation because I never got any evaluation hours.”

The graduate students who discussed limitations of their clinical training raised some very valid and insightful points. When offering this information, the participants were very aware of the specific areas in which they felt they were personally lacking



clinical experience. They were well aware of the various ages, diagnoses, disorders, and clinical tasks with which they had not gained enough clinical experience. Furthermore, graduate students are well aware of the number of clinical hours that they need to accrue across different areas of speech-language pathology. Partly due to this, graduate student clinicians tend to be very aware of their personal areas of clinical deficiency. Lastly, SLP 8 raised a valid point regarding the amount of opportunities to evaluate new clients at in-house clinic. Often, clients are returning to the in-house clinic semester after semester. Since they are not new clients, an evaluation is usually not required. While graduate students do gain clinical evaluation experience on their externships, perhaps this skill should be a focus earlier on in clinical training. In a “real world” clinical setting an evaluation must be administered and the results of that evaluation must be correctly interpreted before any treatment should begin.

During the interviews seven out of eight graduate students mentioned some limitations that they experienced during their graduate clinical training. First, some students felt that the chance to work clinically with more varied diagnoses and disorders would have been helpful. One student thought that having the opportunity to work with clients with a wider range of ages would have been beneficial. As a final point, several of the participants felt that more experience with clinical assessments and evaluations would have been valuable.

#### *Limitations of Clinical Coursework*

During the interviews all eight of the graduate students discussed some particular limitations that they experienced related to their graduate-level coursework. Six of the eight participants discussed what it was like to take graduate-level coursework while

simultaneously completing in-house clinic or externship experiences. SLP 3 discussed, “There are so many times that I wish that we could have done all of our classes first, then do clinic. Just talking to other people in other majors, like nursing programs—they do all of their classes first, then they have clinical.” SLP 2 stated, “I feel like you could focus more on your clinic experience if you had all your classes first. If I had clinic by itself, that would be so much easier to me and less stressful.” SLP 7 had similar thoughts: “It’s good to have all of your courses behind you so you can actually refer to them during clinic. That way, you don’t find yourself completely in the dark with different kinds of clients.”

Other students had the opposite opinion; they felt that it was beneficial to complete graduate-level coursework and clinical experiences simultaneously. SLP 4 said, “I like it when I’m in a placement during classes. It just makes me think about things a little differently. Even if it’s not the same age group, I just feel more connected with what I’m doing in clinic.” SLP 5 mentioned, “I think that taking classes while you’re doing clinical placements is really helpful because you can draw on both of those experiences and put them together.” SLP 8 discussed, “I will say that the classes *did* help me apply things. The key is: if you have a class that is relevant to the clients you’re currently working with, then it helps. Otherwise, you just feel overwhelmed.”

Exactly when coursework is completed in reference to clinical experiences seems to be more a case of personal preference. Some students feel that it would have been better to take all of their courses and gain as much “book knowledge” as they could before beginning any clinical experiences. In addition, other students felt that they would have been less stressed and able to give more of their attention to their clinical

experiences if they weren't completing coursework at the same time. On the other hand, several students liked the idea of completing coursework and clinical experiences simultaneously. By engaging in both classroom experiences and clinical experiences at the same time, some students are able to more easily connect theory with practice. However, as one student highlighted: if the coursework does not match up with the students' current clinical experiences, taking courses while participating in clinical experiences can be quite overwhelming.

SLP 1, SLP 2, and SLP 8 expressed that learning more "practical" information would have been helpful. SLP 1 stated, "We had a class focused on being an SLP in the school system. But, we didn't get any advice on how to interact in the medical placements. There isn't like, a whole class focused on it as there was for the education setting." From this statement it appears that this student felt that more practical information was presented, but that the focus was only on one single setting where speech-language pathologists may work. It should be noted that the university that SLP 1 attended has a graduate program that is known for placing a bit more focus on training speech-language pathologists for the school setting, rather than for medical settings.

SLP 2 also discussed that receiving practical clinical information would have been helpful. She said, "I guess that sometimes I wish that I had learned more in my classes that was more practical for clinic. I know that we have to take the Praxis, and we have to learn all of that stuff, but practical stuff is what helps when you're in clinic." SLP 8 discussed, "In class, I wish that they would bring in a client and say, 'This is what you can do' instead of reading out of a book about a therapy technique you can do. That's great and I can pretty much understand how to use that technique, but until I see someone

else do it, I don't know if I'm doing it right." The statement from SLP 8 suggests that graduate students may desire for more models and hands-on experience, even before they reach in-house clinic or externships. Therefore, some graduate students may perceive that models and hands-on experience may be partly lacking in both the clinical setting and the classroom setting in speech-pathology graduate programs.

During the interviews all eight of the graduate students discussed some limitations that they experienced related to their graduate-level coursework. Many of the participants discussed taking graduate-level coursework while simultaneously completing in-house clinic or externship experiences. Some students felt that it would have been easier to complete all coursework before beginning any clinical experiences. Other students had the opposite opinion; they preferred to complete coursework and clinical experiences simultaneously. To conclude, a few of the participants expressed that learning more "practical" information would have been helpful. For example, some graduate students may find more models and hands-on experience helpful, even before they reach in-house clinic or externships.

The second large, over-arching theme that helped to organize the data was the theme of clinical experiences. The theme of clinical experiences included four main categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework. Each of these categories was discussed with thick, rich description and was supported by direct quotes from the study participants.

This chapter presented data in two large, over-arching themes: supervision and clinical experiences. These two themes were further organized into more specific

categories. These categories were discussed in detail and supported by direct quotes from the study participants to form a rich, thick description of how the participants experienced the phenomena being studied. In the final chapter of this dissertation, the rich, thick description of each category and relevant literature will be utilized to discuss the “essence” of the phenomena being studied. The “essence” emphasizes the common experiences of all the study participants and aids in the reader’s understanding of the lived experience of those who experienced the phenomena being studied.

The following tables provide a review of the results that were presented in this chapter. Tables 4.2 and 4.3 present a visual summary of two themes: supervision and clinical experiences, as well as the categories within these themes. Next to each category, key elements from the interview data are displayed.

**Table 4.2**

*Summary of Theme One: Supervision*

Category	Key Elements
Most helpful supervisor characteristics	<ul style="list-style-type: none"><li>• Builds confidence</li><li>• Encouraging</li><li>• Approachable</li><li>• Personable</li><li>• Gives constructive feedback</li><li>• Actively involved with students</li><li>• States clear expectations and guidelines</li><li>• Provides models for their students</li></ul>
Least helpful supervisor characteristics	<ul style="list-style-type: none"><li>• Provides insufficient feedback</li><li>• Unapproachable</li><li>• Relates to students in a negative way</li><li>• Rigid and inflexible</li><li>• Impatient with students</li></ul>
Differences in supervision	<ul style="list-style-type: none"><li>• Direct supervision versus indirect supervision<ul style="list-style-type: none"><li>○ Positive and negative aspects of each</li></ul></li><li>• Combination of direct supervision and indirect supervision</li></ul>
Feedback from supervisors	<ul style="list-style-type: none"><li>• Overall importance of feedback</li><li>• Written feedback<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li><li>• Verbal feedback<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li><li>• Combination of written and verbal feedback</li><li>• Immediate feedback</li><li>• Preferred form of feedback<ul style="list-style-type: none"><li>○ Depends upon nature of the feedback (positive vs. negative)</li></ul></li><li>• Receiving feedback in front of a client<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li></ul>
Working with different supervisors	<ul style="list-style-type: none"><li>• Working with multiple supervisors at a time<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li><li>• Working with multiple supervisors throughout clinical training<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li></ul>

**Table 4.3**

*Summary of Theme Two: Clinical Experiences*

Category	Key Elements
Differences between in-house and externship	<ul style="list-style-type: none"><li>• More direct supervision at externship versus in-house</li><li>• More realistic clinical experience at externship versus in-house<ul style="list-style-type: none"><li>○ Time spent on planning and paperwork</li><li>○ Time spent directly with clients</li></ul></li><li>• More models and demonstration from supervisors at externship versus in-house</li></ul>
Significant aspects of clinical training	<ul style="list-style-type: none"><li>• Hands-on clinical experiences</li><li>• Clinical observation hours<ul style="list-style-type: none"><li>○ Importance of observations prior to hands-on clinical training</li></ul></li></ul>
Limitations of clinical training	<ul style="list-style-type: none"><li>• Client caseloads could have been more varied<ul style="list-style-type: none"><li>○ Different diagnoses and disorders</li><li>○ Different age ranges</li></ul></li><li>• Not enough opportunities to complete evaluations with new clients</li></ul>
Limitations of clinical coursework	<ul style="list-style-type: none"><li>• Completing coursework and clinical experiences simultaneously<ul style="list-style-type: none"><li>○ Positive and negative aspects</li></ul></li><li>• Lack of “practical” information during coursework</li></ul>

## **CHAPTER FIVE: DISCUSSION**

### **Summary of the Study**

The purpose of this study was to understand and describe how speech-language pathology graduate students perceive their clinical training and supervision obtained during graduate school prepared them for their first externship placements. Using an exploratory, phenomenological study design, the researcher sought to understand and describe the lived experience of those who experienced the phenomena being studied.

The data were organized into two over-arching themes: supervision and clinical experiences. The data in each theme were further organized into more specific categories. The theme of supervision includes five categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors. In addition, the theme of clinical experiences includes four categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework.

The two themes of supervision and clinical experiences will be discussed in detail by closely examining the more specific categories within each theme. Key findings within each category will be reviewed. Then, theories of adult learning, as well as relevant rehabilitation sciences and speech-language pathology literature will be utilized to discuss these key findings. The main discussion of the research findings will be followed by recommendations for future research, recommendations for practice, and other closing thoughts.



## **Discussion of Theme One: Supervision**

The results of this study indicate that supervision plays an extremely important role in the overall clinical experience for speech-language pathology graduate students. According to the study participants, specific supervisor characteristics, different styles of supervision, working with different supervisors, and how supervisors provide feedback are significant elements of their experiences with clinical supervisors during graduate training. The theme of supervision includes five categories: a) most helpful supervisor characteristics, b) least helpful supervisor characteristics, c) differences in supervision, d) feedback from supervisors, and e) working with different supervisors.

