Graduate Preparation and Professional Development of Speech Language Pathology Students: A Grounded Theory Study

by

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Abstract

This study describes a hierarchical model developed using grounded theory analysis of clinical development of speech-language pathology graduate students. Eight female students attending Auburn University's speech-language pathology master's program participated in interviews prior to beginning graduate training and after each subsequent semester. The interviews were divided into 3,792 meaning units that were categorized to create the model, which contained six layers. Results revealed a model that incorporated the interaction of individual experiences with the students' academic, clinical, and supervisory experiences, which all influenced the clinical growth experienced by the students.

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I. Introduction

The student who enters a graduate training program to become a speech-language pathologist must accomplish several steps before certification is within reach. According to the American Speech-Language-Hearing Association (ASHA, 2015a), an aspiring speech-language pathologist must first complete the process of receiving a bachelor's degree in communication disorders or another area coupled with pre-requisite course completion. A degree in communication disorders or the post-baccalaureate tract is required to prepare students for graduate level success. Students completing this step typically take foundational coursework that covers typical speech and language development, speech and language disorders, linguistics, anatomy of the speech and hearing mechanism, and introduction to speech pathology and audiology. The 2014 SLP certification standards state that graduate degrees must be obtained from an institution certified by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA; ASHA, 2014). Graduate training involves a minimum of 36 hours of course work as well as supervised clinical experience in evaluation and treatment of multiple communication disorders across the lifespan. Following graduation, certification requirements must be met by completing the clinical fellowship year under the supervision of an accredited speech-language pathologist. A Certificate of Clinical Competence (CCC) is certification provided by the American Speech-Language-Hearing Association. Therefore, to achieve your CCC a student must obtain a degree from an accredited program that can demonstrate that the student has met the knowledge outcomes, skills outcomes, and assessment outcomes stipulated by ASHA (ASHA, 2015a).

According to ASHA (2014), knowledge outcomes cover several areas over which the student must exhibit proficiency. Students complete these requirements during their graduate as

well as undergraduate coursework. Understanding of biological, physical and social/behavioral sciences as well as statistics is required as a basic knowledge base. Next a student is required to demonstrate adequate knowledge of the anatomy and physiology of the speech and swallowing mechanism as well as typical development of communication and language. Disorders of articulation, fluency, voice and resonance, receptive and expressive language, hearing, swallowing, cognitive communication skills, social communication, and augmentative and alternative communication also must be adequately understood in terms of their etiologies, characteristics, prevention, assessment, and treatment strategies. Proficient knowledge of ethical conduct and the importance of research skills in applying evidence-based practice are also covered in the knowledge outcomes for speech-language pathologists. Finally, contemporary practice issues as well as knowledge of the credentialing process on the state and national level must be understood (ASHA, 2014).

The general steps required to complete the professional development process for becoming a certified speech-language pathologist are clearly outlined. One would assume that completion of this detailed process leads to the development of competent therapeutic abilities; however, the process of professional growth and the product that results after completion of graduate training is very complex and varied. How students cope with the stresses of this process may affect the professional development of therapists and furthermore it may affect their therapeutic performance. Some therapists are clearly more effective when providing services than others and the factors that contribute to optimal student growth and development of these therapists in training remains ambiguous at this time.

The following sections of this paper discuss the growth and development of a future professional. It is organized into four sections: (a) generational learning styles, (b) psychosocial

factors influencing students, (c) learning motivation (d) supervisory practices and perceptions, and (e) therapeutic effectiveness.

II. Literature Review

Generational Learning Styles

When examining the development of a student clinician, generational learning styles and experiences should be considered for optimal growth. Just as a speech-language pathologist would not provide the same assessments and treatment programs to clients with differing levels of functioning and diagnoses; it could be argued that teachers and supervisors should not provide the same types of training to every student clinician. Diversity within cohorts of graduate students can be seen in many forms, including generational differences. How generational differences influence performance in the classroom as well as in clinical practicum can be considered when trying to understand the learning style of students.

According to Howe and Strauss (2000), a generation can be defined as a group of individuals that share a past, present, and future location in history that spans from their childhood to adulthood. The generational cycle has been implemented across four centuries and involves four recurring stages: Idealist, Reactivist, Civic, and Adaptive. Each generation represents a stage and typically follows this cycle (Strauss & Howe, 1991). Differences between generations depend on many experiential factors. For example, the G.I. generation, born 1901-1924, experienced a much different society than did the Boomers, born 1943-1960. The G.I. generation conquered the Depression, World War II, the first moon landing, and other historical events (Howe & Strauss, 2000). The Boomers, on the other hand, experienced the Vietnam War, the assassination of President John F. Kennedy, and the first orbit of Earth (Strauss & Howe, 1991). These events led to generational personality differences. For example, World War II was an empowering event for many G.I. veterans. The defeat was something that was praised. The

Vietnam War, however, sparked much controversy and ended with a victory that was much less empowering (Strauss & Howe, 1991).

Current generation. As of 2015, the generation that a professor or supervisor is most likely to encounter during clinical education include students from the Millennial generation. For comparison purposes, traits of Generation X, also known as the Thirteenth generation will also be described. The Thirteenth generation students are those who were born between the years of 1961 and 1981 (Howe & Strauss, 2000). This generation of students is the first to see a large decrease in college graduation rates; however, they are seen as the generation with the most street smarts (Strauss & Howe, 1991). Currently, the most prevalent generation of college students is that of the Millennials, also known as Generation Y. Those who fall into this generation share many historical events that define their generation including: Columbine, the Fall of the Berlin Wall, Princess Di's death, the OJ Simpson trial, and 9/11. The Millennials, born 1982 to 2002, possess different traits than any other generation (Howe & Strauss, 2000). Not only are there more individuals encompassing this generation, they are also typically more educated and more diverse than any other generation. Members of this generation are results of a role reversal in reproductive practices from previous generations, producing a rise in planned pregnancies and children who are wanted by their parents. This stimulated an era of child protection where childproofing homes and family values play a critical role in child rearing (Howe & Strauss, 2000).

There are 7 distinguishing traits of Millennial learners discussed by Howe and Strauss (2000). Parents of the Millennials have instilled a sense of uniqueness in their children; therefore, they feel as if they are each vital members of the nation. Millennials are also a very sheltered generation. This generation has experienced the largest youth safety movement in American

history. This movement involved the extensive implementation of child protection acts. Structure and supervision by teachers, relatives, babysitters, surveillance cameras, and curfews were essential elements of typical Millennial children's day-to-day lives. Millennials are also a confident group of individuals. In this generation, suicide rates are falling for the first time in decades and overall the group is happy, positive, and feel as if they have power and potential to positively impact their communities and world (Howe & Strauss, 2000).

Teamwork is also a large part of the learning style of this generation according to Howe and Strauss (2000). Tight peer groups and team-based instincts allow for cohesiveness and positive experiences when groups of this generation work together. Wilson (2004) suggested that this could be due to the many opportunities that the Millennial generation had to work together with others as children through team sports or other group-oriented activities. The Millennial generation experienced an increase in school standards that instilled a higher level of achievement. This level of educational accountability has leveraged this generation to be the overall best-educated adults compared to other generations. Technology has also proved to be a fascination for this generation, which, in turn, has increased math and science scores. This push to achieve in school has led this generation to feel a sense of pressure, including pressure to achieve high marks in school as well as pressure to take advantage of opportunities placed in front of them. Finally, this generation is a generation of conventionality. Overall, Millennials are rule followers and favor the placement of rules in the classroom as well as in society (Howe & Strauss, 2000). Generation X's learning style, however, is more focused on quick and easy assignments with casual classroom rules. They see college as a task that they must endure to accomplish a goal such as accepting an ideal job offer instead of seeing it as an important learning experience (Sacks, 1996).

With every generation, trends develop as the generation unfolds. This will not be any different with the Millennial generation. These trends will be different than any that were seen in both Baby Boomers and Generation X, which have the capability to affect performance in the classroom when experiencing different teaching styles (Howe & Strauss, 2000). Borges, Manuel, Elam, and Jones (2006) explored differences between two cohorts of medical students from Northeastern Ohio Universities College of Medicine including Generation X, Millennials, and Cuspars. The Cuspars generation refers to the students that were born between generations and therefore share traits with both. Eight hundred and nine students completed a personality questionnaire. Significant differences were found between all three groups. For example, the personality factors that Millennials scored highest on were warmth, rule-consciousness, sensitivity, emotional stability, openness to change and perfectionism. Students from Generation X, however, scored higher on self-reliance (Borges, Manuel, Elam, & Jones, 2006). These differences produce different learning styles across generations. Therefore, accounting for and understanding the generation participating in clinical training may aide in the development of the effective clinician.

Generational differences and clinical teaching. Many learning theories have been developed to attempt to find patterns in the ways in which people acquire new information or skills. Implementation of specific theories in the classroom as well as in the clinical learning environment may assist students in fully grasping the information presented. Students with various learning styles, such as those from differing generations, may acquire novel information differently from others thus indicating the importance for understanding learning theory.

Implementation of a supervision method that includes theories of learning could increase the learning experiences of the Millennial students as the tasks increase in difficulty and

complexity. Using theory or models of learning could facilitate the transition from externally driven to internally driven learners, which enables students to become independent, critical thinkers. Venne and Coleman (2010) discussed the use of an experiential evolutionary scaffolding model for clinical supervision and education. This model combines authentic learning theory with evolutionary scaffolding theory. According to Renzulli, Gentry, and Reis (2004), authentic learning theory is a student-driven approach that allows students to actively engage in the learning process while focusing on real-world problems. Real-world problems are typically used in this model because they provide a reference point, do not have cookie-cutter solutions, and are motivating (Renzulli, Gentry, & Reis, 2004). Scaffolding involves providing support such as individualized prompts to students as they develop critical thinking skills (Vygotsky, 1980). As discussed previously, Millennial learners thrive when provided with structure and support throughout their learning experiences (Howe & Strauss, 2000). This model provides the support and has the components that the literature indicates is necessary for Millennial students to succeed. Venne and Coleman (2010) outlined a way this method can be used in clinical supervision. They used chart review and literature searches since these activities are common across many clinical fields. During chart review, the guidance transfers from supervisor-led review, to joint discussion, and finally ends with student-led review. Similarly, the literature review occurs in the same pattern. Students who have never performed a literature search may have difficulty discerning high quality research from articles that are less significant. Therefore, scaffolding will begin at the expert level while the supervisor provides direct assistance and eventually moves to self-scaffolding. Self-scaffolding occurs when the clinical student is able to find credible research independently (Venne & Coleman, 2010).

To successfully accomplish goals within the classroom and/or clinic, instructors must adjust to the Millennial style of learning. Authentic learning theory coupled with evolutionary scaffolding theory could create an effective learning environment that targets the Millennial learning style (Venne & Coleman, 2010). This learning environment, if used in clinical teaching, has the ability to lessen the disconnect between the supervisor's clinical teaching and the student's clinical practice thus lessening stress and anxiety, as well as increasing learning experiences for the clinical student. Twenge (2009) suggests that faculty use information regarding the learning styles of this generation to improve their teaching methods by understanding the generation's perspective and promoting their learning styles in the classroom. This may allow students to more fully connect with the information provided resulting in greater learning experiences.

Learning styles. David Kolb's (2004) identified a learning cycle that consists of four quadrants including: accommodators, convergers, assimilators, and divergers. It is thought that those who are learning must pass through all quadrants to fully grasp the information presented. The four quadrants are placed on two dimensions, which are perceiving and processing. The perceiving dimension describes how the learner gains novel information. This learning is placed on a range from concrete experience to abstract conceptualization. The processing portion describes how the learner makes sense of their environment, which can be placed on a range from active experimentation to reflective observation. Accommodators are those learners need to be involved with the material to learn it. Convergers are learners who prefer practical application of the information presented, while assimilators are those who prefer abstract thinking and construction of models. Divergers, on the other hand, are learners who prefer to observe to gain information (Kolb, 2004).

Psychosocial Factors Influencing Students

According to Stansfeld and Rasul (2007), psychosocial factors involve the combination of psychological processes that affect the mental clarity of an individual and the social factors that influence their psychological status. Social factors may include work pace, work environment, socioeconomic status, and/or life events. For example, psychosocial factors may refer to the environmental stressors, such as a difficult exam, that trigger psychological responses, such as stress or anxiety. Therefore, psychosocial variables may have a role in mediating stress and coping responses in individuals (Stansfeld & Rasul, 2007).

Stress. Stress has been defined as, "the nonspecific response of the body to any demand," (Selye, 1956,1976, p.1). Lazarus (1999) discusses two levels of stress, sociocultural and physiological. An individual's sociocultural level of stress involves their culture's social structure, including factors such as age, gender, and socio-economic status. These cultural factors influence the stress response of its members. Cultural factors may include mourning, courting, and marriage rituals, as well as forms of aggression and social class (Lazarus & Folkman, 1984). The physiological level of stress covers how an individual's body reacts to stressors in his/her environment. Although each of these levels contributes to the stress experienced by an individual, it's important to remember that there is no one factor that directly produces a given amount of stress. However, the complex interplay between several different factors influences the amount of stress experienced by an individual and contributes to the significant variability that can be observed in stress responses (Lazarus, 1999).

According to Lazarus and Folkman (1984), modern developments in stress research have found that there are many individual and varied responses to demands; therefore, assumptions cannot be made across an entire population. Demand refers to the environmental influence that

causes the stress reaction and is variable across individuals (Lazarus & Folkman, 1984). Factors such as motivation and coping have to be considered when analyzing an individual's stress responses. To better understand what influences stress levels, it is necessary to consider how different types of stress, stress stimuli and stress responses influence stress levels.

According to Miller, Smith, and Robinson (1993) there are two common forms of stress: acute stress and chronic stress. Acute stress is a short-term form of stress that doesn't cause the long-term effects that are often associated with chronic stress. Chronic stress, on the other hand, is a long-term form of stress that has been found to cause lasting damage on a person's body and mind. When chronic stress is experienced, the person experiencing the stress typically isn't as aware of its influence or damage to the self until it's too late. The stress becomes the norm for the person who is experiencing the stress. Chronic stress can include stressors such as living in poverty or with a chronic medical condition (Miller, Smith, & Rothstein, 1993). Graduate students typically experience acute forms of stress. The stresses associated with graduate school are experienced in the short-term and can include situations such as a week where many assignments are due or many scheduling conflicts are occurring. Often the students are very aware of these acute stressors and therefore can cope accordingly.

Stress stimuli refer to the factors that cause stress responses while stress responses are the individual's reactions to the stimuli (i.e., coping response; Lazarus & Folkman, 1984). Students entering a graduate speech-language pathology program are likely to experience many new demands and pressures during the graduate training process. At this time, the stresses associated with this process and its influence on speech-language pathology graduate students' professional development remains unexplored. Lazarus and Folkman (1984) discuss the possibility that as an individual feels that a stressor is certain to affect him/her, there will be an increase in stimulation

thus a need for coping strategies. If graduate training is thought to be a stressor for many students, sources of stress, methods of coping with stress, and perceived levels of stress associated with the graduate training process need to be explored.

Coping with stress. Before an individual can begin to cope with feelings of stress, an appraisal, or categorization, of the event must take place (Lazarus & Folkman, 1984). There are two types of appraisal, primary and secondary. During primary appraisal, the individual makes judgments about whether or not the event affects his/her welfare. If the event does not affect the welfare of the individual, the event is deemed irrelevant; however, if the event does affect the individual it must be deemed either positive or stressful (Lazarus & Folkman, 1984). Secondary appraisal refers to the ways in which the individual decides to manage the event. It involves the individual taking into account the coping strategies and resources available as well as the likelihood that the strategies will be successful (Lazarus, 1999). Resources that may be used to cope with stress may incorporate the individual's overall health and energy levels, positive self-esteem, problem-solving abilities, social skills and supports, and/or materials (Lazarus & Folkman, 1984).

According to Lazarus (1999), there are two main functions of coping, problem-based and emotion-based (Lazarus, 1999). Problem-based coping involves trying to rectify the environmental issue causing the stress response. There are several forms of problem-based coping that an individual may participate in and include problem-solving strategies that are directed at self and problem-solving strategies that are directed at the environment. This type of problem solving involves defining the stressor, creating solutions, weighing costs and benefits of solutions, selecting a solution, and completing the selected solution. For example, an individual may remove himself or herself from a particularly stressful situation as a problem-based coping

method. If an individual is experiencing a particularly stressful event, such as a difficult exam, directly targeting the cause of stress by studying will reduce it (Lazarus & Folkman, 1984).

Emotion-based coping, on the other hand, involves the individual trying to stabilize their emotional response to the stressor. There are several types of this form of coping and include strategies such as avoidance, minimization, distancing, selective attention, positive comparisons, and removing positive outcomes from negative events. An example of this type of coping function can be seen when an individual participates in activities that deter his/her focus from the stressor, such as watching television instead of studying for a difficult exam (Lazarus & Folkman, 1984).

Support systems are also particularly helpful when coping with various levels of stress. Hudson and O'Regan (1994) completed a study that evaluated seven factors impacting stress in graduate psychology students including: gender, year in their program, income level, relationship status, age, number of children, and employment hours. One hundred and fifty six students answered the questionnaires. Females completed 112 of the surveys with the remaining 44 completed by males. The age range of the respondents was 23 to 58 years of age. Of the 156 respondents, 78.2% considered themselves to be in a committed relationship. Employment hours ranged from 0 to 80 hours per week and the number of children that the respondents were responsible for ranged from 0 to 6. This study did not find any significant differences between any single factor and overall stress levels. However, females who were working full time who were not in a committed relationship showed a higher level of stress than all other students. Hudson and O'Regan (1994) suggest that even though one particular variable cannot predict stress levels in graduate students, the level of support that an individual has outside of the classroom may alleviate levels of stress to a degree (Hudson & O'Regan, 1994).

Wang, Cai, Qian, and Peng (2014) completed a study documenting the effect of social support on stress and depression. Scales were distributed to 632 undergraduate students who had a mean age of 20.47 years of age. Three scales were provided to the students including the perceived stress scale, the perceived social support scale, and the self-rating depression scale. Following analysis, it was found that 18.7% of the respondents experienced depression and that, overall, depression and stress are positively correlated. It was also documented that those with smaller support systems exhibited a closer relationship between stress and depression (Wang, Cai, Qian, & Peng, 2014).

Sources of stress and anxiety. Heins, Fahey, and Leiden (1984) analyzed six sources of stress in medical, law, psychology, and chemistry graduate students. The sources of stress included: academic stress, time stress, fear of poor performance, classroom stress, economic stress, and societal stress. One hundred and five law students, 68 second-year medical students, 54 third-year medical students, 57 psychology graduate students, and 66 chemistry graduate students participated in the study. Average ages ranged from 25-28 across all four groups. Respondents filled out a 78-item questionnaire. It included information about the participant's background, time utilization, health, mental health, academic stress, support systems, significant problems in the past year, best- and least-liked aspects of their program, ways the school could relieve pressure, and open ended questions. The researchers completed a factor analysis of 31 items to determine factors that are sources of stress. Six factors emerged and included: academic concerns, time concerns, fear of failing, classroom interactions, economic issues, and world issues (Heins, Fahey, & Leiden, 1984).

Results indicate that medical students spent the most time on schoolwork, laboratory and/or outside work when compared to all other respondents. When analyzing overall stress, the

law, psychology, and medical students reported higher total stress scores. Of the sources discussed, it was found that time, economic, and academic stresses were of the highest levels in these populations (Heins, Fahey, & Leiden, 1984). In a study conducted by Coburn and Jovaisas (1975), similar sources of stress were evaluated and it was found that many students experienced concern with the possible inability to remember the information presented to them throughout their coursework. It was also documented that academic and social sources of stress interact. Therefore, indicating that the amount of time it takes to complete schoolwork for graduate level programs leaves less time for social activities; which may negatively impact stress levels (Coburn & Jovaisas, 1975).

Sleight (1985) conducted a study examining anxiety levels in graduate clinicians. This study aimed to develop a Likert-type scale that could be administered to graduate students to determine their level of anxiety in regards to practicum. A forty-item scale was developed based on supervisory standards, responsibility for clients, application of theory, and practicum functioning. Forty-four graduate speech-language pathology students participated in the study and were asked to respond to the items in the scale. Participants were provided with the scales in two groups. The first twenty-two respondents were in the first semester of clinical practicum, the second group of fourteen respondents was not enrolled in clinical practicum, and the third group of eight respondents was completing observation of therapy but were not enrolled in practicum. The scale was provided at both the beginning and the end of their terms. Results indicated that anxiety significantly lessened and confidence significantly increased as practicum continued. Feelings of responsibility for clients was found to be an area that did not increase in confidence throughout practicum. This difference in confidence level indicates an area that could be targeted by supervisors (Sleight, 1985).

Toews et al. (1997) conducted a study that aimed to discover the types and severity of stress levels found in three groups of graduate students and their sources of support. The three groups included medical students, residents, and graduate science students. Four schools of medicine, the University of Alberta Faculty of Medicine, the University of Calgary Faculty of Medicine, the Dalhousie University Faculty of Medicine, and the McMaster University Faculty of Health Sciences, were provided with the University of Calgary Stress Questionnaire, the Social Readjustment Rating Scale, and the Symptom Checklist-90. One thousand six hundred eighty-one questionnaires were completed and returned for analysis. Overall, the women respondents reported higher levels of stress than that of the men respondents. However, the overall report from the respondents was that they used stress as a motivation to increase academic performance. The male respondents were especially likely to report this feeling. To relieve stress, the groups used confrontation, exercise, and discussion. The researchers also found that friends and significant others were most often reported as sources of stress relief in graduate students (Toews, et al, 1997). McDonough and Walters (2001) also examined gender differences in stress over a representative sample of 20,000 household residents of Canada. Measures were taken covering health, chronic stressors, life events, sex, and sociodemographic variables. Overall, females reported greater amounts of chronic stress when compared to their male counterparts. The type of chronic stress that was reported with the greatest frequency in females was social life stress (McDonough & Walters, 2001).

According to Hobfall (1986), females undergo different levels and forms of change, and therefore stress, than their male counterparts. These stressors are both ecological and biological in nature, and thus cause different stress responses in females. Both males and females experience stressors throughout life, however, females seem to more easily use social support to

alleviate feelings of stress (Hobfall, 1986). A study conducted by Matud (2004), documented gender differences in stress as well as coping styles. Respondents include 2,816 people between the ages of 18 and 65 years. They completed the Life Event Stressful Success Questionnaire (LESSQ), the Chronic Stress Questionnaire, the Minor Daily Stressor Questionnaire, the Coping Styles Questionnaire, the Emotion Control Questionnaire, and the General Health Checklist. Overall the differences in the amount of stress that females experience when compared to males was small; however, the types of stressors differed. For example, women experienced more daily stress, chronic conflicts, demands, and frustrations. The largest differences that were documented involved coping styles. Women were found to participate in more emotion-based coping strategies, such as avoidance and/or detachment (Matud, 2004).

In the Speech-Language Pathology (SLP) Healthcare Survey of 2011, ASHA recorded that only 4% of the respondents were male (ASHA, 2011a). Similarly, the 2010 Schools survey conducted by ASHA found that only 3% of the respondents were male indicating that the field of speech-language pathology as a whole predominately consists of females (ASHA, 2010). Since there is a higher proportion of female professionals in the workplace, it is likely that the majority students completing speech-language pathology graduate programs are female. Because of the sex differences in stress response and coping styles, there may be a higher overall stress level throughout the graduate school program when it is compared to a program that is predominantly male.

Learning Motivation

Motivation to achieve the goal of becoming a speech-language pathologist, whether intrinsic or extrinsic, must be present due to the extensiveness of requirements for graduation and

licensure. Zimmerman, Bandura, and Martinez-Pons (1992) conducted a study that compared students' levels of self-efficacy during parental as well as personal goal completion. One hundred and two high school students agreed to participate in the study. Two subscales of the Children's Multidimensional Self-Efficacy Scales were used: self-efficacy for self-regulated learning and self-efficacy for academic achievement. The students' as well as the parents' goals for grade achievement were also documented in the questionnaire that was administered to the participants. Results indicated that the goals that parents set for the child's success was significantly higher than the child's personal goals; however, the students' levels of self-efficacy influenced their personal academic goals as well as the completion of these goals (Zimmerman, Bandura, & Martinez-Pons, 1992). One could assume that goal attainment occurs similarly at the graduate student level; therefore, examination of self-efficacy, motivation, and locus of control are important aspects to consider.

Self-efficacy. According to Bandura (1977), self-efficacy refers to an individual's belief that he/she can achieve a goal. Self-efficacy impacts behaviors, goal selection, and strength of efforts. When considering behaviors, it's important to consider that an individual's belief that the task can be completed by his/her actions directs the behaviors that are or are not overtly produced. Once an individual realizes their efficacy expectations, whether high or low, behaviors are exerted and are based on outcome expectations. Outcome expectations are the person's belief that a certain outcome will occur following a behavior. Bandura (1977) discusses four major details that affect self-efficacy: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. Performance accomplishments are an influential source of self-efficacy that is based on prior mastery of goals. These successes raise the individual's expectations, while lack of success lowers them. Vicarious experience influences levels of self-

efficacy through observation of others completing the goal at hand. Verbal persuasion involves outsiders verbally suggesting to the individual that accomplishment is possible resulting in a raise in self-efficacy. Emotional arousal affects self-efficacy by inhibiting or encouraging self-efficacy growth. High negative emotional arousal, such as agitation or fear, typically decreases feelings of self-efficacy (Bandura, 1977).