### *Most Helpful Supervisor Characteristics*

The preference for a supervisor who builds confidence, gives support, and provides constructive criticism can be explained by examining the theory of self-efficacy. An individual's sense of self-efficacy can be crucial in affecting how one approaches goals, tasks, and challenges. Four of the eight participants emphasized that a helpful supervisor is one who helps to build confidence, is approachable and personable, and gives specific, constructive criticism. For example, SLP 6 said, "I like someone who is really encouraging. If you're not getting the encouragement from your supervisor, it's more difficult to feel confident about using the knowledge that you have." According to SLP 7, "It helps me as the student to feel successful and move on and feel confident and competent. Then, I feel like I can go out there and work alone and make the right decisions."

Bandura defined self-efficacy as one's belief in one's ability to succeed in specific situations (Bandura, 1977). Self-efficacy is developed from external experiences and can

be influential in guiding future behavior. According to Bandura's theory of self-efficacy, those individuals with high self-efficacy—those who believe they can perform well in a given situation—are more likely to have a desire to master a difficult task, rather than avoid it (Bandura, 1988; Miller & Dollard, 1941; Mischel & Shoda, 1995). According to Bandura's work there are several sources that can affect self-efficacy. *Social persuasions*, or encouragements and discouragements can have a robust influence on self-efficacy. Positive social persuasions increase self-efficacy, while negative social persuasions decrease self-efficacy. Therefore, a supervisor who gives positive support, provides constructive criticism, and builds their students' overall confidence in their performance may ultimately enable their students to master difficult tasks and challenges as a speech-language pathologist, even after direct supervision is no longer being provided.

According to one participant, a supervisor who states clear expectations and guidelines to their students is also beneficial to the students during their graduate clinical training. When graduate students are aware of what is expected of them in the clinical setting, they may be able to better gauge their supervisors' personal expectations. Different supervisors may have different expectations for when their students should become more independent with certain clinical skills. Individual supervisors may also have different ideas regarding the type of feedback and supervision that they will be providing for their students. At times, it may be difficult for graduate speech-language pathology programs to formulate very specific expectations and guidelines, and more difficult still for individual clinical supervisors to formulate specific expectations and guidelines for the clinical training setting. The American Speech-Language-Hearing Association (ASHA) has standards and procedures in place to help guide and standardize

the training of speech-language pathology graduate students; however some expectations that relate to supervision are not specified. For example, within these standards there are currently no procedures to guide the amount of supervision that must take place in a face-to-face environment. While it is stated that supervision must be in real-time, this supervision can either occur face-to-face, through observation via a one-way mirror in the therapy room, or through observation via live video and audio recording. Hence, it may be difficult for graduate programs and individual supervisors to formulate very specific expectations and guidelines for the clinical training setting since more specific standardized guidelines and procedures are not currently in place.

Lastly, two of the study participants emphasized that clinical supervisors may be most helpful to graduate students when they are willing to be a model for their students. SLP 3 discussed, “My ideal supervisor would be someone who does more examples, more models, more hands-on, and shows me how they would do it.” When graduate students are able to actively observe a clinical supervisor performing evaluation and therapy tasks, they are able to obtain a more holistic view of the clinical tasks that are required during an assessment or treatment session with a client. This idea is supported by social cognitive learning theory. The cognitive learning theory supports the importance of a supervisory model. In general, the cognitive learning theory suggests that learning occurs by observing models and consequences of modeled behaviors (Merriam et al., 2007; Schunk, 1996). Cognitive learning theory also states that learning occurs by observing models of the desired behaviors, and by observing the consequences of the modeled behavior (Bandura, 1986, 1988; Merriam et al., 2007).

The importance of a clinical model is also mentioned in literature related to different models of supervision. Many models of supervision have surfaced over the past thirty years (Ladany et al., 1999), and methods that are often utilized within the rehabilitation sciences stem from the cognitive-behaviors models of supervision. Aspects of cognitive-behavioral models of supervision include: modeling (learning through demonstration of a supervisor), role-playing and/or practice of new skills, feedback and reinforcement from the supervisor, self-evaluation, and goal setting (Spence et al., 2001). Finally, the importance of clinical supervisors providing a model is supported by literature in speech-language pathology. A more recent study sought to determine the development of clinical and metacognitive thinking skills in first-year graduate students enrolled in a graduate level speech-language pathology program during their first semester of clinical in-house practicum. Findings indicated that learning styles, the ability to integrate knowledge, etc. would certainly affect the acquisition of clinical knowledge across individuals. However, despite abilities that vary from student to student, it was determined that supervisors can best facilitate clinical growth by modeling strategy usage in the clinical setting (Madix & Oxley, 2009).

Clinical education may be defined as: learning by doing specific tasks and skills in the presence of a clinical model with an emphasis on the active participation of the learner (DeClute & Ladyshevsky, 1993; Emery, 1984). It has been suggested that these characteristics of clinical education (the presence of a model and active participation of the learner) are the most influential factors of effective clinical learning; these factors may even be more crucial than the learner's present level of knowledge and ability (Griffiths, 1987; Stritter et al., 1975).

### *Least Helpful Supervisor Characteristics*

All eight of the study participants discussed various characteristics and qualities that are least helpful for a supervisor to possess. According to three of the study participants, supervisors who do not provide good feedback are not helpful to the overall learning process. For example, SLP 1 stated, “I guess I would dread working with someone who doesn’t give me any advice or feedback of what to do differently.” If a supervisor does not provide adequate feedback to their students, the students may not be able to learn new clinical skills efficiently and effectively. It is suggested that students will learn more material, learn it more efficiently, and retain it for a longer period of time if active learning methods of teaching are utilized (Bonwell & Eison, 1991; Meyers & Jones, 1993; Sutherland & Bonwell, 1996). Active learning is “anything that involves students in doing things and thinking about the things they are doing” (Bonwell & Eison, 1991). Reflection is a major component of active learning and takes place when learners think about what they have learned and how they are learning. Without feedback, the student may not be able to effectively and accurately reflect on what they are doing and what they are learning. When learning new, complex skills a student will likely not even be aware of their strengths and weaknesses without feedback on their current performance. If a student does not receive adequate feedback from their supervisor, it may be very difficult for the student to engage in active learning. As SLP 7 said, “If I don’t get feedback, I don’t learn anything day after day.”

Six of the eight study participants explained that a supervisor who relates to their students in a negative way is not viewed as being helpful to graduate students. For example, supervisors who are unapproachable, less personable, inflexible, and impatient

may not be as helpful to graduate students. As previously discussed, self-efficacy can be crucial in affecting how one approaches goals, tasks, and challenges. Encouragements and discouragements can have a great influence on self-efficacy. While positive social persuasions increase self-efficacy, negative social persuasions decrease self-efficacy. If a supervisor relates to their students in a negative way, the student may begin to feel negatively about themselves as a person, and possibly as a beginning clinician. As SLP 3 discussed, “After I hear enough negative comments about what I’m doing wrong and I don’t hear anything that I’m doing right, I start to think that maybe my supervisor doesn’t like me. Or I think that I’ll never be a good clinician.”

If a supervisor gives a student negative comments, without being constructive or somewhat positive, a student can begin to feel as if they are being attacked by their supervisor on a personal level. If a supervisor is more inflexible and demands that their graduate students perform therapy tasks in precisely the same way that they themselves would, it is more difficult for the student to develop confidence in their own personal clinical skills and style. SLP 6 said, “It’s not helpful when a supervisor doesn’t trust you enough to let you take initiative to create your own ideas and styles and techniques. That wouldn’t give me the confidence to move forward.”

Last, five of the eight participants conveyed that a clinical supervisor is not helpful when they appear impatient with their graduate students during the clinical training process. When learning how to utilize new, complex clinical skills graduate students may feel more relaxed and comfortable during the learning process when their supervisors are more patient with them as they are learning. It should be noted that it is generally easier to decrease an individual’s self-efficacy than it is to increase an

individual's self-efficacy (Bandura, 1977, 1986). Therefore, if a supervisor relates to their students in negative way over a significant period of time, it may not be long before a student develops poor self-efficacy, which may directly affect how they learn new tasks and utilize new skills. In addition, if a student already has poor self-efficacy, it may take a significant amount of time and encouragement for that student to be able to approach new tasks with confidence. . As SLP 5 said, "Sometimes I feel like some of the supervisors I have had make me feel like I should already know that I'm doing, that I should already be a professional. I'm still learning and they need to take time to help build my confidence."

### *Differences in Supervision*

According to Pena and Kiran, the five phases of clinical knowledge are novice, transitional, competence, mastery, and expert (Pena & Kiran, 2008). The first three phases of clinical knowledge (novice, transitional, and competence) are the three phases that are most frequently exhibited and developed in students in a graduate program. During the transitional phase it is crucial that supervisors provide direct feedback during the actual therapy session, rather than waiting until the session is completed. This can aid students in learning the appropriate steps to help correct an error, or to change a strategy so it can be used more effectively in the future (Madix & Oxley, 2009).

In their interview responses, six of the eight study participants shared experiences related to differences in the nature of the supervision that they received during their clinical training. Some students considered the supervision that they received to be more direct; the supervisor was in the same room with the student during evaluation and treatment sessions. The study participants spoke more favorably about direct supervision

as compared to indirect supervision and considered direct supervision to be more beneficial overall. These findings are supported by the literature. Stech (1973) and colleagues claim that a part of clinical training should be the teaching of methods to bring about the process of professional skills into consciousness. In other words, student clinicians should be taught and encouraged to be aware of the skills required for the “on-line” processes that are involved in the face-to-face therapeutic setting (Stech et al., 1973).

Evidence suggests that speech-language pathology graduate students in general feel that they are never actually taught how to “do” therapy. In this instance “doing” therapy refers to the completion of speech or language tasks in face-to-face interactions, such as presenting and explaining tasks, modifying tasks as needed, and giving appropriate responses and feedback (Horton et al., 2004). When supervisors provide their students with direct supervision, there may be more opportunities for students to focus on planning therapy, devising a strategy to “do” therapy, and learning how to manage difficulties that arise during therapy. The literature suggests that this kind of supervision and instruction can have a significant impact on the students’ perceptions of their understanding of how to “do” therapy (Horton et al., 2004).

#### *Feedback from Supervisors*

It is well supported that receiving feedback is an important part of clinical education, whether the feedback is received in verbal or written form. Despite differing professional and theoretical backgrounds, supervisors across several areas of clinical practice (speech-language pathology, occupational therapy, social work, psychology) tend to engage in similar methods of supervision (Hart, 1982; Heckman-Stone, 2004;



Rich, 1993). Usually, the supervisee presents some form of work example, which is followed by discussion, review, and feedback from the supervisor (Spence et al., 2001).