Self-determination theory. According to Deci and Ryan (1985), self-determination theory (SDT) refers to the development of human motivation, both extrinsic and intrinsic, that controls the choices and outcomes of a goal-directed behavior. It involves choice and the ability to carry out one's choices by an internal locus of control. SDT requires flexibility in that awareness of both one's environment and self is required to act (Deci & Ryan, 1985). Deci, Eghrari, Patrick and Leone (1994) conducted a study that examined the factors that support internalization and self-determination. One hundred and ninety two college students participated in the study. Facilitating factors were controlled and included: rationale versus no rationale, acknowledgement versus no acknowledgement, and low control versus high control. Participants completed boring computer tasks and a questionnaire was provided to examine the participants' perceptions, experiences, and feelings. Results indicate that providing a rationale, acknowledging feelings, and providing choice encourage internalization. Inclusion of these factors allow for self-determination. When self-determination was supported, integration occurred; however, when it was not supported introjection occurred. Integration occurred when the participant personally identified with the activity. Introjection occurred when the activity is completed, but is not valued as a personal choice (Deci, Eghrari, Patrick, & Leone 1994). When applying these results to the development of a professional speech-language pathologist, one must consider the student clinician's ability to move supervisor feedback from introjection to integration.

The intrinsic and extrinsic facets of motivation determine a student's locus of control. For example, what one student may see as a task that is completed for the satisfaction of the letter grade alone is experiencing a different source of motivation than a student who sees a task as an opportunity for personal growth. Therefore, differences in these types of motivation are important to consider when analyzing student development. Intrinsic motivation refers to an individual's ability to inherently seek out opportunities for growth and is the primary cause of behaviors (Deci, 1975). Individuals have an inherent need to feel competent; therefore intrinsic motivation allows him/her to follow through with behaviors that produce these feelings. Achieving this feeling begins with identification of the potential gratification and continues to behavior directed at goal completion. The individual then experiences the reward with feelings of fulfillment following reward acceptance (Deci, 1975).

A theory that is within self-determination theory is called cognitive evaluation theory (CET) (Deci & Ryan, 1985). This refers to the social and environmental factors that provide fluctuation in successful intrinsic motivation. This theory assumes that if certain social and/or environmental factors are combined, a situation that is conducive to intrinsic motivation will occur. There are three propositions that are included in CET. First, the theory assumes that external events control intrinsic motivation and perceived locus of control. Second, CET proposes that external events influence intrinsic motivation to a great extent. Therefore, it affects the individual's confidence in completion or inability to complete the goal. Third, it is proposed that three features are differing across individuals and affect intrinsic motivation: informational, controlling, and amotivating. The informational facet involves feedback; while the controlling facet gives the individual inclination that he/she should behave or feel a certain way. Amotivation involves the belief that a goal cannot be reached thus influencing motivation

negatively. Overall, cognitive evaluation occurs arbitrarily throughout goal setting, during completion, and after the goal has been accomplished in either a conscious or unconscious manner (Deci & Ryan, 1985).

Extrinsic motivation refers to rewards that are received from outside sources (DeCharms, 1968). According to Deci and Ryan (1985), organismic integration theory (OIT) divides extrinsic motivation into four subgroups across a continuum: external regulation, introjected regulation, identified regulation, and integrated regulation, with the latter being most closely related to intrinsic motivation. External regulation refers to behavior completion that is based solely on reward contingency or demands. Introjected regulation refers to behavior completion that is based on avoidance of negative feelings and is thought to be the first step in developing self-control. Identified regulation occurs when a goal is consciously owned as a personal objective, while integrated regulation occurs when goals and objectives are merged with the individual's values (Deci & Ryan, 1985). Individuals may move through these as they are integrating regulations to self (Ryan & Deci, 2000).

Ryan, Stiller, and Lynch (1994) conducted a study examining the affects of teacher, parent, and friend relationships on self-esteem and educational outcomes. Participants included 606 public middle school students. The participants completed school life surveys during scheduled health classes. The Inventory of Adolescent Attachments was used to analyze relationships via felt security and emotional utilization. The Academic Coping Inventory was used to assess the students' coping styles in regards to academic failure. The Self-Regulation Questionnaire-Academic evaluated the students' motivation to complete schoolwork. Academic engagement versus disaffection, perceived control, and capacity beliefs were all included in the questionnaire. The Multi-Dimensional Self-Esteem Inventory was used as a measure of global

self-esteem and self-evaluation behaviors. Results indicate that friends of students generally did not have an affect on their academic success, while both parents and teachers influenced outcomes and school motivation. Strong parent and friend relationships were also found to be indicators of higher self-esteem; while students who claimed to not rely on others for support were found to have lower self-esteem and school adaptation skills. These results support the need for positive student-teacher relationships when viewing motivation to achieve academic goals (Ryan, Stiller, & Lynch 1994).

Locus of control. According to Rotter (1966), an individual's behaviors toward a goal are directly related to where he/she feels the control lies. If the control is thought to be internal, then the individual controls the completion; however, if it is contingent on a different force, whether it is luck or other individuals, then external control is thought to be the driving force. Individuals may interpret situations differently. Goals that some find to be internally driven, others may find externally driven. However, if an external locus of control such as luck or chance is thought to achieve a goal, it is less likely that the individual will raise his/her expectations of future similar successes (Rotter, 1966).

A study conducted by Phillips and Gully (1997) aimed to document the relationships between goal orientation, ability, need for achievement, and locus of control and performance. Four hundred and five undergraduate students participated in the study, provided American College Test (ACT) and Scholastic Aptitude Test (SAT) scores, and filled out questionnaires covering goal setting, locus of control, and need for achievement. A second session occurred one week later and involved completion of a self-efficacy questionnaire. This questionnaire included goals for grade achievement on their mid-semester exam. Data analyses indicated that self-efficacy is positively correlated with ability, learning goal orientation, and internal locus of

control. Twenty percent of self-efficacy variance was due to locus of control. It was found that learning goal orientation involved a higher need for achievement and locus of control. Therefore, individuals who believe they can achieve a goal may have a greater internal locus of control and more greatly appreciate achievement (Phillips & Gully, 1997).

Supervisory Practices & Perceptions

The American Speech-Language-Hearing Association provides standards that clinical supervisors should abide by when in a supervisory position. ASHA (1985) defines clinical supervision as, "the tasks and skills of clinical teaching related to the interaction between a clinician and client," (Introduction section, para. 3). ASHA's code of ethics describes standards that supervisors must keep in mind. Supervisees are working under the supervisor's license. Unethical practices as well as the delegation of tasks that a supervisee is not ready to complete independently are prohibited (ASHA, 2010r). Therefore, to be a successful supervisor, ethical practices in speech-language pathology as well as clinical competencies required of supervisors should be considered (ASHA, 1985).

ASHA provides several modalities by which special training may be acquired for those who are interested in effectively supervising future professionals. This training may be obtained through several outlets. Some graduate programs may offer extensive courses that focus on the process of supervision training. These programs are typically doctoral programs that focus on supervisory preparedness. There are also many opportunities in continuing education that provide supervisors with the resources necessary to deliver a growth-filled experience to their supervisees. These opportunities may include sessions at conferences like the American Speech-Language-Hearing Association annual conference or many state association conferences (ASHA,

1985). ASHA has also a special interest group, SIG 11 Supervision and Administration, which provides literature that focuses on administration and supervision that is available to supervisors. This special interest group aims to provide continuing education opportunities, networking possibilities, and current research evidence regarding supervisory practices. This group provides a forum for the community of professionals to discuss difficulties they may be facing in their supervisory practice. Therefore, they can receive input from others that may have overcome the same issues when working with supervisees in their professional career (ASHA, 2015c).

The supervision process. There are thirteen tasks that ASHA expects supervisors to complete. Supervisors are expected to maintain a successful working relationship with the student while facilitating the clinical learning process of developing goals and objectives, assessment skills, clinical management skills, record-keeping skills, verbal and written skills, and clinical research consumer skills. Supervisors must also strive to be models for clinical excellence of professional conduct and interpersonal skills. Professional conduct may involve interaction with the supervisee as well as clients, caregivers, family members, and other professionals. Interpersonal skills are important for the interactions between the supervisor and supervisee. ASHA informs us that supervisors are required to support a working relationship with their supervisee that involves assisting the student in clinical problem solving as well as independent thinking skills (ASHA, 1985).

According to McCrea and Brasseur (2003), there are five components of the supervisory process that assist in the successful completion of the tasks required of supervisors by ASHA. First, supervisors must have an understanding of the supervisory process as a whole. Therefore, they must be prepared for the role they are going to play in the supervisor-supervisee relationship. This should include discussion between both parties to formally provide

information regarding their expectations of the process and experience. Mandel (2015) conducted a study that examined differences between the expectations of supervisors and supervisees completing a speech-language pathology graduate program. Fifty-four students and eighteen supervisors participated in the study. Both groups completed surveys regarding expectations of each other's actions and performance. Data analyses revealed that there were discrepancies between what was expected of the graduate clinician as well as what was expected of the supervisor. Student clinicians tended to expect direct support for a longer period of the clinical training program. Supervisors, on the other hand, expected supervision to move to a more indirect method of instruction (Mandel, 2015). Next, there is a planning component that must be completed. Just as a clinician plans for a client's therapy sessions, a supervisor should also plan for their supervisee's supervisory process. This preparation may involve continuing education and/or completion of supervision coursework. There should also be a process of observation. This not only involves the observation of a student clinician working with a client but should also involve observing and documenting their interactions throughout all of the clinical process. The fourth component that McCrea and Basseur discuss is analysis. This is a portion that directly involves the observation process. This component involves interpretation of the observations made. The last component of the supervisory process is integration. This is where all of the parts of the supervisory process come together to provide feedback to the clinician, which assists them in making the best clinical decisions for their clients.

To be a successful supervisor, all five of the components must consolidate to form a situation that is likely to teach the supervisee according to McCrea & Brasseur (2003). This situation typically occurs during regularly scheduled conferences or meetings that include both the supervisor and supervisee. This portion of the supervisory process requires excellent

communication skills, as well as the ability to communicate clearly as well as concisely. Clear communication does not only involve conveying ideas in ways that are understood by the listener, it also involves not using excessive fillers or fragmented sentences. Not only do these meetings allow for feedback on clinical practices, but they also allow for professional growth when observing the professional interaction style of the supervisor. This interaction style should include several qualities of good conversationalists including good listening skills, which involves not conversationally dominating meetings (McCrea & Brasseur, 2003).

Problem solving development. The development of clinical problem solving skills is a complex process that if understood by supervisors may assist with meeting supervisees' developmental needs and could promote optimal student growth. Moses and Shapiro (1996) suggested that there are several developmental factors that affect the student clinician's ability to problem solve. Age and experience level, as well as the amount of information provided by supervisors, are factors that are capable of having influence on the development of these integral skills (Moses & Shapiro, 1996). Shapiro and Moses (1989) discuss a problem-solving taxonomy that progresses from identifying a clinical problem from a self-centered perspective to constructing a theory of causality based upon reflection. There are nine stages of problem solving development that occur when a student clinician is training under the supervision of a professional. They include: identification, disequilibrium, reflection, exploration, solidification, negotiation, modification of perspective, evaluation, and construction. Identification involves the clinician's ability to identify the problem; however, this identification occurs through his/her own perspective. Disequilibrium occurs when the clinician feels uncomfortable after identification of the problem. The clinician then moves into reflection of causes of the problem. Exploration involves the clinician discovering other professionals' perspectives of the problem.

The clinician then progresses to solidification. During this stage, the clinician's disequilibrium increases as the perspectives of both the clinician and professional collide. Negotiation occurs when the clinician begins to move towards the professional's perspective. The clinician then begins modifying his/her perspective using problem-solving skills. Disequilibrium begins to subside. Evaluation occurs when the clinician examines the effectiveness of procedures that resulted in resolution to the problem. Finally, construction allows the clinician to modify his/her early theory of the cause of the problem by interpreting past events. A supervisee should progress through these features to become a successful critical thinker in therapy sessions (Shapiro & Moses, 1989).

Moses and Shapiro (1996) describe three domains of problem solving that can be used to assess the development of a clinician: (a) the student clinician's perspective that's reflected in interactions, (b) behaviors confronted in interactions, and (c) solutions to the problems during therapy sessions (Shapiro & Moses, 1996). When considering the student clinician's perspective observed in their interactions, Shapiro and Moses (1989) suggest that two factors be considered: the cause of the issue as well as the clinician's approach to rectification. Similarly, the behaviors that were confronted in the client-clinician interaction should also be viewed from the perspective of how the clinician approached problem eradication. The third domain, which focuses on solutions to clinical problems, views the ways in which the clinician handles difficult situations such as how the session is modified to elicit preferred responses (Shapiro & Moses, 1989).