Whether feedback is provided in verbal or written form, it is clear that feedback from supervisors is important to the graduate students who participated in this study. All eight of the study participants discussed the importance of supervisor feedback in one form or another. One participant voiced her frustration with a lack of feedback from her clinical supervisors. SLP 2 said, “All the supervisors I had during in-house clinic weren’t really good with feedback. After the majority of my sessions, my supervisor(s) didn’t give me *any* feedback, so I don’t know what else to do other than the same things over and over.”

It may be argued that a beginning clinician requires a sufficient amount of verbal and/or written feedback from their supervisor in order to effectively anticipate a client’s needs and to detect errors in their own clinical skills, and then in turn, provide feedback and correction to the client. Without having the necessary clinical skills to think “on-line”, a beginning therapist may have more difficulty advancing along the continuum of clinical competence. Schon’s (1987) term “knowing-in-action” refers to a skilled clinician’s ability to anticipate a client’s needs, adjust tasks and verbal directions accordingly, detect errors, and provide feedback and correction to the client. These skills must be able to be implemented instinctively and efficiently; the therapist must implement these skills “on-line”, so to speak (Schön, 1987). The concepts of “knowing-in-action” and thinking “on-line” may be closely related to the definitions of a proficient therapist and an expert therapist (Dreyfus & Dreyfus, 1986; Dutton, 1995; Slater & Cohn, 1991).

Even among only eight study participants, forms of feedback and preferences of feedback greatly differed. Three of the students commonly received only written feedback from their supervisors, and they spoke positively about this form of feedback. Other students pointed out that they preferred to receive both written and verbal feedback from their supervisors. As is the case with specific procedures for the supervision of graduate students, it may also be difficult for graduate speech-language pathology programs to formulate very specific expectations and guidelines for the nature and amount of supervisor feedback that should be provided to graduate students. The American Speech-Language-Hearing Association (ASHA) has standards and procedures in place to help guide and standardize the training of speech-language pathology graduate students; however some expectations that relate to supervisor feedback are not specifically addressed.

As a final point, three of the students revealed that they prefer not to receive more negative feedback from a supervisor in front of a client because it may cause them to feel more uncomfortable and self-conscious about their clinical performance. Some students only like to receive direct verbal feedback from their supervisor if they have a comfortable relationship with their supervisor. If a student does not feel as comfortable around their supervisor, they may prefer to receive feedback in a more indirect way.

So, while it is essential that student clinicians receive direct feedback from their supervisors, the students' comfort level and self-perceptions should also be considered. This idea may also be related back to the theory of self-efficacy. It may be said that self-efficacy is the personal perception of one's behavior in the external environment. According to Bandura's theory of self-efficacy, those individuals with high self-

efficacy—those who believe they can perform well in a given situation—are more likely to have a desire to master a difficult task, rather than avoid it (Bandura, 1988; Miller & Dollard, 1941; Mischel & Shoda, 1995). Since negative social persuasions and discouragements can negatively affect a person’s self-efficacy, it is important for supervisors to keep this in mind when providing feedback to their students. If possible, verbal and written feedback should not cause the students to feel uncomfortable or self-conscious, especially in front of a client.

#### *Working with Different Supervisors*

During the interviews, four of the eight study participants talked about their experiences working with different supervisors during their clinical training in graduate school. Some of these experiences were described in a more negative light; one student expressed that having different supervisors was frustrating because she never knew what to expect from different individual supervisors. SLP 1 stated, “I have had a lot of supervisors during in-house clinic and they are all very different. Some of them will give you a lot of feedback, but some of them don’t give you much feedback at all, which is frustrating because there is no consistency.” Without more specific standards for the supervision and training of speech-pathology graduate students, it may be very frustrating indeed for graduate students to work with several different supervisors simultaneously, or even over the course of several semesters.

Again, the American Speech-Language-Hearing Association (ASHA) does not specifically address some expectations that relate to the supervision of speech-language pathology graduate students. There is a document that outlines standards for the program of study’s knowledge and skills outcomes (Standard IV). More specifically Standard IV-

E states that the amount of supervision must be appropriate to the student's level of knowledge, experience, and competence and "supervision must be sufficient to ensure the welfare of the client/patient" (pp. 9). So, it may be challenging for individual graduate supervisors to formulate very specific standards for the supervision and training of speech-language pathology graduate students.

Two other participants offered a more positive view of the experience of working with different supervisors. Working with different supervisors may provide students with many diverse experiences, and the chance to observe many different models during their clinical training. SLP 3 stated, "I just had so many different models in front of me and I was able to pick and choose some things that I liked and didn't like to use during my therapy sessions." If implemented with some care, working with different and multiple supervisors may indeed be beneficial for graduate student clinicians. For example, the mentor-protégé model (Nolinske, 1995) places an emphasis on multiple mentors, rather than one supervisor. This supervision model is based on the idea that multiple mentors are able to provide more specific information based on their areas of expertise and interest. Working with different supervisors may provide students with many diverse experiences, and the chance to observe many different models during their clinical training.

### **Summary of Theme One Discussion**

The results of this study indicate that supervision plays an extremely important role in the overall clinical experience for speech-language pathology graduate students. According to the study participants, specific supervisor characteristics, different styles of supervision, working with different supervisors, and how supervisors provide feedback

are significant elements of their experiences with clinical supervisors during graduate training. These results were discussed and supported by the concept of active learning, and significant learning theories, such as social cognitive learning theory and the theory of self-efficacy. Current American Speech-Language-Hearing Association (ASHA) guidelines for clinical supervision were also discussed, as well as relevant models of clinical supervision.

### **Discussion of Theme Two: Clinical Experiences**

The results of this study revealed several significant elements of the overall clinical experience in a speech-language pathology graduate program. According to the study participants, there are specific differences between in-house clinic experiences and externship experiences, particularly significant aspects of clinical training, and limitations of clinical training and clinical coursework. The second over-arching theme is clinical experiences. In this theme, there are four categories: a) differences between in-house experiences and externship experiences, b) significant aspects of clinical training, c) limitations of clinical training, and d) limitations of clinical coursework.

#### *Differences between In-house Experiences and Externship Experiences*

During the interviews, five of the eight participants discussed differences between their in-house clinical experiences and their externship clinical experiences. The first three phases of clinical knowledge (novice, transitional, and competence) are the three phases that are most frequently exhibited and developed during a student's graduate clinical experiences (Pena & Kiran, 2008). During the transitional phase it is crucial that supervisors provide direct feedback during the actual evaluation or treatment session, rather than waiting until the session is completed. This can more quickly allow students

to learn the appropriate steps to help correct an error, or to change their procedures and practice so they can be used more effectively in the future (Madix & Oxley, 2009). Three of the study participants stated that they received more direct supervision from their supervisors at their externship sites in comparison to the in-house clinic. For example, SLP 2 said, “She was more easily accessible. If I had a question in the middle of a session, I could ask her. So that was more helpful than supervision during in-house clinic.” Since the supervisors tended to be in the therapy room while the graduate student was working with a client, the graduate student could more easily ask questions and receive feedback.

After completing their first externship, four of the students realized that the amount of paperwork and planning for therapy sessions that was expected of them at in-house clinic was not realistic compared to what was expected of them on their externships. They explained that they thought their overall clinical experience during their externship placement was more realistic and more like the “real world” than their overall clinical experience at in-house clinic. This idea is significant and is closely linked with the concept of tacit knowledge. Tacit knowledge places emphasis on learning from direct experience and solving problems that may arise in practice (Nestor-Baker & Hoy, 2001). Furthermore, tacit knowledge involves a firm understanding of how something works and using that knowledge to solve problems of practice (Björk, Kowalski, & Browne-Ferrigno, 2005).

Tacit knowledge also involves a holistic understanding of a system or environment and has three major facets: a) It is related to knowing how to complete specific tasks, b) it is necessary to attain practical goals, and c) it is usually acquired in

work-embedded contexts. Overall, tacit knowledge is related to an individual's ability to successfully and competently perform real-world tasks, and to achieve personal goals (Sternberg, 1996). The acquisition of tacit knowledge is important, as it was determined that measures of tacit knowledge are predictive of an individual's future performance (Sternberg et al., 1993). The literature suggests that tacit knowledge is best acquired through significant learning experiences which will help individuals to gain professional knowledge. Hence, more realistic and significant clinical experiences in work-embedded contexts are key to acquiring tacit knowledge. For those wishing to enter a professional or administrative career, such as speech-language pathology, the acquisition of tacit knowledge is vital.

Last, five participants also stated that they received more models and demonstrations from their supervisors in their externship settings versus the in-house clinic setting. As discussed earlier in this chapter, this idea is supported by social cognitive learning theory. The cognitive learning theory supports the importance of a supervisory model. In general, the cognitive learning theory suggests that learning occurs by observing models and consequences of modeled behaviors (Merriam et al., 2007; Schunk, 1996). Cognitive learning theory also states that learning occurs by observing models of the desired behaviors, and by observing the consequences of the modeled behavior (Bandura, 1986, 1988; Merriam et al., 2007).

Relevant supervisory literature also supports the use of supervisory models. Aspects of cognitive-behavioral models of supervision include: modeling (learning through demonstration of a supervisor), role-playing and/or practice of new skills, feedback and reinforcement from the supervisor, self-evaluation, and goal setting (Spence

et al., 2001). Goldhammer's (1993) model of clinical supervision briefly outlines six components that should be addressed in clinical supervision. These six components are: lesson planning, interaction techniques, reinforcement, response rate, cues, and prompts/stimulation. These components can only be taught through direct clinical supervision and modeling, (Goldhammer et al., 1993) not through mentoring and reflective practice. According to the study participants, they received more direct supervision and supervisor models while on their externships. It may be that direct supervision and modeling are utilized more effectively in the externship setting, rather than the in-house clinical setting.

#### *Significant Aspects of Clinical Training*

All eight of the study participants discussed significant aspects of their clinical training. Seven of the graduate students who were interviewed discussed that hands-on clinical experiences were significant in their overall clinical training. As an example, SLP 7 stated, "I feel like I learn best when I have hands-on experience. Otherwise, it just doesn't sink in and stick in my brain." Hands-on clinical experiences are important for several reasons. Students have a chance to learn how to conduct an entire therapy session with an actual client, and they have the opportunity to try using different practices and procedures that they have learned about in their coursework. Furthermore, hands-on clinical experience enables the student clinician to make a stronger and more efficient connection between theory and practice. When keeping in mind a framework for professional preparation that consists of principles of adult learning and the acquisition of professional knowledge, the importance of shifting instruction out of the classroom and into a work-embedded context becomes clear (Björk, 2001). One of the more influential



teaching strategies used to acquire professional knowledge is problem-based learning. This teaching strategy is widely used in medical schools as well as in the rehabilitation sciences and other professional schools. Problem-based learning allows students to learn in an environment that simulates actual working conditions as accurately as possible (Fink, 2003).