The taxonomy discussed by Shapiro and Moses can be compared to Bloom's Revised Taxonomy (Anderson, et al., 2001). Bloom's taxonomy was designed as a tool that a teacher could use to measure a student's learning expectations. This taxonomy is two-dimensional and

classifies learning into six levels beginning with remembering and continuing through the stages of understanding, applying, analyzing, evaluating, and creating. These are the cognitive processes that one experiences when learning. These cognitive processes are coupled with the knowledge dimension of learning. The knowledge dimension includes: factual, conceptual, procedural, and metacognitive learning (Anderson, et al., 2001). When supervising, the clinical problem solving process is essential for clinical development. When viewed from the taxonomic classification of problem solving development provided by Shapiro and Moses, supervisors will be able to effectively decide what areas a student clinician may need to improve for optimal future clinical practice.

Problem solving skills may develop by way of scaffolding. This technique, discussed by Wood, Bruner, and Ross (1976), allows the individual to complete a task that he/she would be unable to achieve independently. This can be viewed in the supervisor-supervisee relationship as the supervisor assists with difficult tasks depending on the independence level of the student clinician. Even though the supervisor is assisting in task completion, the supervisee must still understand and recognize the solution. Thirty children, ages 3 to 5 participated in a study aimed to document the success of scaffolding in the learning process. They were assigned to a "tutor," who facilitated the construction of a pyramid using wooden blocks. The tutor used the same cueing procedure when working with each of the children and was classified into three categories including: direct assistance, an error-directed verbal prompt, or a direct instruction verbal prompt. Observation of the children's task completion indicated that they could recognize the correct response before they could construct the correct response. The scaffolding process derived from the results involves: recruitment, reduction of degrees of freedom, direction maintenance, marking critical features, frustration control, and demonstration. Recruitment

allows for the student's attention to be brought to the task, while reducing the degrees of freedom involves simplifying the task for the student. Direction maintenance occurs when the tutor keeps the student motivated in a direction towards goal completion. When the tutor marks critical features of the task at hand, he/she highlights key features of the task at hand. Frustration control occurs when the tutor manages the student's frustrations. This step may include praise. Demonstration is observed when the tutor performs the task solution in a style that the student is expected to imitate (Wood, Bruner, & Ross, 1976). This process can be applied to graduate clinician supervision in that a scaffolding process may assist students while transitioning to independent clinical practice.

Feedback. There are several models of feedback that a supervisor may engage in when working with their supervisee. McCrea & Brasseur (2003) discuss the different forms of feedback: written feedback, spontaneous verbal interaction, and feedback during sessions. Written feedback may involve checklists, rating scales, and/or evaluation forms and messages that are filled out during or after a session. It is then provided to the supervisee and discussed during a scheduled conference. Spontaneous verbal interaction refers to the comments that are provided to the supervisee between the clinical session and scheduled conferences. These interactions are not planned and provide the supervisee with immediate feedback. Feedback that occurs during sessions aim to alter the events that are taking place at that moment. For example, if the supervisee is finding it difficult to complete an activity with their client, the supervisor may demonstrate the steps necessary to complete the activity (McCrae & Brasseur, 2003).

Ho and Whitehill (2009) compared two groups receiving different forms of feedback: immediate verbal and delayed written. Improvement of both groups' clinical skills was observed; however, there were differences in student evaluation of the types of feedback they were

receiving. For example, students in the group receiving delayed written feedback found it beneficial to receive feedback after a period of time because they were able to engage in self-evaluation and organize their thoughts on how the session went before taking the supervisor's thoughts into consideration. On the other hand, some of these students found it difficult to understand written feedback because the supervisor wasn't there to explain what exactly the comments meant. The immediate verbal feedback group found that they were able to benefit from the timely nature of receiving immediate feedback because the session was still clearly on their mind. On the other hand, some found it time consuming (Ho & Whitehill, 2009).

The ability to ask the right questions to lead the supervisee to critically think is a very important aspect of the supervisor's communication skills and affects their duty as a clinical teacher. McCrea and Brasseur (2003) discuss the ways in which questions could positively, or negatively impact a student clinician's growth. The right questions have the ability to provide information to the supervisor about the supervisee's preparation for their client, their strengths and needs, and may increase the problem solving abilities of the supervisee. Supervisors should also consider how questions are posed. The ways in which the question is worded has a direct effect on the response provided by the supervisee. Therefore, effective questions will elicit effective responses, rather than "yes/no" or "I don't know", from the clinician (McCrea & Brasseur, 2003).

Supervisee needs. Dowling and Wittkopp (1982) identified several needs of the supervisee during the clinical supervision process. It was found that the needs of the student clinician change throughout the clinical learning process. When the process begins, at the beginning of clinical education, more guidance is perceived to be necessary when developing lesson plans, diagnosing clients, and treating clients. More observation was also perceived as

helpful to the student clinician. Progression through a graduate program seemed to require less structure from clinical supervisors including more responsibility and less observation. Levels of structure work on a continuum and individual differences should also be considered when deciding the amount of independence a student clinician is ready to handle (Dowling & Wittkopp, 1982).

Dowling and Shank (1981) completed a study that aimed to determine the type of supervisory style that best developed self-supervisory behaviors in graduate students completing speech-language pathology clinical work. The participants included two supervisors and ten graduate students. The students were placed into two groups. One group received a conventional teaching method that consisted of a one-to-one student to supervisor ratio. This method involved the supervisor observing the student during therapy, meeting with the student, and discussing the session. The second group received the teaching clinic method of supervision, which is a method of peer-group discussion supervision. This form of supervision involved the student clinician bringing a videotape of the session to a group meeting. The group as a whole would then discuss and critique the session. Each teaching clinic session begins with a follow-up discussion of the previous week's clinic. Both supervisory styles were videotaped for analysis. Samples of the conferences were randomly ordered for coding and were placed into six categories: good evaluation, bad evaluation, question, strategy, observation/information, and irrelevant. Analysis indicated that both methods of supervision are usable models; however the teaching clinic method of supervision used more "talk" strategy and evaluative behaviors (Dowling & Shank, 1981). However, the results may not be generalizable to all contexts. The number of students included in the study was small and included only one site, indicating the need for further study.

Smith and Anderson (1982) examined the relationship between the verbal content of conferences and perceived effectiveness. Two groups participated in the study. The first group consisted on 15 pairs of supervisors and supervisees. The second group consisted of three trained raters and three trained coders. Forty-five videotaped supervisor-supervisee conferences were analyzed. Perception was analyzed using the *Individual Supervisory Conference Rating Scale*. MOSAICS was used to code conferences into six categories including: speaker (supervisor and clinician), pedagogical moves, generality (specific and general), focus (objectives, methods/materials, and execution), domain (cognitive, affective, and disciplinary), and substantive logical (diagnostic processes and prescriptive processes). Analyses indicated that the more direct the conferences were perceived, the fewer questions and answers during the conference, less discussion of objectives and more discussion of methods and materials, and less discussion of affect. Perceived indirect conferences provided the supervisee with more questions for the supervisor, more reflexive moves such as reaction, response, and summary, and more discussion of affect. Overall, results from this study indicate that there is a strong relationship between the coded behaviors and the perceptions of effectiveness (Smith & Anderson, 1982). The number of participants included in this study was also small and restricted to a single site, making it difficult to generalize the results to broader contexts.

Larson (1981) conducted a study that aimed to discover the supervisory needs and expectations of graduate clinicians in speech-language pathology and audiology. Questionnaires were developed based on existing scales: the Supervisory Expectations Rating Scale and the Supervisory Needs Rating Scale, both of which were found to be reliable. Twenty-two speech-language pathology and audiology programs participated in the study. Results indicated that two factors influence supervisor-supervisee interactions including: supervisee focused expectations

and supervisor controlled expectations. Supervisee focused expectation are those that are centered on the student clinician's need to have an active role in the supervisor-supervisee interactions. Supervisor controlled expectations, on the other hand, are those that assume that the supervisor assumes the active role in the supervisor-supervisee interactions. More experienced clinicians were found to expect a more active role in the supervisory process, while needing supervisors to assume a supportive, attentive role. Inexperienced clinicians were found to need supervisors to provide them with information regarding their weaknesses. Both groups stated that they needed to be able to express themselves regarding their clinical practice. Predictions of expectations and needs focused on experience level, program policies, peers, and academic courses (Larson, 1981). However, the number of participants included in the study was small, making it difficult to generalize the results.

Therapeutic Effectiveness

Currently there is limited research on the qualities of successful speech-language pathologists and what makes one therapist more effective and achieve better or quicker outcomes than another. While the qualities of an effective therapist are poorly understood in the field of speech language pathology, the qualities of an effective therapist have been explored within the field of psychology. Wampold (2011) described several qualities and actions of an effective therapist. First, an effective therapist has a well-developed set of interpersonal skills, which include: verbal fluency, interpersonal perception, affective modulation and expressiveness, warmth and acceptance, empathy, and an ability to focus on others. Effective therapists are also able to make clients feel understood while promoting trustworthiness. This trusting relationship begins during initial interactions with clients and also builds a connection that allows for collaborative work and therapy goal agreement, which is important for success (Wampold,

2011). Wampold (2001) referred to this relationship as a therapist-client alliance. This alliance is comprised of feelings of trust towards the clinician. The client's perspective of this relationship has been demonstrated to affect the outcome of therapy (Wampold, 2001).

Duncan, Miller, and Sparks (2004) describe four ways that a therapist can foster an alliance between themselves and the client. First, a therapist can allow for a generally friendly interaction. Next, the therapist can be responsive to the clients' behaviors and responses. Flexibility is also a way to foster alliance. For example, if a client is not responding to a therapeutic procedure the therapist should find a new way to target the client's goal. Finally, the therapist should validate the client's feelings, whether they are good or bad, in order to foster an alliance (Duncan, Miller, & Sparks 2004).

Motivational interviewing can also be a facilitator of the therapeutic relationship between the therapist and the client. Miller and Rollnick (2013) described four processes used in this style of client interviewing: engaging, focusing, evoking, and planning. Engaging involves forming a working alliance between the two parties while focusing moves the focus of the relationship to a particular issue or difficulty. Evoking occurs when the therapist finds the client's motivation for change and their feelings regarding the process. Planning, on the other hand, occurs when the client makes the goals of therapy their own and has a personal commitment to change. This part of therapy begins to rely less on the therapist for change and more on the client (Miller & Rollnick, 2013).

Bachelor (1995) completed a qualitative study analyzing the client's perceptions of therapeutic alliance. Thirty-four clients who were beginning weekly psychotherapy in a university setting participated in the study. Measures of therapeutic alliance were taken at three different points in therapy: at pre-therapy, during the initial session, and at a later phase. Clients

were asked open-ended questions regarding their therapeutic alliance and its importance. Three types of alliance were discovered within the interviews. Nurturant alliance, which elicited feelings of empathy and respect, accounted for 46% of the clients' alliance. Insight-oriented alliance accounted for 39% of alliance types. This type of alliance involves an improvement or clarification of self-understanding. Collaborative alliance, which incorporated the client's involvement in therapy, accounted for 15% of alliance types. These patients claimed to feel as if they were participating in successful goal setting. Clients' feelings regarding alliance were found to vary individually. However, throughout all types of alliance, clients found respect, a non-judgmental attitude, listening skills, empathy, and trust to be highly regarded (Bachelor, 1995). Despite the application to psychotherapy, the importance of the client-clinician alliance in speech-language pathology cannot be overlooked and its influence on therapeutic outcomes should be considered.

A study conducted by Anderson, Ogles, Patterson, Lambert, and Vermeersch (2009) aimed to assess therapists' facilitative interpersonal skills. This was accomplished by rating therapist responses to challenging clients. Twenty-five therapists participated in the study. The *Social Skills Inventory* and the *Facilitative Interpersonal Skills Performance Task* were used to assess social and interpersonal skills. Sessions were videotaped and the researchers chose four problematic processes. The problematic styles included: a confrontational and angry client, a passive, silent, and withdrawn client, a confused and yielding client, and a controlling and blaming client. Also, two self-focused, negative clients as well as two other-focused, friendly, and dependent clients were selected. Variables considered in this study included: age, sex, percentage of work time conducting treatment, and theoretical orientation. It was found that increased age of the therapist was the only factor that produced better therapy outcomes and that

age and facilitative interpersonal skills were correlated. Facilitative interpersonal skills were also found to be a significant predictor of successful therapy outcomes. Therefore, therapists with higher levels of interpersonal skills produced positive outcomes in therapy (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009).

Another action, described by Wampold (2011), that effective therapists are able to successfully complete is providing understood explanations of the problems or issues being addressed in therapy. This explanation must be consistent with the discipline, seen as acceptable in the eyes of the client, must provide a means by which the client can overcome his or her difficulty, and must include awareness of the context of the client. This awareness includes culture, values, socioeconomic status, and attitudes (Wampold, 2011). An effective therapist must also be culturally competent when working with clients. According to Wampold, consideration of culture, socioeconomic status, and values, while also monitoring psychological reactions to clients to determine if therapeutic strategies are useful to therapy outcomes, is also necessary (Wampold, 2011). The importance of obtaining cultural competence is broadly spread over the entire practice of speech language pathology due to increasing demographic growth. The amount of cultural competence that a clinician possesses may affect their ability to successfully interact with, assess, and treat a variety of individuals (ASHA, 2015b).