When adult learners are placed into hands-on, work-embedded learning environments, they will encounter real-life, open-ended problems and situations. In these situations, the students must learn to accurately analyze the problem, gather information, assess the relevance of that information, formulate an appropriate solution, and apply feedback to further learning opportunities. Recent evidence in the literature has demonstrated that students can more effectively learn how to analyze and solve problems through problem-based learning and work-embedded learning, compared to the traditional curriculum of “book knowledge” for two or more years and only then moving forward to learn how to apply their knowledge (Duch et al., 2001; Fink, 2003; Wilkerson & Gijsselaers, 1996).

In addition, three of the students discussed the importance of gaining clinical observation hours prior to beginning hands-on clinical training. SLP 6 said, “I think the main thing that I got out of observation was understanding how to conduct a therapy session. It was the first time that I got to see how a speech therapy session actually works.” The importance of clinical observation hours is supported by the concept of active learning. By engaging in observation hours, students have a chance to gain a more holistic view of the profession of speech-language pathology. The literature in the areas of college teaching and higher education especially has posed important questions about

the overall effectiveness of the more traditional approach to teaching. This body of literature also suggests that students will learn more material, learn it more efficiently, and retain it for a longer period of time if active methods of teaching are utilized (Bonwell & Eison, 1991; Meyers & Jones, 1993; Sutherland & Bonwell, 1996). Active learning is “anything that involves students in doing things and thinking about the things they are doing” (Bonwell & Eison, 1991). While passive learning consists of the receiving of information and ideas, active learning involves “doing” and “observing” experiences. “Observing experiences” can only occur when a learner listens to or watches someone else doing something that is directly related to what they are learning. Through observation, the learners have the opportunity to experience the reality of what they are learning.

#### *Limitations of Clinical Training*

During the interviews seven out of eight graduate students mentioned some limitations that they experienced during their graduate clinical training. Firstly, four students felt that the chance to work clinically with more varied diagnoses and disorders would have been helpful. One student thought that having the opportunity to work with clients with a wider range of ages would have been beneficial. As a final point, four of the participants felt that more experience with clinical assessments and evaluations would have been valuable.

Since some of the study participants did not have the opportunity to work clinically with more varied diagnoses, disorders, and age groups, they were not able to actively learn about certain areas of speech-language pathology. SLP 3 discussed, “I only had two clients, so getting more experience and seeing more of a variety would have

helped. I feel like a lot of the clients that I had were language and articulation and nothing more severe than that.” Active learning involves “doing” and “observing” experiences, and reflecting on what has been learned. “Doing experiences” refers to a learning activity in which the learners are actually doing what the teacher wants them to specifically learn how to do. In other words, through a “doing” experience the learner is doing what they need to do in order for them to use the material that they learned to perform specific tasks after the class/course is complete.

The graduate students who discussed limitations of their clinical training raised some very valid and insightful points. The participants were very aware of the specific areas of speech-language pathology in which they felt they were personally lacking clinical experience. They were well aware of the various ages, diagnoses, disorders, and clinical tasks with which they had not gained enough clinical experience. This very topic is well supported by literature in speech-language pathology. For example, over the past twenty years practitioners and researchers have reported inadequacies in the clinical preparation of speech-language pathologists to provide services to the stuttering population (Kelly et al., 1997). In an article published in 1974 it was found that speech therapists who have just graduated and those who have been working for several years all have feelings of inadequacy when dealing with those who stutter, and consequently try to avoid working with this population (Sommers & Caruso, 1995). Other scholars have also explored this topic and have concluded that graduate students received minimal coursework and insufficient clinical opportunity with those who stutter (Curlee, 1985; Leith, 1971; Louis & Lass, 1980; Mallard et al., 1988; Starkweather, 1995)

### *Limitations of Clinical Coursework*

During the interviews all eight of the graduate students discussed some limitations that they experienced related to their graduate-level coursework. Six of the participants discussed taking graduate-level coursework while simultaneously completing in-house clinic or externship experiences. Three of the students felt that it would have been easier to complete all coursework before beginning any clinical experiences. Three other students had the opposite opinion; they preferred to complete coursework and clinical experiences simultaneously.

A concern commonly expressed throughout the rehabilitation sciences literature (occupational therapy, physical therapy, athletic training, speech-language pathology) is the idea that students and beginning clinicians and practitioners often perceive an inconsistency between theory and practice (Steward, 1996). Students and young therapists may have difficulties making connections between coursework and fieldwork, between different forms of knowledge used in clinical practice, and between different areas of practice (Steward, 1996). This disconnection between theory and practice may be the result of inadequate development of clinical skills and theory building (Strohschein et al., 2002). In addition, the disconnection between theory and practice may suggest that both clinical educators and students do not place enough emphasis on identifying and refining theories to develop clinical practice (Steward, 1996; Strohschein et al., 2002). If classroom experiences and clinical experiences are taken simultaneously and a meaningful connection is made between coursework and the students' current clinical experiences, a strong link between theory and practice can be made.

Exactly when coursework is completed in reference to clinical experiences seems to be more a case of personal preference. Some students may prefer to take all of their courses prior to beginning clinical experiences. In this way, they may feel that they can devote more time and attention to their clinical experiences since they are not completing coursework at the same time. Conversely, other students may prefer to complete coursework and clinical experiences simultaneously. By engaging in both classroom experiences and clinical experiences at the same time, some students are able to more easily connect theory with practice. However, it should also be noted that if the coursework does not match up with the students' current clinical experiences, taking coursework while participating in clinical experiences can be quite overwhelming.

Last, three of the participants expressed that learning more “practical” information in their courses would have been helpful. Another important issue in rehabilitation science is the translation of theory and scientific findings from the literature into clinical training and practice. The specialized field of translational science is one which focuses on the transmission of developed ideas and theories, products, or techniques from a research environment (“bench”) to practical application in the realm of clinical training and practice (“bedside”). The world of rehabilitation science does present challenges that demand additional methods of transfer from “bench to bedside”. Once again, the data from this study suggests that models and hands-on experience may be somewhat lacking in both the clinical setting and the classroom setting in speech-pathology graduate programs.

For example, some graduate students may find more models and hands-on experience during their coursework helpful, even before they reach in-house clinic or

externships. Specifically, one participant expressed that observing their instructor/professor working with an actual client during their courses would be beneficial. In this way, they could more easily see the connection between theories and techniques, and clinical practice. SLP 8 discussed, “In class, I wish that they would bring in a client and say, ‘This is what you can do’ instead of reading out of a book about a therapy technique you can do. That’s great and I can pretty much understand how to use that technique, but until I see someone else do it, I don’t know if I’m doing it right.”

### **Summary of Theme Two Discussion**

The results of this study revealed several significant elements of the overall clinical experience in a speech-language pathology graduate program. According to the study participants, there are specific differences between in-house clinic experiences and externship experiences, particularly significant aspects of clinical training, and limitations of clinical training and clinical coursework. These results were discussed and supported by the concepts of tacit knowledge, active learning, problem-based learning, and work-embedded learning. Social cognitive learning theory and relevant models of clinical supervision also supported the discussion. In addition, related rehabilitation sciences literature and speech-language pathology literature aided in the discussion of the study results.

### **Summary of Discussion**

The results of this study indicate that supervision plays an extremely important role in the overall clinical experience for speech-language pathology graduate students. According to the study participants, specific supervisor characteristics, different styles of supervision, working with different supervisors, and how supervisors provide feedback

are significant elements of their experiences with clinical supervisors during graduate training. The results of this study also revealed several significant elements of the overall clinical experience in a speech-language pathology graduate program. According to the study participants, there are specific differences between in-house clinic experiences and externship experiences, particularly significant aspects of clinical training, and limitations of clinical training and clinical coursework. These results were discussed and supported by the concepts of tacit knowledge, active learning, problem-based learning, and work-embedded learning. Social cognitive learning theory and the theory of self-efficacy also supported the discussion. In addition, related rehabilitation sciences literature and speech-language pathology literature aided in the discussion of the study results. Finally, current American Speech-Language-Hearing Association (ASHA) guidelines for clinical supervision were discussed, as well as relevant models of clinical supervision.

### **Recommendations for Future Research**

The survey for this study was developed by the principal investigator along with other experienced consultants; hence, there is no validity or reliability data for this tool as of yet. The tool was designed to enhance the study by providing demographic and background information of the study participants, as well as detailed information regarding their clinical coursework and experiences in speech-language pathology. Through the completion of this study, the researcher gained further insights into the shared experiences of speech-language pathology graduate students. By further examining the data that emerged from this study, the researcher may be able to design a survey instrument that is more relevant to the experiences of speech-language pathology graduate students.

Once a more appropriate survey tool is developed, it may be administered to a much larger group of participants to provide more relevant information regarding clinical training, and graduate students' knowledge and clinical skills for working with clients across different areas of speech-language pathology practice. More specifically, a survey tool that further assesses the self-ratings of speech-language pathology graduate students' knowledge and skills could add extremely beneficial information to the literature, as it closely relates to the theory of self-efficacy. Self-efficacy has been described as the sense of belief that one's own actions have an effect on their environment (Steinberg, 1998). Self-efficacy may also be based on a person's judgment of their capabilities within specific mastery criteria, or a person's assessment of their abilities to perform desired tasks in relation to goals and standards, rather than in comparison with another individual's capabilities. It has been proposed that an individual's ideas of self-efficacy greatly affect their social interactions.

A concern commonly expressed throughout the rehabilitation sciences literature (occupational therapy, physical therapy, athletic training, speech-language pathology) is the idea that students and beginning clinicians and practitioners often perceive an inconsistency between theory and practice (Steward, 1996). It has also been suggested in the rehabilitation sciences literature that a solid clinical education requires an underlying philosophy or theoretical framework that is clearly stated and embraced by all the individuals engaged in the process of clinical education (Cranton & Kompf, 1989; Strohschein et al., 2002). Therefore, it may be said that a theoretical framework is needed to guide the clinical training and supervision of speech-language pathology graduate students, so that the link between theory and practice is robust and consistent.