An effective therapist's treatment plan must go hand-in-hand with the explanation that was provided to the client in the initial stages of therapy (Wampold, 2011). A therapist's ability to persuade their client that the provided explanation for the posed problem is correct is also an important attribute for an effective therapist. This will, in turn, increase agreement with therapy procedures and will ultimately be beneficial for the client. According to Wampold (2001), the degree to which the therapist believes the approach will provide progress affects the client's

outcome. The higher levels of allegiance the clinician feels towards the therapy approach, the more progress may be made. Many therapy approaches may have similar facets; however their effectiveness may stem from other qualities of the therapeutic interaction (Wampold, 2001). Progress stemming from this agreement must be monitored throughout sessions and therapy should be adjusted if the client is resistant to the therapist's explanations or treatment methods (Wampold, 2011). Boswell, Kraus, Miller, and Lambert (2013) discussed outcome monitoring and its affect on client progress. Routine monitoring of client progress continually reassures the client that they are progressing towards their goals. This type of monitoring may be done through benchmarking, which is the use of benchmark scores to compare client progress rather than using data from their individual performance.

Wampold (2011) describes an effective therapist as one who does not avoid therapy material that may be perceived as more difficult by the client. The therapist must acknowledge this task avoidance and should assist in successful task completion during therapy sessions. Effective therapists are able to convey hope to the client for optimal motivation. Conveying hope may be difficult in situations where the client is not making the progress that was expected or where a client is experiencing a lack of motivation, however, it should be displayed by means of realistic goal setting and communication by the therapist (Wampold, 2011). According to Duncan, Miller, and Hubble (2007), clients discontinue therapy for two reasons. One reason is that the client may feel as if the therapy isn't alleviating the problem. The second reason is that they feel as if the therapist-client relationship isn't fitting. Thus, the importance of the client's opinions of the therapeutic methods and the progress is reinforced (Duncan, Miller, & Hubble, 2007). Finally, an effective therapist continually strives to improve his or her therapeutic skills throughout their career to better serve their clients and to produce more positive therapy

outcomes (Wampold, 2011). This can be viewed in the use of evidence-based practice in the clinical setting, which involves integrating current research as well as clinical expertise and values of the client to provide the best possible services (ASHA, 2005). According to Duncan, Miller, and Hubble (2007), using client feedback to perfect our treatment approaches is crucial to facilitating successful outcomes. This session-driven feedback should give therapists insight into their effectiveness, and should be used to improve weaknesses (Duncan, Miller, and Hubble, 2007).

III. Justification

Several variables warrant consideration when selecting an effective supervisory style. The supervisor should not only be knowledgeable about the development of the graduate clinician's problem solving skills, he/she should also be confident in knowing what makes a clinician effective and which skills contribute to the development of an effective clinician. The effect of the learning style of the generation as well as the stressors and coping styles used by the students who are experiencing SLP graduate training may provide information that is potentially valuable to supervisors.

Variance in supervisor-supervisee perceptions and practice effectiveness, along with the gaps in the literature regarding overall clinician development, indicates the need for more information regarding the development and perspectives of a student clinician. If supervisors do not have a strong understanding of the anxieties and expectations of graduate clinicians, then necessary supports may not be put in place to foster the growth of an independent and effective clinician.

While some research has been carried out regarding therapist development, especially in psychotherapy, more research is needed to examine the progression of training and supervisory experiences for speech-language pathologist trainees. Furthermore, more research is also warranted on the way in which trainees cope with the educational and clinical training experience as well as the effect their training and inner reactions have on the therapeutic process. Examining the lived experiences and reactions of novice speech therapists as they progress through their graduate training may allow for suggestions to enhance training programs and improve the ability of the trainee to become an effective therapist. Considerations regarding generational classroom differences and perceptions of supervisory styles convey important

information regarding effective models that contribute to successful clinical and academic development. The present study aims to answer the following questions:

1. What are the experiences, reactions, and coping strategies used by novice therapists throughout their graduate speech language pathology training experience?
2. How do a graduate speech language pathology student's anxiety, supervisory expectations, supervisory needs, and skill change over time?

IV. Methods

The purpose of the current study was to explore the experiences and perceptions of graduate speech language pathology students who are completing their academic and clinic course work and understand what factors play an important role in their training and development. A qualitative research paradigm was chosen because it is best suited to answer the question of this study. Since the experience of graduate training is an individualized process, a qualitative research paradigm can provide a naturalistic representation of a student's experiences. This representation allows for theory to develop on its own without expectations. A naturalistic design also provides flexibility because of its open-ended nature (Patton, 2015).

The qualitative data obtained is interpretive; it cannot be statistically quantified. When using qualitative methods, in-depth analysis of details is possible and information about the topic of interest can be explored (Patton, 2015). This information is best gathered in an empathetic and neutral manner meaning that the investigators must exhibit understanding of the participant's experiences while suspending bias and maintaining a nonjudgmental attitude towards the participants' opinions and feelings (Patton, 2015). This is especially important when looking at topics such as stress and anxiety, which may cause high-emotion conversations during the interview process.

Using a qualitative methodology also enables investigators to capture the stories of those experiencing a phenomenon, take the personal experiences of the participant and combine them with external events contributing to the topic of interest (Patton, 2015). Therefore, the feelings and experiences of the students experiencing a graduate level speech-language pathology program will be combined with knowledge of aspects of the program itself to form a theory regarding the training and development of speech-language pathologists.

This section will outline in detail the qualitative research methods employed in the current study. The five sections include: (1) research participants, (2) recruitment, (3) interview, (4) analysis, and (5) credibility.

Research Participants

Both general and specific criteria were used to select the study participants. In general, to be included in this study, the participants had to be able to (1) complete the required questionnaire, (2) adequately communicate about their experiences with the phenomenon being explored, and (3) be willing to fully share their experiences about the phenomenon being explored. Specifically, they also had to be graduate students entering a graduate training program in speech-language pathology, be over 19 years of age, be literate, and be monolingual, English speakers. In keeping with a qualitative research design, the number of interviews collected was limited to a small sample. Theoretical sampling was used to generate participants that are best suited for the study. Theoretical sampling is used in grounded theory research and aims to provide a varied opportunity for observation of the population of interest by directing focus to this population. Participants are selected based on their involvement with the phenomena under observation (Creswell, 2007). This variation, therefore, produces better-saturated categories as the theoretical basis. The participants in this study included eight females who were completing the speech-language pathology graduate program of study at Auburn University. The participants were diverse in their undergraduate training, previous clinical experience, and age. Previous clinical experience ranged from having only completed ASHA's mandatory 25 observation hours to having hands-on treatment experience**.** Participant diversity is ideal as a model developed from a diverse sample is more likely to be inclusive and represent a broader range of experiences (Patton, 2015). The participants were between the ages of 21 and 28 (M =22.37, SD =2.39) and

lived in Auburn, Alabama at the time of their interviews. Seven of the participants received their bachelor's degree in communication disorders, while one received a bachelor degree that was undeclared.

Table 1: Demographic Information

Pseudonym	Age	Race	Sex	BCD	Hours Clinical Experience	Type Clinical Experience
Kelly	28	W	F	No	25	Observation
Heather	21	W	F	Yes	2.5	Treatment
Julie	23	W	F	Yes	0	N/A
Ann	22	W	F	Yes	>50	Treatment
Mary	21	W	F	Yes	6	Treatment
Susan	21	W	F	Yes	24	Treatment
Maria	22	W	F	Yes	5.5	Treatment
Debra	21	W	F	Yes	4.5	Treatment

BCD (Bachelors communication disorders)

Recruitment

The participants were recruited at the Auburn University Speech and Hearing Clinic through personal contact, word of mouth, and/or the posting of flyers. Interested participants were provided with written information about the project, including the principal investigator's contact information. A faculty member not involved in the study recruited the speech pathology graduate students during a student orientation event that occurred prior to the start of classes. It was made clear to the students who participated in the study that participation was voluntary and had no impact on their academic performance or academic standing. The students were also informed that there was no extra credit for participating in the study.

Interview

All of the interviews for this study were conducted by Dr. Laura Plexico, who has received training in qualitative interviewing. All of the interviews took place in a private location that was agreed upon by both the interviewer and the graduate student participant. The students

who were willing to participate in this study were asked to participate in an interview at the beginning of each semester and following the final semester of a 5 semester graduate training program, resulting in 6 interviews per participant. The interviews did not have a pre-established time frame and continued until all relevant information needed for the study was obtained. The participants were told that the interview could take approximately one hour. Only the participant and the interviewer were present in the room during the interview and all responses were recorded with a high quality PMD671 Marantz digital recorder (Marantz America, LLC, New Jersey).

A standard set of administration instructions and an interview packet were constructed for data collection. This packet included: (1) a cover sheet, (2) consent form, (3) participant demographic form, (4) document request & code ID form, and (5) the interview guide (see appendix A-D). The participants were given the interview packet and were asked to turn to the first page, which contained the consent form (see appendix A). The interviewer reviewed the consent form with the participant, allowed questions after review of each section independently, and gave the participant the opportunity to withdraw from the study. If the participant chose to continue, the participant was asked to sign the consent form with the interviewer as a witness. The participant was then asked to complete the participant information form and the document request and code ID form at the beginning of the interview (see appendix B-C). The participant demographic form contains the participant criteria and requested demographic information such as full name, age, gender, education, whether there is a history of language or psychiatric problems and previous clinical experience. The document request and code ID form was used to request permission for feedback and contact information.

Once the above information was completed, the interviewer began asking four categories of questions outlined in the interview guide, allowing the participants as much time as she required to respond to each question. The four categories covered general information, clinical questions, academic questions, and supervision questions. Unplanned prompts on topics that required additional elaboration were used when clarification on a topic was needed. Each of the interviews consisted of a series of open-ended questions that were used to develop an understanding of student experiences as they progress through a graduate speech-pathology training program. The research questions outlined in the interview guide were developed to gain an increased understanding of what happens, the emotions experienced, and what is thought or done as students' progress through a graduate Speech-Language Pathology Program. The goal of the interview was to develop insight into the students' learning style, work ethic, experience of the training process, academic expectations, and supervisory experiences. The interview questions were derived from a review of the literature and probed for experiences and reactions of students completing a speech-language pathology graduate program and the strategies used to manage their reactions. The questions probed for information on the effects of supervisory practices on student development and whether or not there was a change over time in student anxiety and supervisor expectations. The interview questions also probed for student-training effects on the therapeutic process by examining the changes in perceptions of effectiveness over time.

Following each of the interviews, the interviewer asked the participant credibility questions to check the researcher's influence on the interview process and to make sure that the data was thoroughly gathered. First, the interviewer asked if there was anything else that the student felt was important that was not covered in any of the other questions. The next two

questions pertained to the overall interview experience including: suggestions for future interviews and if any of the questions were asked in a way that may influence the answers provided by the students. At this time the participants were also once again presented with the opportunity to ask any questions and withdraw from the study. Upon agreement to continue the study, a code was assigned to the recording. The code was used to link the interview data to the student. If participant disagreement occurred with the findings or if the participant indicated that they would like to withdraw post-analysis, it would be necessary to link the coded data to the identifying information.

Analysis

The verbal responses obtained during the interviews were transcribed and served as the data source for this study. Each of the recordings were transcribed verbatim and were analyzed per the procedures described in this section. Pseudonyms were randomly assigned to participant numbers once analysis was complete to more easily discuss each participant's experiences. Glaser and Strauss's (1967) method of grounded theory was used for data analysis. Their method of grounded theory was chosen because this study aims to develop a theory regarding a relatively unexplored area of speech-language pathology that is based on specific experiences of students in training. Therefore, the data resulted in a theory that was established in data from those who have experienced the phenomena (Glaser & Strauss, 1967).

The grounded theory method developed by Glaser and Strauss (1967) involves a systematic set of procedures that occurs in stages, and completion of data analysis results in a substantive-level theory that emerges through a memoing process (Glaser & Strauss, 1967). Analysis of data collected by systematic procedures occurs in stages. First, the researcher uses open coding to categorize information about the model. Subcategories are then found within each

category. All of these categories relate to the core phenomenon of interest to the research. Next, axial coding is employed to assemble the data using a coding paradigm. In this paradigm, the researcher identifies the central phenomenon, explores causal conditions, specific strategies, context as well as intervening conditions, and consequences. Data acquisition and analysis continues until data saturation is reached. One difficulty that researchers may experience during systematic grounded theory research is determining when a category is fully saturated. Saturation was achieved when the interview data from two participants did not contribute any further to the developing theory or contribute any new themes that would be necessary for understanding the phenomenon of interest (Glaser & Strauss, 1967).

Qualitative Solutions and Research (QSR-N4) software was used to facilitate the organization of the data into a hierarchy of categories. The number of participants who contribute meaning units to each of the higher-order categories was tallied to follow the degree of convergence between participants.

Credibility

In qualitative research, objectivity is not the goal given that a researcher cannot entirely remove themselves and their biases from a study. Rather, keeping in compliance with a qualitative paradigm the credibility of the findings will be of significant interest. In this study, credibility was addressed through the incorporation of the following procedures:

1. All interviews were recorded with a high quality digital recorder and transcribed by a graduate research assistant verbatim prior to analysis.
2. Personal and professional biases regarding student training and development were identified before the interviews and will be reviewed as themes emerge. Memos were kept to record any emerging hypotheses among developing categories throughout the

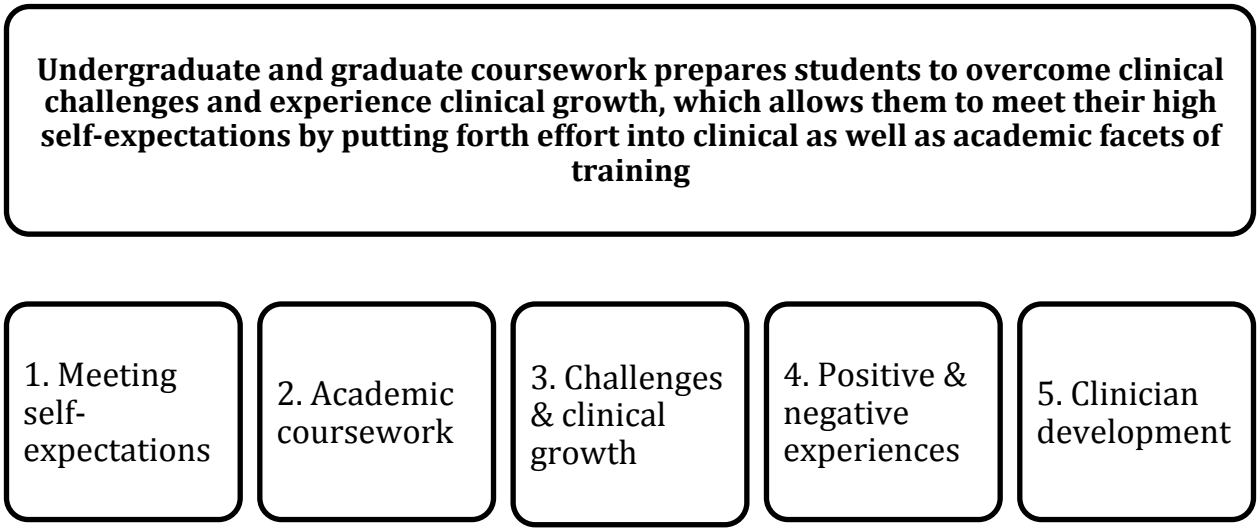
analysis process. This process involved the researcher writing down ideas about the evolution of the developing theory (Glaser & Strauss, 1967). Procedural, coding, and theoretical memos were kept throughout the data analysis process. Procedural memos involved recording and describing procedural decisions during collection. Coding memos were used to segment, code, and categorize information into the hierarchical model. Theoretical memos outlined hypotheses and the developing theory based on the relationships observed between the categories formed in earlier documentation (Glaser & Strauss, 1967).

3. Investigator triangulation was used to incorporate views from multiple sources in order to credibly establish a theme from more than one point of view (Creswell, 2007). Investigators separately coded the meaning units and then employed the constant comparative method to seek consensus. This method involved fine-tuning emerging categories in a systematic manner (Patton, 2015). Disagreements between the two investigators were handled by privileging the second investigator's perceptions. This was handled in this manner because the second investigator interacted with the participants and therefore had more insight of the participant's experiences.

V. Results

The forty-four interviews were broken down into 3,792 meaning units. Results of investigator triangulation indicated 90% reliability between investigators in the determination of the meaning units. The hierarchy contained six layers and included 3,814 meaning units. The overall hierarchy contained more meaning units because the meaning units could be placed into more than one subcategory. The "core category" is the highest layers and contains five "clusters". Each cluster contains categories, which in turn consist of subcategories. Several subcategories also consist of themes. Following will be a description of each of the five clusters along with each of the categories, subcategories, and themes. Each cluster number, category number, subcategory letter, and theme letter-number combination will be indicated and will correspond with the results presented in appendix E. Table 2, is an overview of the resulting core category and five Clusters. The core category will be presented and discussed following the discussion of the five clusters, which describes the overall experience presented.

Figure 2: Core category and Cluster Summary



Cluster 1: To successfully complete graduate training, students have increasing expectations of themselves that are met by putting forth effort into organization, time management, and finding their preferred learning styles

All participants (N=8) endorsed this cluster that resulted from five categories describing different aspects of the participants' working and specific learning styles which included: organization, time management, self-expectations, work ethic and effort, and the plateauing of the participant's working and learning style (see Table 4).

Students mindfully put forth effort while exhibiting a strong work ethic that plateaus after the second semester of graduate training (1-1). Seven participants endorsed this category (*n*=7). Two subcategories emerged within the first category (1-1). The first subcategory (1-1A) focuses on the amount of effort required to complete a graduate training program while the second subcategory (1-1B) focuses on the type of work ethic that the students possess and its level of stability.

Exhibiting the amount of effort required for completion of graduate training (1-1A). Four participants endorsed this subcategory (*n*=4). These participants found that a large amount of effort was required to complete graduate training; however, they were only putting forth the amount of effort necessary for completion. Ann stated at the end of her first semester of graduate training, "I do what I think I should, as far as clinic goes. Um, and I put the work in that I think I need to." This amount of effort was stated as becoming increasingly greater across semesters, but was required for managing an increased caseload and for learning the skills necessary to become an effective speech-language pathologist.

Students possess a strong work ethic that remains stable over the course of graduate training (1-1B). Seven participants endorsed this subcategory (*n*=7). These participants were

found to believe that they possess a strong work ethic that remained strong through the duration of the training program. Heather stated, "I have a very hard work ethic." Other words that participants used to describe their work ethic included: hard, thorough, dependable, and diligent. The participants' work ethic remained the same and did not appear to change from the end of the first semester of graduate training to the end of graduate training. Susan stated, "I mean, I feel like I put just as much into it now, um, as I did before." The remaining participants endorsing this subcategory made similar statements. They indicated that they felt like they worked hard throughout the duration of the program and their efforts toward degree completion did not waver.

Table 3
Cluster 1: To successfully complete graduate training, students have increasing expectations of themselves that are met by putting forth effort into organization, time management, and finding their preferred learning styles.

Categories	*n*	Subcategories	*n*
1. Effort & work ethic	7	A: *Amount of effort*	A: 4
		B: Strong work ethic	B: 7
2. Importance of organization	7	A: *Time management skills*	A: 5
3. Self-expectations versus supervisor expectations	5		
4. Working & learning styles	8	A: *Hands-on & visual learning styles*	A: 7
		B: Working & learning styles remaining the same	B: 8
5. Helpfulness of undergraduate coursework	4		

Organization is an important aspect of training that can improve overall success, preparation, and the student's ability to learn (1-2). Seven participants endorsed this category (*n*=7) and one subcategory (*n*=5) emerged from the category. These participants found organization to be a key skill or strategy that is necessary to complete a graduate training

program. Prior to beginning clinical training, Heather stated, "I'm very organized. I like to be prepared." Prior to the third semester of graduate training, Maria stated:

> I mean if anything I have to be even more like, on top of lists and just like in the spring it's just so chaotic. Like I'm pretty organized. I think that's how I – if I wasn't I would absolutely go insane. So…I try to stay organized.

Organization continued to be a key working skill of importance throughout graduate training that was used by the students to alleviate the stressors of an increased clinical as well as academic workload.

The need for successful time management skills increases throughout graduate training and is a difficult skill to learn (1-2A). Five participants endorsed this subcategory (*n*=5). Time management skills, a form of organization, were found to be an increasing challenge throughout graduate training. At the beginning of graduate training, Debra stated, "It's just more time management than before 'cause there's more to be done." This could be compared to undergraduate or previous job requirements. Towards the middle of graduate training, Debra also stated, "It was a lot more time management issues this semester than the previous since we had more clients and class demands as well." This indicates an increasing time management requirement. Ann found that she could use past time management experiences during graduate training to increase her ability to manage her time. She stated, "I learned from my previous semesters, like, to stay on top of treatment plans. And uh so yeah, just what I learned from last time." Like Ann, many students found that they learned the importance of time management throughout graduate school using trial and error. A lack of time management was found to increase levels of stress, while an increase of time management abilities was found to decrease levels of stress.

When beginning graduate school, self-expectations may be unrealistic and mismatched with client or supervisor expectations; however, as graduate training continues self-expectations increase with supervisors' expectations (1-3). Five participants endorsed this category (*n*=5). Throughout graduate training, several participants felt as if their self-expectations were unrealistic. When referring to her self-expectations prior to beginning graduate training, Mary stated, "Course that might be a little too high expectations right now. I don't know." These expectations included clinical performance and abilities. As graduate training continued, self-expectations were found to increase. At the end of the third semester of graduate training, Kelly stated, "I feel like I'm probably going to expect a lot more of myself, even, and less of my supervisor's input in making judgments and making decisions for me, and really putting it on myself." Self-expectations continued to increase at the end of graduate training and eventually matched the supervisor's expectations for the students.

Working and learning styles fluctuate between hands-on and visual styles during the first semester, but plateau at the end of the first semester (1-4). All participants endorsed this category (N=8). Two subcategories developed during analysis of the participants' responses. The first pathway (1-4A) focused on the specific types of learning styles that the participants used to complete coursework and clinical work. The second pathway (1-4B) focused on the time required for the participants' working and learning styles to solidify and then plateau.

Students prefer using a combination of hands-on and visual learning styles throughout graduate training (1-4A). Seven participants endorsed this subcategory (*n*=7). Throughout the first semester of graduate training, the participants' learning styles included both hands-on and visual styles. Four students (*n*=4) stated that a hands-on style of learning was preferred, while seven students (*n*=7) stated that their preferred learning style was visual. These preferences

adjusted or combined as graduate training progressed leading to the majority preferring a combination learning style. Prior to the first semester of graduate training, Kelly stated:

> My learning style? I'm definitely a visual learner. Um…I like to see things, and then I like to write things down. So, I take a lot of notes, and re-copy my notes, and seeing things in action kinda helps me put it all together.

Similarly, prior to beginning clinical training Maria found that she used a combination of both learning styles. She stated, "But I do think like, actually, like, um…working hands-on like with a client, I definitely remember those cases more than..over visual. But like, I know how I learn is visual." This trend continued throughout graduate training. Visually presenting feedback or therapy ideas was found to assist students in internalization of their supervisor's suggestions, while using a hands-on approach to learning allowed students to relate experiences.

By the end of the third semester of graduate training, students' overall working and learning styles began to remain the same (1-4B). All participants (N=8) endorsed this subcategory. At the beginning of the third semester of graduate training, the students' overall working and learning styles were found to remain the same. When asked if her working and learning styles have changed since beginning graduate training Julie stated, "I don't think so. I would say it's probably stayed the same…I'd say it's probably stayed the same." Similarly, Kelly stated, "I think I'm still pretty consistent," when asked if her learning style had changed during her third semester of graduate training. This indicates that once established, working and learning styles are employed in similar manners during clinical training. They do not fluctuate between each other (e.g. sometimes visual, sometimes hands-on).

When beginning graduate training, undergraduate academic and/or clinical coursework was found to be a helpful preparation aid (1-5). Four participants (*n*=4) endorsed

this category. Prior to beginning graduate training, undergraduate coursework and clinical work was described as a helpful preparation aid. Julie stated:

> Um…so far it's been a lot of review. Um, I think that I got an outstanding education at XXX. And I think that what I've learned so far has been a lot of review, and, maybe not necessarily review for everyone else. But definitely review for myself. Um…I think that I came very prepared from my undergraduate [program].

This preparation enabled Julie to begin graduate training with a level of confidence that other students may not have experienced. Not all students begin graduate training in speech-language pathology with a background in communication disorders; therefore, their feelings of preparedness may differ from students with an undergraduate background in a field other than communication disorders. For example, when discussing students whose undergraduate coursework was in a different field of study Susan stated:

> Well several of them, [students with other backgrounds], you know, just, I guess they're starting in grad school so they've had to observe. And so they have one client now, but they're not familiar, or, as much so familiar with the objectives and procedures and how, um, a clinic functions.

This indicates that some students may enter graduate training better equipped to begin clinical work at the beginning due to their previous experience with clinical procedures. Different degrees of experience and clinical exposure during undergraduate training influenced the students' comfort level and confidence with different clinical procedures.

Cluster 2: Academic coursework is a foundational and overwhelming aspect of graduate training that cannot fully prepare a student clinician for all clinical problems, thus

indicating the need for academic faculty to provide connections, a foundational framework to build from, as well as advice to students

All participants (N=8) endorsed this cluster resulting in four categories. The first category, The overwhelming, however helpful, academic coursework increases a student clinician's comfort level and is an overall positive experience, resulted in two subcategories. The second category, Academic coursework is a foundational aspect of graduate training and requires application, which may be difficult, resulted in one subcategory. The third category describes how students expect academic faculty to provide connections between academic coursework and clinical work, to provide advice to students, as well as to provide a framework for diagnosis and treatment of communication disorders. The fourth and final category describes how academic coursework cannot fully prepare a clinician for all future clinical problems.