Specifically in speech-language pathology, there lacks a systematic framework for describing the processes that take place during therapy and other clinical tasks. The data that emerged from this study is not only supported by relevant literature in the rehabilitation sciences and speech-language pathology, but the data can also be explained by adult learning theories, namely social cognitive learning theory and the theory of self-efficacy.

Further research that focuses on developing this theoretical framework would be extremely valuable. However, Cranton and Kompf (1989) advised against the development of educational frameworks for the rehabilitation sciences/health care professions in isolation. They recommended that an educational framework for the rehabilitation sciences should be devised from an interdisciplinary and holistic approach so that the needs of students as adult learners can be wholly met. This kind of educational framework would need to consider the inclusion of perspectives from all of the rehabilitation sciences, as well as the inclusion of theoretical foundations of cognitive psychology and adult learning theories (Cranton & Kompf, 1989; Geller & Foley, 2009; Strohschein et al., 2002). Therefore, it may also be beneficial to replicate this study in the future, interviewing graduate students in other rehabilitation sciences programs, or speech-language pathology graduate students from other universities in other regions of the country to determine if the same experiences are shared by this group of students in other regions of the country. If experiences of speech-language pathology graduate students are similar at different universities in different regions of the country, sufficient data may be gathered to develop a theoretical framework to guide the clinical training and supervision of speech-language pathology graduate students.

Understanding how students are prepared may enable those who are directing programs to improve the clinical training and supervision that speech-language pathology graduate students receive. Educational leaders are vital when restructuring the components of any graduate program. Hence, another promising area of inquiry would further examine the educational leaders within a speech-language pathology graduate program (program directors, department heads, and clinical coordinators). Further research in this area could examine how these leaders use empirical knowledge (research) to improve clinical training and supervision of graduate students.

### **Recommendations for Practice and Closing Thoughts**

The two speech-language pathology graduate programs in this study were located in the same state, less than 200 miles apart. Despite this, the two universities and graduate programs were completely different from one another. Furthermore, each of the eight students within each graduate program had completely different personal experiences related to supervision and clinic. Even though the graduate programs were different, and each participant was so different, all eight of the study participants had very similar opinions, concerns, and perspectives to discuss related to their experiences with supervision and clinic. In fact, of the nine categories that organized the data, there was not a single category that was more predominant at one university versus the other. However, it should be noted that the category that compared in-house clinic experiences to externship experiences only included data from the students who attended West Welton University, as Lone Lake University did not have an in-house clinic.

The results of this study may also help to guide and inform clinical supervisors in speech-language pathology graduate programs. According to the students who

participated in this study, they feel they receive the most benefit from supervisors whom they have a positive relationship with, and with those who help to build their confidence in their clinical skills. These factors seem to be even more important than having a supervisor who is very knowledgeable or has the most clinical experience. In addition, many of the research findings revealed that what is beneficial to students is sometimes highly based on personal preferences. Obviously, it would be impossible to accommodate every single student when designing the layout of coursework and clinical experiences. However, the graduate students who participated in this study do seem to have a very clear idea of what they prefer in terms of skills they would like to learn, how they prefer to receive feedback, the kind of supervision they prefer, and the kind of relationship they want to have with their supervisor.

Hence, it is extremely important for supervisors to be aware of these preferences and differences among students, especially of the students they are supervising. In addition, it is crucial for clinical supervisors to be aware of how these elements affect a graduate student's overall clinical learning experiences. The American Speech-Language-Hearing Association (ASHA) provides some standards to guide the clinical training and supervision of graduate students, but then those standards should be tailored to meet each graduate student where they are.

Study findings may lead some to question as to whether or not in-house clinic experiences are especially beneficial to speech-language pathology graduate students. If there are so many positive benefits and so many elements that the study participants preferred at their externship sites, is the in-house clinic experience necessary? Some of the study participants could not participate in an in-house clinical experience, and still

seemed to acquire roughly the same clinical skills and experiences as those that did participate in an in-house clinical experience. So, would speech-language pathology graduate students benefit from only participating in extensive, direct observations followed by multiple and varied externship placements?

The study participants from West Welton University discussed several differences between clinical experiences at their externship sites and clinical experiences at the in-house clinic. The study participants spoke very positively about their clinical experiences at their externship sites. The students felt that they received more direct supervision and feedback from their supervisors at their externship sites in comparison to the in-house clinic. The students explained that they thought their overall clinical experience during their externship placement was a more “real world” experience. The graduate students were able to spend more time gaining direct clinical experience with clients, rather than spending hours preparing for therapy sessions and completing paperwork. At their externship sites, the students also had the opportunities to work with more varied clients in a number of different clinical settings. Last, the graduate students received more models and demonstrations from their supervisors in their externship settings as compared to the in-house clinic setting. All of these components that occur at the externship sites can be supported by adult learning theories and offer insights into constructing clinical and supervisory models. Externship sites may more readily provide an overall clinical experience and learning environment that would allow adult learners to learn and maintain advanced clinical skills more efficiently and effectively.

Increasing the efficacy of the clinical training and supervision of speech-language pathology graduate students requires standards of practice, such as those

provided by the American Speech-Language-Hearing Association (ASHA). But, other components should be included. Models of highly effective practices that are grounded in adult learning theory and empirical research regarding clinical training and supervision should also be taken into account. When standards of practice are informed by empirical research and are grounded in adult learning theory, department-level leaders can more effectively design models of clinical training and gain insights into supervisory methods that may be most efficacious. Therefore, these changes can only happen with the support of ASHA and with the ability of program and department-level leaders in institutions of higher education to construct more effective methods of clinical training and supervision for speech-language pathology graduate students. A rich body of knowledge that links adult learning theory with how beginning clinicians should be trained and supervised is considered necessary. The results and discussion of this exploratory phenomenological study will be a valuable addition to the literature in this area.

APPENDIX A: IRB APPROVAL AND EXTENSION



Office of Research Integrity
IRB, IACUC, RDRC
315 Kinkead Hall
Lexington, KY 40506-0057
859 257-9428
fax 859 257-8995
www.research.uky.edu/ori/

Initial Review

Approval Ends
February 6, 2013

IRB Number
12-0018-P4S

TO: Anysia Ensslen, M.S.
Education Admin & Supervision
151 South Locust Drive, Apt #320
Lexington, KY 40517
PI phone #: (717) 215-8559
FROM: Chairperson/Vice Chairperson
Non-medical Institutional Review Board (IRB)
SUBJECT: Approval of Protocol Number 12-0018-P4S
DATE: February 10, 2012

On February 8, 2012, the Non-medical Institutional Review Board approved your protocol entitled:

Experiences of Speech-Language Pathology Graduate Students: An Exploratory Phenomenological Study

PLEASE NOTE: Once you receive approval from the U of L and WKU IRBs you must forward copies of the approval letters to our office to be placed in your file.

Approval is effective from February 8, 2012 until February 6, 2013 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's Guidance and Policy Documents web page [http://www.research.uky.edu/ori/human/guidance.htm#PIresp]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [http://www.research.uky.edu/ori]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

M. Van Tubergen Ph.D. /ah
Chairperson/Vice Chairperson



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Continuation Expedited Review  
Modification Approved: Extension; Close to Enrollment; Update Contact Info

Approval Ends  
January 29, 2014

IRB Number  
12-0018-P4S

TO: Anysia Ensslen, M.S.  
Education Admin & Supervision  
5 Sna Lane  
Mechanicsburg, PA 17055  
PI phone #: (717)215-8559

FROM: Chairperson/Vice Chairperson  
Non-medical Institutional Review Board (IRB)

SUBJECT: Approval of Protocol Number 12-0018-P4S

DATE: February 4, 2013

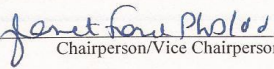
On January 30, 2013, the Non-medical Institutional Review Board approved your protocol entitled:

*Experiences of Speech-Language Pathology Graduate Students: An Exploratory Phenomenological Study*

Approval is effective from January 30, 2013 until January 29, 2014 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigator's responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

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Chairperson/Vice Chairperson

APPENDIX B: PARTICIPANT RECRUITMENT FLYER

*Did the Clinical Supervision You Received Prepare You  
To Be A Clinician???*



The purpose of this study is to understand and describe how well speech-language pathology graduate students feel their clinical training and supervision during graduate school prepares them for their first externship placements. **You will be asked to participate in 2-3 interviews (approximately 1 hour each), and to complete a short survey, which will help me to learn more about your classroom and clinical training in different areas of speech-language pathology.** A consent form will be provided for you prior to completing the survey and participating in the first interview.

In order to participate in this study you must:

- (1) be currently enrolled in a graduate speech-language pathology program*
- (2) have completed at least one externship placement as per the requirements of your graduate program*
- (3) have completed your undergraduate degree and/or speech-language pathology prerequisite courses at the same university where you are currently enrolled in a graduate speech-language pathology program*

This study has been reviewed and approved by the University of Kentucky Institutional Review Board for human subject participation. If you have any questions about the study please contact Anysia Ensslen at [ajensslen@uky.edu](mailto:ajensslen@uky.edu).

Please inform your clinical supervisor if you are interested in participating in this study, and then I can contact you with further information.

Thank you in advance for your help with this research project!  
Anysia J. Ensslen, M.S., CCC-SLP



## APPENDIX C: INTERVIEW PROCEDURES

- 1) Describe the clinical supervision you received during your clinical training at your university.
- 2) What aspect(s) of clinical training best prepared you for your first externship placement?
- 3) What would have helped you to be more prepared to enter your first externship placement?

### Sub-questions

- a. Which particular areas of evaluation and treatment warranted more focus during your clinical training at your university?
- b. What was your overall performance during your clinical training (at the university/in-house)?
- c. What was your overall performance during your first externship placement?
- d. Tell me about what your experiences at your externship may have been like had you not had an in-house clinic experience. (applicable to students at West Welton University only)
- e. How do you prefer to receive feedback from your supervisors?
- f. What are some good qualities for a clinical supervisor to have?
- g. What are some qualities that you would NOT like a clinical supervisor to have?

## APPENDIX D: INFORMED CONSENT

IRB Approval 12-0018
THIS FORM VALID 2/8/12 - 2/6/13

Consent to Participate in a Research Study

### EXPERIENCES OF SPEECH-LANGUAGE PATHOLOGY GRADUATE STUDENTS: AN EXPLORATORY PHENOMENOLOGICAL STUDY

#### WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being invited to take part in a study that is being conducted to understand and describe how well speech-language pathology graduate students feel their clinical training and supervision during graduate school prepares them for their first externship placements. You are being invited to take part in this research study because you are currently a speech-language pathology graduate student at either Western Kentucky University or University of Louisville who has completed at least one externship placement. If you volunteer to take part in this study, you will be one of about 10 people to do so.