Academic coursework is experienced as an overwhelming process; however, it is found to be helpful, increases a student clinician's comfort level, and is an overall positive experience (2-1). All participants (N=8) endorsed this category resulting in the emergence of two subcategories. The first subcategory (2-1A), focused on the difficulties experienced by the students including both the overwhelming nature of graduate training and the difficulty experienced when trying to manage both clinical and academic coursework. The second subcategory (2-1B) focused on the helpful nature of academic coursework that was also found to be a positive experience for students.

Academic coursework is overwhelming and difficult to complete when also assigned clinical coursework (2-1A). Six participants (*n*=6) endorsed this category finding their academic coursework to be overwhelming and difficult to complete. Two sub-subcategories emerged from this category during analysis.

Table 4

Cluster 2: Academic coursework is a foundational and overwhelming aspect of graduate training that cannot fully prepare a student clinician for all clinical problems, thus indicating the need for academic faculty to provide connections, a foundational framework to build from, as well as advice to students.

Categories	*n*	Subcategories	*n*
1. Academic coursework experience	8	A. Overwhelming nature of academic coursework B. Helpful, positive, and enjoyable academic coursework	A: 6 B: 7
2. Academic coursework as a foundation	8	A. Academic coursework as a large, foundational role	A: 8
3. Student expectations of academic faculty	8		
4. Inability to fully prepare clinician through academic coursework alone	7		

Students found academic coursework to be overwhelming throughout graduate training, which resulted in feelings of increased pressure (2-1A1). Four participants (*n*=4) endorsed this category. These participants found the overall nature of graduate level academic coursework to be overwhelming, which prompted some students to focus on survival rather than success when experiencing graduate training. For example, when asked about her academic needs, Kelly stated that she just needed to "survive." Students also felt that the amount of information provided to them was an overwhelming amount. Maria stated, "Like I said we get a lot of information, and I don't think it's humanly possible to actually remember all of it, you know?" This trend was seen throughout the graduate training experience.

Students experienced difficulties managing both clinical work and academic coursework, which affected their preparation for therapy as well as application abilities (2-1A2). Seven participants (*n*=7) endorsed this category. Many participants experienced difficulties managing both academic and clinical coursework and could not find a workload balance where they could focus equally on both sets of work. Some participants felt as if they had to choose which part of

their graduate training would receive more attention, academic or clinical. Some participants, like Ann, felt as if they were less prepared for clients when putting forth extra effort into academic coursework. She stated, "I could've wish that I'd learned more, because I don't know that I would feel as prepared for therapy in those kind of areas as I would like." This lack of balance may have increased stress levels and caused some students to feel they were not able to fully grasp all information presented to them to the extent that they desired. That is, the students felt that they were not always attending to each aspect of graduate training with equal amount of attention and this discrepancy left an unsettling feeling with some of the students.

Overall, students find academic coursework to be helpful, positive, and enjoyable (2-1B). Seven participants (*n*=7) endorsed this category. Participants found that academic coursework was helpful despite the challenging nature of managing both academic and clinical coursework. Helpfulness was observed both clinically and academically. For example, students within the graduate training program were required to take comprehensive exams. Participants found academic coursework to be a helpful preparation aid for these exams as well as with clinical decision-making. For example, Kelly stated, "Overall, they've [academic courses] been really great and very helpful." General enjoyment of academic coursework was documented throughout graduate training. In regards to general enjoyment of academic coursework, Heather stated, "The classes are really interesting. I've enjoyed the variety of classes that we've had." Aspects of coursework that participants specifically mentioned as being enjoyable included the variety of coursework and the clinically relevant information provided by professors.

Academic coursework plays a large, foundational role in the training of a clinician; however, application to clinical problems proves to be difficult (2-2). All participants (N=8) endorsed this category resulting in a discussion of the importance of academic coursework as

well as the difficulty of application to clinical work. The focus of this category was on the general role academic coursework plays in graduate training as well as the application of academic coursework to clinical problems. Debra stated, "I think they [academic courses] play a big role because it's the foundation we're—at this point—basing our therapy process on." All participants agreed with this statement and this trend continued throughout graduate training; therefore, academic coursework continued to play a large role in clinical development throughout each semester of training.

All eight participants found that application of academic coursework was a necessary aspect of graduate training. When discussing application of academic coursework to clinical coursework, Julie stated, "That's how you're going to have a better understanding of what it is that you're doing." Application was also found to be a difficult task when beginning graduate training, but began to decrease in difficulty as graduate training continued. Difficulties were seen when coursework wasn't clinically applicable to a client at the time they were taking the coursework. For example, a student may not have a client experiencing articulation difficulties while in the articulation disorders course. Students also felt that some courses did not provide completely clinically applicable information the entire semester. This was discussed as theoretical information was presented to the students during a portion of the semester instead of focusing on specific assessment and treatment techniques.

Students expect academic faculty to provide connections between academic coursework and clinical work, to provide advice to students, as well as to provide a framework for diagnosis and treatment of communication disorders (2-3). All participants (N=8) endorsed this category. Many specific expectations were discussed; however, few specific expectations were repeatedly stated by multiple participants during the interviews. However, the

academic faculty was expected to provide connections between academic and clinical work. Expectations provided by the participants included using clinical examples during class or allowing students time to ask questions about current clients that they were providing services to in the university clinic or at an internship setting. Another expectation was for the academic faculty to provide clinical and professional advice to the students. Much of this advice pertained to clinical problems that the participants were faced with at the time. A framework for diagnosis and treatment of communication disorders was also stated as an expectation for academic faculty. When asked about her expectations for the academic faculty during her second semester of graduate training, Debra stated, "Just to continue to provide information that's going to be useful. As far as…this is the therapy process and this is the diagnostic process for whatever we're taking." Many students similarly felt as if they needed specific information regarding diagnostics and treatment methods; however, they didn't feel as if the theoretical bases for these methods was as necessary to learn.

Academic coursework cannot fully prepare a clinician for all future clinical problems (2-4). Seven participants (*n*=7) endorsed this category. When asked if academic coursework would be able to fully prepare each clinician, the participants repeatedly denied the ability of the coursework to do so. Maria stated:

> Think about how many individual unique cases there are, and – or like rare disorders that you know, maybe some of ya'll have never even experienced or seen. I think classes are important to give you like, um…the overall, but what you will encounter the most. Hopefully if you encounter something that's a rare unique disorder, you can take from everything else you learned and try to piece together and like, somehow figure out what might work for this person. You know? Like I think I'm going to XXX in the spring and

like, I like, feel like I'm gonna encounter things that I've never seen before and that's not a teacher's fault, it's just, there's such rare conditions and you kinda just kinda have to figure out based on what you do know.

Seven participants made similar statements. It was acknowledged that academic coursework could not fully prepare the student clinician, and that continued throughout graduate training. This lack of full preparedness may have forced students to use critical thinking skills to apply experiences to their academic foundation since they could not rely on just one aspect of their training.

Cluster 3: Despite the challenges faced by students completing a graduate-level program, all participants' experienced clinical growth, which is due to the many clinical learning and academic experiences that occurred during training

All participants (N=8) endorsed this cluster resulting in five categories: orientation is an important foundational aspect of beginning clinical training that provides an overview of the culture of clinic; challenges were experienced throughout graduate training and transitioned from an overall therapeutic ability focus to challenges involving specific difficulties experienced; clinical learning encompasses all aspects of graduate training and increases the clinician's ability to conduct therapy sessions comfortably and effectively; many factors contribute to the effectiveness of a clinician, which may not be realized by the student until graduate training has progressed; and in general, the graduate students enjoyed clinical experiences, clinical training, supervisor and faculty interactions, and the independence they were provided with while in the role of clinician.

Orientation is an important foundational aspect of beginning clinical training that provides an overview of the culture of clinic (3-1). Four participants (*n*=4) endorsed this

category finding orientation to be a helpful aide when beginning graduate training. Appropriately, students at the beginning of graduate training primarily addressed this topic. Susan stated, "I mean, I had forgotten a lot, since even last semester. So, I mean I think review, and then training, a quick training session's definitely helpful." Similarly, Mary discussed the frustration that she felt for other students from other universities that did not receive an adequate orientation to the program. She stated:

> I was frustrated for them because I just, was like, if I, if I was going to another university for my graduate work, I would have a lot of expectations of wanting a foundation of all aspects, you know. The set up of the clinic, this is how we do things, and then going into orientation.

Graduate students are typically not aware of the experiences that will occur during graduate training. The students found that orientation provided a foundation for their graduate school expectations and allowed them to experience comfort regarding the structure of the program and procedural expectations.

Table 5

Cluster 3: Despite the challenges faced by students completing a graduate-level program, all participants experienced clinical growth, which is due to the many clinical learning and academic experiences that occurred during training

Categories	*n*	Subcategories	*n*
1. Importance of orientation	4		
2. Graduate training challenges	8		
3. Clinical learning encompasses all aspects of graduate training	8	A. Conducting evaluations versus performing therapy B. Procedural nature of clinic C. Successful therapeutic outcomes D. Therapy session preparation	A: 8 B: 6 C: 8 D. 8
4. Factors contributing to the effectiveness of a clinician	8	A. Observation of client progress	8
5. General enjoyment of graduate training	8		

Challenges were experienced throughout graduate training and transitioned from an overall therapeutic ability focus to challenges involving specific difficulties experienced (3-2). All participants (N=8) endorsed this category. All participants experienced multiple challenges during graduate training that changed in nature as training progressed. At the beginning of graduate training, many challenges were identified as broad therapeutic ability and logistical concerns. Formal assessment procedures, therapy session procedures, and the naturalness of conducting a therapy session were all identified as areas of challenge prior to beginning graduate training. As training progressed, challenges became more specific and client-centered. For example, Debra found that adjusting her expectations was a specific challenge for her. She stated, "Knowing that my expectations for him would have to be different…and knowing that he wouldn't be able to sit there and work like a normal client would was definitely a challenge." She was less concerned with her ability to perform therapy in general, as she was concerned with her ability to tailor her session to her specific client. Self-awareness of the many challenges they were experiencing was noted. They also expressed the desire to use them as a means to grow as a clinician.

Clinical learning encompasses all aspects of graduate training and increases the clinician's ability to conduct therapy sessions comfortably and effectively (3-3). All participants (N=8) endorsed this category, which resulted in four subcategories. These subcategories covered many aspects of the graduate students' clinical learning opportunities and included: comfort with treatment versus evaluation, comfort and understanding of clinical procedures, what constitutes successful therapeutic outcomes, as well as the logistics of a therapy session preparation.

When beginning graduate training, most clinicians preferred conducting therapy sessions when compared to administering formal evaluations; however, as graduate training progressed, clinicians began to enjoy administration of evaluations (3-3A). All participants (N=8) endorsed this subcategory. Prior to beginning graduate training, many participants identified evaluations to cause many feelings of uneasiness. Maria stated:

> Um…evaluations, that was, it's funny you ask, because that last week, was like, I was fine all day during orientation on Monday, and then they read out who was doing evaluations, and I think I just hit like my, like, I was just like, "Oh my gosh." Because it was just…we've never learned about evaluations, and that was the one thing like, I was like, had no idea about. And they were just throwing more and more, this is what you have to fill out, this is what you have to do, and that kind of put me over the edge as far as, "Wow, like, I don't know if I can handle this.

Many participants agreed that evaluations were most difficult due to the lack of familiarity with the many procedures required to complete a formal evaluation when beginning graduate school; however, after completion of some clinical experience both aspects of clinic were identified as feasible. Some students eventually identified evaluations to be more enjoyable than the completion of therapy sessions. When asked which aspect of clinic she liked more, Ann stated, "I like them [evaluations] better. They're more fun to me." By the end of graduate training, three students concurred. The students who enjoyed completing evaluations more than providing treatment found that they enjoyed the structured nature of diagnostics and found therapy to be less predictable in nature.

Adjustment to the procedural nature of clinic begins during the first weeks of graduate training and continues as students work at different clinical sites with differing procedures (3-

3B). Six participants (*n*=6) endorsed this category and identified clinical procedures as an aspect of graduate training that required time to learn. This was recognized throughout all of graduate training and across all off-campus clinical placement sites. Although, Kelly found adjustment to the procedural nature of each placement to increase her ability to focus on her clients. She stated:

> Just because of the experience of the procedures and going through, you know, how to file paperwork, deal with paperwork. That kind of procedural stuff was a lot easier, and so it was…I was able to focus more on the client, and not just what I'm doing but what…what are they doing. What are their behaviors? How can I have a better impact on them, rather than worrying about all the things that I need…you know, was concerned about the first semester.