#### WHO IS DOING THE STUDY?

The person in charge of this study is Anysia Ensslen, M.S., CCC-SLP of University of Kentucky, College of Education, Educational Leadership Studies. She is currently a doctoral student/doctoral candidate in the Educational Leadership Doctoral program. She is being guided in this research by Lars Björk, Ph.D. a faculty member in the Department of Educational Leadership.

#### WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to understand and describe how well speech-language pathology graduate students feel their clinical training and supervision during graduate school prepares them for their first externship placements.

#### ARE THERE REASONS WHY YOU SHOULD NOT TAKE PART IN THIS STUDY?

You should not participate in this study if you (1) have a hearing loss that may interfere with your participation in an interview, (2) have not completed at least one required externship placement as part of your graduate program, or (3) have not completed your undergraduate degree and/or speech-language pathology pre-requisite courses at the same university where you are currently enrolled in a graduate speech-language pathology program.

#### WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research procedures (questionnaire, interviews) will be conducted at either Western Kentucky University or University of Louisville, depending where you attend. The total amount of time you will be asked to volunteer for this study is approximately 3-4 hours.



**WHAT WILL YOU BE ASKED TO DO?**

You will be asked to complete a questionnaire/survey which will include questions regarding past clinical and educational experiences. The questionnaire will also include items that will require you to rate your level of knowledge and clinical skills when working with various types of clients. You will also be asked to participate in 2 or 3 interviews. These interviews will be audio recorded. Each interview will take approximately 45 minutes.

**WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?**

To the best of my knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

**WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?**

There is no guarantee that you will get any benefit from taking part in this study. Your willingness to take part, however, may provide valuable information about the experiences of speech-language pathology graduate students during their graduate program in regards to the clinical training and supervision they received.

**DO YOU HAVE TO TAKE PART IN THE STUDY?**

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. As a student, if you decide not to take part in this study, your choice will have no effect on your academic status.

**IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?**

If you do not want to be in the study, there are no other choices except not to take part in the study.

**WHAT WILL IT COST YOU TO PARTICIPATE?**

There are no costs specifically associated with taking part in the study. However, you may have to pay for the cost of getting to the study site and a parking fee.

**WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?**

You will receive a monetary reward (in the form of a \$25 gas card) for taking part in this study. Please note that in order to receive the reward that you must participate not only in the initial interview, but in the 1 to 2 follow-up interviews as well.

**WHO WILL SEE THE INFORMATION THAT YOU GIVE?**

I will make every effort to keep private all research records that identify you to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will not be entered on any form/file where data is



recorded. You will be given a participant number that will be placed on all forms/files containing data. Your name will only appear on this consent form. This form will be kept separate from the information you give, and these two things will be stored securely in separate places. The laptop that will be used for data collection is password protected; all data files related to this research project will also be password protected. All data that will be stored on the laptop for later analysis will not contain any identifying information. All data files that will be stored on a jump drive will be password protected and also will not contain any identifying information. All audio data that will be collected during the interviews will be digitally recorded and then transferred to the laptop and/or jump drive. All audio data will not contain any identifying information. All e-mails related to this study (correspondence, data files, etc.) will not contain any identifying information.

We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky, the University of Louisville, or Western Kentucky University.

**CAN YOUR TAKING PART IN THE STUDY END EARLY?**

If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. As a student, if you decide that you no longer want to continue in this study, your choice will have no effect on your academic status. However, in order to receive the reward you must participate not only in the initial interview, but in the 1 to 2 follow-up interviews as well.

**WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?**

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Anyisia Ensslen at 717-215-8559. If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428. I will give you a signed copy of this consent form to take with you.

**WHAT IF NEW INFORMATION IS LEARNED DURING THE STUDY THAT MIGHT AFFECT YOUR DECISION TO PARTICIPATE?**

If the researcher learns of new information in regards to this study, and it might change your willingness to stay in this study, the information will be provided to you. You may be asked to sign a new informed consent form if the information is provided to you after you have joined the study.

\_\_\_\_\_  
Signature of person agreeing to take part in the study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of person agreeing to take part in the study

\_\_\_\_\_  
Name of [authorized] person obtaining informed consent

\_\_\_\_\_  
Date

## APPENDIX E: COVER LETTER

Thank you in advance for taking the time to complete this survey. The purpose of this survey is to discover more about your classroom and clinical training in various areas of speech-language pathology. Please take 15-20 minutes to complete this survey prior to the start of our interview.

This study has been reviewed and approved by the University of Kentucky Institutional Review Board for human subject participation. If you have any questions about the study please contact Anysia Ensslen at [ajensslen@uky.edu](mailto:ajensslen@uky.edu). If you have any questions about your rights as a participant please contact the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428.

Thank you again for your participation!

Anysia J. Ensslen, M.S., CCC-SLP

APPENDIX F: SURVEY INSTRUMENT

***Questionnaire: Academic & Clinical Preparation of Graduate Speech-Language Pathology Graduate Students with Various Populations***

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Degree of Knowledge

Please rate your degree of knowledge for working with the following types of clients. Please rate your knowledge level for the population (adult, pediatric, both) that you are currently working with.

**1) Rate your degree of knowledge for working with clients with language disorders (aphasia).**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**2) Rate your degree of knowledge for working with clients with fluency disorders (stuttering).**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**3) Rate your degree of knowledge for working with clients with motor speech disorders (dysarthria).**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**4) Rate your degree of knowledge for working with clients with articulation/phonological disorders.**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**5) Rate your degree of knowledge for working with clients with cognitive deficits (memory, problem solving, reasoning).**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**6) Rate your degree of knowledge for working with clients with voice disorders.**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**7) Rate your degree of knowledge for working with clients with swallowing disorders (dysphagia).**

	Least to most knowledgeable				
Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

## Clinical Skills

Please rate your clinical skills (evaluation, treatment, etc.) for working with the following types of clients. Please rate your knowledge level for the population (adult, pediatric, both) that you are currently working with.

**1) Rate your clinical skills for working with clients with language disorders (aphasia).**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**2) Rate your clinical skills for working with clients with fluency disorders (stuttering).**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**3) Rate your clinical skills for working with clients with motor speech disorders (dysarthria).**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5



**4) Rate your clinical skills for working with clients with articulation/phonological disorders.**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**5) Rate your clinical skills for working with clients with cognitive deficits (memory, problem solving, reasoning).**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**6) Rate your clinical skills for working with clients with voice disorders.**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

**7) Rate your clinical skills for working with clients with swallowing disorders (dysphagia).**

1=Complete supervision; 5=Independent

Before beginning first externship placement	1	2	3	4	5
After completing first externship placement	1	2	3	4	5
Currently	1	2	3	4	5

## Education & Clinical Training

For each degree you hold, please indicate the degree (B.A., B.S., etc.) and your field of study.

	<b>Degree</b>	<b>Field of Study</b>	<b>Date earned/Expected date</b>
<b>Associate's</b>			
<b>Bachelor's</b>			

Please indicate the number of courses that you took at a college or university for each of the following areas of speech-language pathology.

	<b>Bachelor's Level</b>	<b>Master's Level</b>
<b>Language disorders (aphasia)</b>		
<b>Fluency disorders (stuttering)</b>		
<b>Motor speech disorders (dysarthria)</b>		
<b>Articulation/phonology</b>		
<b>Cognitive deficits (memory, problem solving, reasoning)</b>		
<b>Voice disorders</b>		
<b>Swallowing disorders (dysphagia)</b>		

Please estimate the number of clinical training hours you received in the diagnosis and treatment of clients in the following populations (please circle your answers).

*Language Disorders (Aphasia)*

<b>Training Level</b>	<b>Diagnostic/Treatment Hours</b>					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Fluency Disorders (Stuttering)*

<b>Training Level</b>	<b>Diagnostic/Treatment Hours</b>					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Motor Speech Disorders (Dysarthria)*

<b>Training Level</b>	<b>Diagnostic/Treatment Hours</b>					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Articulation/Phonology*

Training Level	Diagnostic/Treatment Hours					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Cognitive Deficits (memory, problem solving, reasoning)*

Training Level	Diagnostic/Treatment Hours					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Voice Disorders*

Training Level	Diagnostic/Treatment Hours					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

*Swallowing Disorders (Dysphagia)*

<b>Training Level</b>	<b>Diagnostic/Treatment Hours</b>					
<b>Graduate</b>	<10	10-20	21-30	31-40	41-50	>50
<b>1<sup>st</sup> externship placement</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	
<b>2<sup>nd</sup> externship placement (if applicable)</b>	<10	10-20	21-30	31-40	41-50	51-60
	61-70	71-80	81-90	91-100	>100	

In what types of settings were your externships? Please indicate the number of placements you had in each setting, and for how many weeks the placement lasted.

_____	Preschool	Number of weeks: _____
_____	Elementary school	Number of weeks: _____
_____	Middle/junior high school	Number of weeks: _____
_____	High school	Number of weeks: _____
_____	Acute care	Number of weeks: _____
_____	Skilled nursing facility (SNF)	Number of weeks: _____
_____	Rehab hospital	Number of weeks: _____
_____	Other; please specify: _____	Number of weeks: _____

## Demographics

- 1) Age: \_\_\_\_\_
- 2) Gender: \_\_\_\_\_
- 3) Age when you earned your Bachelor's degree: \_\_\_\_\_
- 4) Age when you began working on your Master's degree: \_\_\_\_\_



## REFERENCES

- 2005 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology. (2009), 2010, from [http://www.asha.org/certification/slp\\_standards.htm](http://www.asha.org/certification/slp_standards.htm)
- Anderson, H. (2001). Clinical teaching and mentoring: Vital in the development of competent therapists. *International Journal of Language and Communication Disorders, 36*, 138-143.
- Angen, M. J. (2000). Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue. *Qualitative Health Research, 10*, 378-395.
- Argyris, C. (1999). Tacit knowledge in management. In R. J. Sternberg & J. Horvath (Eds.), *Tacit knowledge in professional practice: Researcher and practitioner perspectives* (pp. 123-140). Mahwah, NJ: Lawrence Erlbaum.
- Armstrong, D., Gosling, A., Weinman, J., & Marteau, T. (1997). The place of interrater reliability in qualitative research: An empirical study. *Sociology, 31*, 597-606.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1988). Organizational application of social cognitive theory. *Australian Journal of Management, 13*(2), 275-302.
- Barbour, R. S. (2000). The role of qualitative research in broadening the "evidence base" for clinical practice. *Journal of Evaluation in Clinical Practice, 6*(2), 155-163.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Reading, MA: Addison-Wesley.
- Björk. (2001). Preparing the next generation of superintendents: Integrating formal and experiential knowledge. In C. C. Brunner & L. G. Björk (Eds.), *The new superintendency: Advances in research and theories of school management and educational policy* (pp. 19-54). Greenwich, CT: JAI Press.
- Björk, Kowalski, T., & Browne-Ferrigno, T. (2005). Learning theory and research: A framework for changing superintendent preparation and development. In L. Björk & T. Kowalski (Eds.), *The contemporary superintendent: Preparation, practice, and development* (pp. 71-106). Thousand Oaks, CA: Corwin Press.
- Björk, Kowalski, T. J., & Young, M. D. (2005). National education reform reports: Implications for professional preparation and development. In L. G. Björk & T. J. Kowalski (Eds.), *The contemporary superintendent: Preparation, practice, and development*. Thousand Oaks, CA: Corwin.
- Björk, Lindle, J. C., & VanMeter, E. (1999). A summing up. *Educational Administration Quarterly, 35*(4), 658-664.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: McKay.
- Bond, H., & Spurrirt, D. (1999). Learning practical skills *Educating Beginning Practitioners: Challenges for Health Professional Education* (pp. 189-196). Oxford: Butterworth-Heinemann.

- Bonwell, C. C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom. ASHE-ERIC Higher Education Report 1. (pp. 2). Washington, D.C.: George Washington University.
- Brandt, E. N., & Pope, A. M. (Eds.). (1997). *Enabling America: Assessing the role of rehabilitation science and engineering*. Washington, D.C.: National Academy Press.
- Byng, S., & Black, M. (1995). What makes a therapy? Some parameters of therepeutic intervention in aphasia. *European Journal of Disorders of Communication, 30*, 303-316.
- Cherryholmes, C. H. (1992). Notes on pragmatism and scientific realism. *Educational Researcher, 14*, 13-17.
- Communicating Quality 2*. (1996). London: The Royal College of Speech and Language Therapists.
- Cranton, P., & Kompf, M. (1989). Adult education and health professions training: A paradox? *Journal of Educational Thought, 23*(1), 15-25.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design Choosing Among Five Approaches* (2nd ed.): Sage Publications.
- Cross, V. (1995a). Perceptions of the ideal clinical educator in physiotherapy education. *Physiotherapy, 81*, 506-513.
- Cross, V. (1995b). Some aspects of the quality debate in clinical education. *Physiotherapy, 81*, 502-504.
- Curlee, R. F. (1985). Training students to work with stutterers. *Seminars in Speech and Language, 6*(2), 131-143.
- Curtis, N., Helion, J. G., & Domsohn, M. (1998). Student athletic trainer perceptions of clinical supervisor behaviors: A critical incident study. *Journal of Athletic Training, 33*(3), 249-253.
- Daggett, C. J., Cassie, J. M., & Collins, G. F. (1979). Research on clinical teaching. *The Review of Educational Research, 49*, 151-169.
- Davis, J. R. (1993). *Better teaching, more learning*. Phoenix, AZ: Oryx Press.
- DeClute, J., & Ladyshevsky, R. (1993). Enhancing clinical competence using a collaborative clinical education model. *Journal of the American Physical Therapy Association, 73*, 683-689.
- Denzin, N. K. (1989). *Interpretive biography*. Newbury Park, CA: Sage.
- Dewey, J. (1997). *Experience and education*. New York, NY: Touchstone.
- Dillman, Smyth, & Christian. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Dreyfus, H. L., & Dreyfus, S. E. (1986). *Mind over machine: The power of human intuition and expertise in the era of the computer*. New York: Free Press.
- Duch, B. J., Groh, S. E., & Allen, D. E. (Eds.). (2001). *The power of problem-based learning*. Sterling, VA: Stylus.
- Dutton, R. (1995). *Clinical reasoning in physical disabilities*. Baltimore: Williams & Wilkins.
- Emery, M. J. (1984). Effectiveness of the clinical instructor: Students' perspective. *Physical Therapy, 64*, 1079-1083.

- Emm, M. J., & Cecconi, C. P. (2011). Leadership in teaching: Using student perspectives on administration, supervision, and private practice. *Perspectives on Issues in Higher Education, 14*, 21-28.
- Farrington, A. (1995). Models of clinical supervision. *British Journal of Nursing, 4*, 876-878.
- Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco, CA: Jossey-Bass.
- Forsyth, B. H., & Lessler, J. T. (1991). Cognitive laboratory methods: A taxonomy. In P. P. Beimer, R. M. Groves, L. E. Lysber, N. A. Mathiowetz & S. Sudman (Eds.), *Measurement errors in surveys* (pp. 393-418). New York: Wiley.
- Geller, E., & Foley, G. M. (2009). Broadening the "ports of entry" for speech-language pathologists: A relational and reflective model for clinical supervision. *American Journal of Speech-Language Pathology, 18*, 22-41.
- Goldberg, S. A. (1997). *Clinical Skills For Speech-Language Clinicians*. San Diego: Singular.
- Goldhammer, R., Anderson, R. H., & Krajewski, R. J. (1993). *Clinical supervision: Special methods for the supervision of teachers* (3rd ed.). Fort Worth: Harcourt Brace Jovanovich College Publishers.
- Gresham, G. E., Duncan, P. W., & Stason, W. B. (1995). Post-stroke rehabilitation. Clinical practice guideline No. 16. AHCPR Publication 95-0662. Rockville, MD: Agency for Health Care Policy and Research.
- Griffiths, P. (1987). Creating a learning environment. *Physiotherapy, 73*, 328-331.
- Guba, E. G., & Lincoln. (1988). Do inquiry paradigms imply inquiry methodologies? In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education* (pp. 89-115). New York: Praeger.
- Hart, G. (1982). *The process of clinical supervision*. Baltimore: University Park Press.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany: State University of New York Press.
- Havens, L. A. (2011). Bottom Line: Medicaid and supervision in schools Retrieved April 21, 2013, from <http://www.asha.org/Publications/leader/2011/110405/Bottom-Line--Medicaid-and-Supervision-in-Schools.htm>
- Healey, E. C. (1995). Division 4 Newsletter. In A. S.-L.-H. Association (Ed.), (Vol. 5). Rockville, MD: ASHA.
- Heckman-Stone, C. (2004). Trainee preferences for feedback and evaluation in clinical supervision. *The Clinical Supervisor, 22*(1), 21-33.
- Hegde, M. N., & Davis, D. (2009). *Clinical methods and practicum in speech-language pathology* (5th ed.): Cengage Learning.
- Henri, B. P. (1994). Graduate student preparation: Tomorrow's challenge. *Asha, 36*, 43-46.
- Higgs, J., Glendinning, M., Dunsford, F., & Panter, J. (1991). *Goals and components of clinical education in the allied health professions*. Paper presented at the Proceedings of the 11th International Congress of World Confederation for Physical Therapy, London.
- Horton, S., & Byng, S. (2000a). *Defining a therapy intervention for language impairments: working towards effective learning outcomes*. Paper presented at the International Aphasia Rehabilitation Conference, Rotterdam.

- Horton, S., & Byng, S. (2000b). Examining interaction in language therapy. *International Journal of Language and Communication Disorders*, 35, 355-375.
- Horton, S., Byng, S., Bunning, K., & Pring, T. (2004). Teaching and learning speech and language therapy skills: the effectiveness of classroom as clinic in speech and language therapy student education. *International Journal of Language and Communication Disorders*, 39(3), 365-390.
- Jarski, R. W., Kulig, K., & Olson, R. E. (1990). Clinical teaching in physical therapy: Student and teacher perceptions. *Physical Therapy*, 70, 173-178.
- Kelly, E. M., Martin, J. S., Baker, K. E., Rivera, N. I., Bishop, J. E., Krizizke, C. B., . . . Stealy, J. M. (1997). Academic and clinical preparation and practices of school speech-language pathologists with people who stutter. *Language, Speech, and Hearing Services in Schools*, 28, 195-212.
- Kemmis, S., & Wilkinson, M. (1998). Participatory action research and the study of practice. In B. Atweh, S. Kemmis & P. Weeks (Eds.), *Action research in practice: Partnerships for social justice in education* (pp. 21-36). New York: Routledge.
- Klockars, A., & Yamagishi, M. (1988). The influence of labels and positions in rating scales. *Journal of Educational Measurement*, 25(2), 85-96.
- Koro-Ljungberg, M., & Greckhamer, T. (2005). Strategic turns labeled "ethnography": From description to openly ideological production of cultures. *Qualitative Research*, 5(3), 285-306.
- Krosnick, J., & Fabrigar, L. (1997). *Survey measurement and process quality*: John Wiley & Sons.
- Ladany, N., Ellis, M. V., & Friedlander, M. L. (1999). The supervisory working alliance, trainee self-efficacy, and satisfaction. *Journal of Counseling and Development*, 77, 447-455.
- LeCompte, M. D., & Schensul, J. J. (1999). *Designing and conducting ethnographic research* (Vol. 1). Walnut Creek, CA: AltaMira.
- Leddick, G. R., & Bernard, J. M. (1980). The history of supervision: A critical review. *Counselor Education and Supervision*, 20, 186-196.
- Lefkowitz, N. (1996). Collaborative Models of Clinical Preparation. In ASHA (Ed.), *Division 11 newsletter* (Vol. 1, pp. 3-13).
- Lefrancois, G. R. (1999). *The lifespan* (6th ed.). Belmont, CA: Wadsworth.
- Leith, W. R. (1971). Clinical training in stuttering therapy: A survey. *Journal of the American Speech and Hearing Association*, 13, 6-8.
- Lincoln, & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Lincoln, & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage.
- Lincoln, Stockhausen, L., & Maloney, D. (1997). Learning processes in clinical education *Facilitating Learning in Clinical Settings* (pp. 99-115). Cheltenham: Stanley Thornes.
- Louis, K. O. S., & Durrenberger, C. H. (1993). What communication disorders do experienced clinicians prefer to manage? *Asha*, 35, 23-31.
- Louis, K. O. S., & Lass, N. J. (1980). A survey of university training in stuttering. *Journal of the National Student Speech-Language-Hearing Association*, 10, 88-97.

- Madix, C., & Oxley, J. (2009). What are graduate students really thinking? A metacognitive example. *Perspectives on Administration and Supervision, 19*, 114-119.
- Mallard, A. R., Gardner, L. S., & Downey, C. S. (1988). Clinical training in stuttering for school clinicians. *Journal of Fluency Disorders, 13*, 253-259.
- Mann, W. C., & Banasiak, N. (1985). Fieldwork performance and academic grades. *American Journal of Occupational Therapy, 39*, 92-95.
- Mannix, J., Faga, P., Beale, B., & Jackson, D. (2006). Towards sustainable models for clinical education in nursing: An on-going conversation. *Nurse Education in Practice, 6*, 3-11.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- McBride, M. C., & Martin, G. E. (1986). Dual-focus supervision: A nonapprenticeship approach. *Counselor Education and Supervision, 25*, 175-182.
- McMillan, & Schumacher. (2010). *Research in Education Evidence-Based Inquiry* (7th ed.): Pearson.
- McMillan, J., & Schumacher, S. (2001). *Research in education*. New York, NY: Longman.
- McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.): Pearson.
- Merriam. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Merriam, Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Merriam, S. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- Meyers, C., & Jones, T. B. (1993). *Promoting active learning: Strategies for the college classroom*. San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Miller, N. E., & Dollard, J. (1941). *Social learning and imitation*. New Haven: Yale University Press.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102*, 246-268.
- Moses, N., & Shapiro, D. A. (1996). A developmental conceptualization of clinical problem solving. *Journal of Communication Disorders, 29*, 199-221.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Neistadt, M. E. (1996). Teaching strategies for the development of clinical reasoning. *The American Journal of Occupational Therapy, 50*(8), 676-684.
- Nestor-Baker, N., & Hoy, W. (2001). Tacit knowledge of school superintendents: Its nature, meaning, and content. *Educational Administration Quarterly, 37*(1), 86-129.
- Nieswiadomy, R. M. (1993). *Foundations of nursing research* (2nd ed.). Norwalk, CT: Appleton & Lange.

- Nolinske, T. (1995). Multiple mentoring relationships facilitate learning during fieldwork. *The American Journal of Occupational Therapy*, 49, 39-43.
- O'Connor, L., Baron, C., Coleman, T., Conrad, B., Newman, W., Panther, K., & Brown, J. E. (2008). Position statement: Clinical Supervision in speech-language pathology Retrieved April 17, 2013, from <http://www.asha.org/policy/PS2008-00295.htm>
- Onuoha, A. R. (1994). Effective clinical teaching behaviors from the perspective of students, supervisors, and teachers. *Physiotherapy*, 80, 208-214.
- Opacich, K. (1995). Is an educational philosophy missing from the fieldwork solution? *American Journal of Occupational Therapy*, 49, 160-164.
- Ormrod, J. E. (2006). *Educational psychology: Developing learners* (5th ed.). Upper Saddle River, NJ: Merrill.
- Patel, V., Arocha, J., & Kaufman, D. (1999). Expertise and tacit knowledge in medicine. In R. J. Sternberg & J. Horvath (Eds.), *Tacit knowledge in professional practice: Researcher and practitioner perspectives* (pp. 75-100). Mahwah, NJ: Erlbaum.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Pena, E. D., & Kiran, S. (2008). In defense of cookbooks: From novice to competent clinician. *Topics in Language Disorders*, 28(3), 242-258.
- Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology* (pp. 41-60). New York: Plenum Press.
- Polyani, M. (1967). *The tacit dimension*. Garden City, NY: Doubleday.
- Powell, D. (1996). A peer consultation model for clinical supervision. *Clinical Supervisor*, 14, 163-169.
- Radtke, S. (2008). A conceptual framework for clinical education in athletic training. *Athletic Training Education Journal*, 2, 36-42.
- Reber, A. (1989). Implicit learning and tacit knowledge. *Journal of Experimental Psychology: General*, 118, 219-235.
- Rich, P. (1993). The form, function, and content of clinical supervision: An integrated model. *The Clinical Supervisor*, 11, 137-178.
- Ripich, D. N., Hambrecht, G., & Panagos, J. M. (1985). Discourse analysis of aphasia therapy. *Aphasia-Apraxia-Agnosia*, 3, 9-18.
- Rita, E. S. (1998). Solution-focused supervision. *Clinical Supervisor*, 17, 127-139.
- Rodenhauser, P. (1995). Experiences and issues in the professional development of psychiatrists for supervising psychotherapy. *The Clinical Supervisor*, 13, 7-22.
- Rose, M., & Best, D. (2005). *Transforming practice through clinical education, professional supervision, and mentoring*. New York: Elsevier Churchill Livingstone.
- Rotter, J. B. (1954). *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Royeen, C. B. (1995). A problem-based learning curriculum for occupational therapy education. *American Journal of Occupational Therapy*, 49, 338-346.
- Sabari, J. S. (1985). Professional socialization: Implications for occupational therapy education. *American Journal of Occupational Therapy*, 39, 96-102.

- Schön, D. A. (1987). *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning in the Professions*. San Francisco: Jossey-Bass.
- Schunk, D. H. (1996). *Learning theories: An educational perspective*. Englewood Cliffs, NJ: Prentice Hall.
- Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd ed.). Thousand Oaks, CA: Sage.
- Schwartz, K. B. (1984). An approach to supervision of students on fieldwork. *American Journal of Occupational Therapy*, 38, 393-397.
- Scully, R. M., & Sheppard, K. F. (1983). Clinical teaching in physical therapy education: An ethnographic study. *Physical Therapy*, 63, 349-358.
- Silverman, D. (2005). *Doing qualitative research: A practical handbook* (2nd ed.). London: Sage.
- Simmons-Mackie, N. N., & Damico, J. S. (1997). Reformulating the definition of compensatory strategies in aphasia. *Aphasiology*, 11, 761-781.
- Slater, D. Y., & Cohn, E. S. (1991). Staff development through analysis of practice. *American Journal of Occupational Therapy*, 45, 1038-1044.
- Sommers, R. K., & Caruso, A. J. (1995). Inservice training in speech-language pathology: Are we meeting the needs for fluency training? *American Journal of Speech-Language Pathology*, 4(3), 22-28.
- Spence, S. H., Wilson, J., Kavanagh, D., Strong, J., & Worrall, L. (2001). Clinical supervision in four mental health professions: A review of the evidence. *Behaviour Change*, 18(3), 135-155.
- Starkey, C. (1997). Reforming athletic training education. *Journal of Athletic Training*, 32, 113-114.
- Starkweather, C. W. (1995). Task force on standards. In A. S.-L.-H. Association (Ed.), *Division 4 Newsletter* (Vol. 5, pp. 3-5). Rockville, MD: ASHA.
- Stech, E. L., Curtiss, J. W., Troesch, P. J., & Binnie, C. (1973). Clients' reinforcement of speech clinicians: a factor-analytic study. *ASHA*, 15(6), 287-289.
- Steinberg, L. (1998). *Adolescence*. New York: McGraw-Hill College companies.
- Sternberg, R. J. (1996). *Successful intelligence: How practical and creative intelligence determine success in life*. New York: Simon & Schuster.
- Sternberg, R. J., Wagoner, R., & Okagaki, L. (1993). Practical intelligence: The nature and role of knowledge in work and school. In H. W. Reese & J. M. Puckett (Eds.), *Mechanisms of everyday cognition* (pp. 205-227). Hillsdale, NJ: Erlbaum.
- Steward, B. (1996). The theory/practice divide: Bridging the gap in occupational therapy. *British Journal of Occupational Therapy*, 59, 264-268.
- Stewart, D., & Mickunas, A. (1990). *Exploring phenomenology: A guide to the field and its literature* (2nd ed.). Athens: Ohio University Press.
- Stritter, F. T., Hain, J. D., & Grimes, D. A. (1975). Clinical teaching reexamined. *Journal of Medical Education*, 50, 876-882.
- Strohschein, J., Hagler, P., & May, L. (2002). Assessing the need for change in clinical education practices. *Journal of the American Physical Therapy Association*, 82, 160-172.
- Sutherland, T. E., & Bonwell, C. C. (Eds.). (1996). *Using active learning in college classes: A range of options for faculty*. New directions for teaching and learning, no. 80. San Francisco, CA: Jossey-Bass.

- Svinicki, M. (Ed.). (1999). *Teaching and learning on the edge of the millennium: Building on what we have learned. New directions for teaching and learning, no. 80*. San Francisco, CA: Jossey-Bass.
- Thompson, J. (1984). Update: School-age stutterers. *Journal of Fluency Disorders, 9*, 199-206.
- vanManen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. London, Ontario, Canada: The University of Western Ontario.
- Wagoner, R., & Carter, R. (1996). Research outside the field of education. In K. Leithwood, J. Chapman, D. Corson, P. Hallinger & A. Hart (Eds.), *International handbook of educational leadership and administration* (pp. 447-476). Boston: Kluwer.
- Weidner, T. G., & August, J. A. (1997). The athletic therapist as clinical instructor. *Athletic Therapy Today, 2*(1), 49-52.
- Wilkerson, L., & Gijsselaers, W. H. (Eds.). (1996). *Bringing problem-based learning to higher education: Theory and practice. New directions for teaching and learning, no. 68*. San Francisco, CA: Jossey-Bass.
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage.
- Wolcott, H. F. (1999). *Ethnography: A way of seeing*. Walnut Creek, CA: AltaMira.



## VITA

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### **Education**

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### **Professional Experience**

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- 2010-2011 Adjunct Faculty Member, Western Kentucky University, Bowling Green, Kentucky (distance and hybrid graduate courses)
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### **Publications**

Royal, K.D., Ensslen, A., Ellis, A., & Homan, A. (2010). *Rating scale optimization in survey research: An application of the Rasch Rating Scale Model*. *Journal of Applied Quantitative Methods*, 5(4).

Awan, S.N., Ensslen, A. (2010). *A comparison of trained and untrained vocalists on the dysphonia severity index*. *Journal of Voice*, 24 (6).

Stemple, J., Joshi, A., & Ensslen, A. (2010). Voice Disorders. In D. M. Ruscello (Ed.) *Review questions for the speech-language pathology PRAXIS examination* (1st ed., pp.134-147). Maryland Heights, MO: Mosby, Inc.

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