Overall, the procedural nature of clinical work became easier with experience. The students found that they needed some degree of flexibility when adapting to new clinical sites. They found that the procedural and logistical aspects across sites were variable and required time and patience to adapt to and learn. However, once students were familiar with the site and its routines, the students were able to shift their focus to their therapeutic abilities, client needs, and the overall learning experience at the site.

Therapeutic outcomes are both client- and clinician-dependent and depend upon many external and internal factors (3-3C). All participants (N=8) endorsed this category. Successful therapeutic outcomes were found to be a result of many intertwined factors. Client environmental factors, the clinician's ability to be flexible, therapeutic methods, therapy session preparation, client-clinician rapport, and the therapist's skills were identified to be related to successful therapeutic outcomes at the beginning of graduate training. Students identified environmental

factors as events that occurred earlier in the client's day or consistency of attendance. When discussing the importance of flexibility, Mary stated:

> If you go into it, and the child or the adult or whatever is not responding to whatever you're doin', be able to have a plan B, and switch to something quicker. That way, the client doesn't get bored or frustrated that way you can, see some sort of progress.

Therapeutic methods were also found to be a predictor of therapeutic success. Evidence based practice as well as goal selection was identified as abilities required to produce successful methods. For example, Ann stated, "Well, it seems like you have to have a good target to work on." Effort during preparation as well as rapport with the client and their family were also thought to predict the success of therapeutic outcomes. Finally, the therapist's skills were identified as anticipators of success during therapy. Their ability to make clinical decisions, manage time during the session, as well as their enthusiasm and creativity were mentioned as skills that were important for clinicians to possess. Maria stated, for example, "You need to be enthusiastic and creative." Application of academic coursework and client motivation were discussed as a predictor after clinical experience was obtained.

The difficulty of therapy session preparation decreases as graduate training progresses, which includes the amount of time required, and increases the clinician's comfort level (3-3D). All participants (N=8) endorsed this subcategory resulting in the development of five sub-subcategories. These sub-subcategories covered the amount of time required to prepare for each therapy session, the inability for the student to completely prepare for their clients, the ease of preparation, therapy preparation activities, and the importance of routine in preparation.

After the first semester of graduate training, students began to experience a decrease in required preparation time as well as a decrease in difficulty of preparation prior to each therapy

session (3-3D1). Seven participants (*n*=7) endorsed this finding that the amount of time they needed to prepare for their clients had decreased after one semester of clinical experience. This trend continued throughout graduate training and across all off-campus clinical placement settings. After the fifth semester of graduate training Heather stated:

> I don't like [take], a whole day to prepare for what I'm gonna do you know—I mean at the beginning you just don't know what's available and you're just not as sure, so it takes a long time, but I think it's – I mean, for however many years we've been doing it, you just get more comfortable and you know…you have things you can fall back on if you don't have anything—you know, you can—you can come up with things a lot quicker.

During the first semester of graduate training, students needed an average of two and a half hours to prepare for each of their clients. Many preparation difficulties were noted at the beginning of the students' first semester of graduate training. Several participants identified specific difficulties including: lack of creativity, lack of experience, lack of structure, as well as the overwhelming nature of preparation. When asked about factors that made preparation difficult, Julie stated, "I don't think that we have the experience to know what's going to work and that it's guaranteed to work."

Each student was asked how much preparation time they needed during each interview. The numbers they provided were averaged to find the amount of time they needed to prepare. During their second semester of training, the participants needed an average of an hour and a half to prepare for their clients, a major decrease from the previous semester. During their third and fourth semesters the amount of time that the students needed decreased to an average of fifteen minutes during the third semester and 6.5 minutes of preparation time during the fourth semester. Once the students completed their first semester of graduate training, preparation was noted to be

an easier task to complete, which continued throughout graduate training. Preparation was particularly noted as an easier task once the clinician identified the clients' goals.

Students experience an inability to completely prepare for clinical work (3-3D2). Four participants (*n*=4) endorsed this theme stating that they could not be completely prepared for their clinical work resulting in feelings of unpreparedness and increased stress. Maria stated, "I like to have everything lined up and prepared and perfectly and plan out what I'm gonna say and do. And I didn't have time to do that. And that kind of got me flustered at times." This occurred after the fourth semester of graduate training. Much of the inability to be completely prepared was discussed beginning after the second semester of graduate training was complete. At this time, many students were completing off-campus internships; therefore, time available and expectations for preparation were different than previously experienced within the university clinical setting. For example, when working in the university clinic, client arrival times may be variable; however, if the student is working in school or health care settings, clients may attend speech therapy back-to-back resulting in less preparation time.

Therapy session preparation routines decrease preparation time required (3-3D3). Six participants (*n*=6) endorsed this theme. Finding a routine within therapy session preparation of materials as well as familiarity with goals and objectives was found to lessen preparation time. When asked what contributed to her decreasing amount of preparation time required Kelly stated, "Um, I think just kinda getting into a routine and being able to even just use materials over again for a different client. You know, just kinda helps be more efficient in managing my time before a session." The other participants made similar statements regarding the importance of routine in therapy session preparation.

Many factors contribute to the effectiveness of a clinician, which may not be realized by the student until graduate training has progressed (3-4). All participants (N=8) endorsed this category. Towards the beginning of graduate training, students seemed to either not be able to identify the causes of treatment effectiveness or found that what they were doing with clients was ineffective. This led to acting without methodology during treatment and decreased the likelihood of the use of evidence-based practice, which is a foundation of the profession. Mary felt as if she was able to be an effective clinician if she could model her supervisor's clinical actions. After the first semester of graduate training was complete, Mary stated:

> I can go in there but I, I don't feel like I would be as effective if I didn't have [supervisor models]… Or even just in the supervisor meetings, saying this is how I would've done it, or this is how we've done it in the past. I wanna be effective and I feel like by having that example it helps me to be more effective and even then I can kind of come up with different ways to do things.

Ann was unable to find specific activities more effective than others for at least one of her clients. For example, Ann stated:

> So, um, and then the, there was a five-year-old, language delayed who also had other developmental issues who, um, that was the one where I just had a lot of different targets, and I just didn't think, like, we ever, felt like we didn't make a lot of progress…partially because I never knew what I was doing.

Once training progressed, the students described how they were able to better adapt to the client's specific needs as well as identify their clients' strengths and weaknesses. With increased experience, the participants came to the realization of what they found to be effective when working with clients so that client progress could occur.

During the end of the second semester of graduate training, students began to see progress in their clients' performance, which continued throughout graduate training (3-4A). All participants (N=8) endorsed this subcategory. Despite providing treatment to clients for two semesters, the majority of participants were not able to document client progress until after completion of their third semester of graduate training. This trend of progress documentation continued throughout graduate training.

In general, the graduate students enjoyed clinical experiences, clinical training, supervisor and faculty interactions, and the independence they were provided with while in the role of clinician (3-5). All participants (N=8) endorsed this category, which resulted in many statements of enjoyable activities, and experiences that were provided by their graduate training. Enjoyable clinical experiences were found throughout graduate training. Susan stated, "It's been very enjoyable," when referring to her experiences with clinical work. These experiences range from direct clinical experiences within the university clinic as well as varying clinical placement settings to supervisor feedback and overall clinical training enjoyment. Enjoyment of general clinical work with clients appeared to provide students with the motivation to complete other aspects of training.

Cluster 4: Despite the negative supervisory experiences that some graduate students overcame, many positive experiences occurred increasing the student's ability to be flexible when working with different professionals' working styles and expectations

All participants (N=8) endorsed this cluster resulting in five categories describing different aspects of the graduate students' supervisory experience. This experience covers negative and positive interactions supervisor interactions, perceptions of helpfulness, personal conflict, overall supervisory styles experienced, and expectations of the student as well as the

supervisor. Supervisory styles included: feedback, level of guidance provided by the supervisor, supervisor meetings, and direct observation of the student by the supervisor.

Table 6
Cluster 4: Despite the negative supervisory experiences that some graduate students overcame, many positive experiences occurred increasing the student's ability to be flexible when working with different professionals' working styles and expectations

Categories	*n*	Subcategories	*n*
1. Clinical supervisor interactions	8	A. Negative supervisor interactions	A: 5
		B. Positive supervisor interactions	B: 8
2. Perceptions of supervisory behavior	8	A. Perceptions of supervisor helpfulness	A: 6
		B. Perceptions of supervisor unhelpfulness	B: 8
3. Personal conflicts with supervisors	8		
4. Impact of multiple supervisory styles	8	A. Adjusting to multiple supervisory styles	A: 8
		B. Supervisor feedback	B: 8
		C. Supervisor guidance	C: 8
		D. Clinical independence provided by supervisors	D: 8
5. Supervisors' expectations of students	8	A. Learning of supervisor expectations	A: 7
		B. Level of supervisor expectations	B: 8
		C. Students' expectations of supervisors	C: 7

Graduate students experienced both negative and positive interactions with clinical supervisors (4-1). All participants (N=8) endorsed this category, which resulted in two subcategories. These subcategories delve into both the positive and negative supervisor interactions experienced by graduate students. Both positive and negative interactions occurred throughout graduate training.

Negative supervisor interactions were typically influenced by the manner of communication provided by the supervisor (4-1A). Five participants (*n*=5) endorsed this

subcategory. Lack of communication seemed to be an issue for both student clinician and supervisor. Several students felt like they were unable to communicate their ideas or concerns to their supervisor, which made clinical growth difficult due to the lack of feedback that could be provided regarding the students' thought processes. When discussing her supervisor difficulties, Susan stated, "I pretty much kept it to myself. I mean, I shared a few times, but it didn't do any good." Other students stated that their supervisor was not communicating effectively with them. This inefficiency was due to differing factors including: tone perceived in negative feedback and perceived punishment in supervisor statements.

All graduate students experienced many positive supervisor interactions (4-1B). All participants (N=8) endorsed this subcategory. Graduate students experienced many positive interactions. Graduate students felt as if the experience of interacting with their supervisors was enjoyable throughout graduate training and across multiple off-campus internship sites. The effectiveness and ease of communication between supervisor and supervisee was discussed throughout graduate training. For example, Mary stated:

> Like, my last supervisor…I would… I could tell her exactly what I thought, and she would tell me exactly what she thought. But it's just different, like, it was just a different relationship that I had with her.

This occurred after completion of the students' sixth semester of graduate training indicating that the ability to communicate effectively with other professionals was influenced by an increase in clinical experience. This appeared to be due to the student clinicians' increased overall comfort level with the therapeutic process. Once a general comfort level was reached, students indicated greater comfort with communicating thoughts, ideas, and observations to others.

Supervisory behaviors were perceived as both helpful and unhelpful during graduate training, and these behaviors involve both supervisor availability as well as levels of guidance provided (4-2). All participants (N=8) endorsed this category indicating the need for supervisor availability as well as an appropriate level of guidance during graduate training. Perceptions were similar across semesters and clinical placement sites. Two subcategories emerged from analysis resulting in a discussion regarding supervisor actions perceived as helpful as well as unhelpful.

The greatest action by the supervisor perceived as helpful involves general availability for assistance and questions (4-2A). Six participants (*n*=6) endorsed this subcategory. Graduate students found explanations of methodology and rationale to be helpful during graduate training. Modeled behavior and approachability was also found to be particularly helpful. Many students found that general availability of the supervisors was also found to be an important trait to students. They wanted supervisors to be available for general questions via email and/or in person. For example, when asked which supervisor traits she found to be helpful Kelly stated:

> I think just being direct and honest in their expectations, um, and being able to answer questions and being, you know, available…um… when questions and concerns… being approachable. You know, if I have, you know, a concern or a question, um, that I can get an answer and keep moving on.

Many unhelpful perceptions of supervisors occur when too much or too little guidance is provided to the graduate student (4-2B). All participants (N=8) endorsed this subcategory indicating the importance of this perception. When Susan discussed what she found to be unhelpful, she described a situation where too little guidance may be provided to the student. She stated:

> Just to put me out there. And to let me go – I've heard of several um, facilities that expect you to know – or since think they since you've been in grad school for a year that you should know what you're doing, in this specific area, but, since we haven't been exposed to it that would be…horrible. Horrible would be a nice way to put it.

Other students made similar statements regarding their perceptions of supervisor actions. Too much guidance provided by the supervisor was also perceived as unhelpful. For example, When Julie was asked what she found to be unhelpful she stated:

> Um, not being allowed to do anything independently. Um, kind of being told what to do for every session. Uh, being told what objective to hit. Um, just too much supervision, I guess. Too much…too much hands-on, and not…too much of them hands-on and not enough of me hands-on learning.

These results indicate the need for a balance between the amounts of clinical guidance and the needs and experience of the student. A need for more guidance was indicated at the beginning of graduate training as well as when they were placed in a novel situation or with unfamiliar clinical populations. Less guidance was needed once familiarity or an amount of experience was reached.

Most graduate students did not experience a personal conflict with their clinical supervisors, and those that did were not able to resolve the conflict (4-3). All participants (N=8) endorsed this category. The majority of students did not experience personal conflicts with their supervisors; however, two participants did (*n*=2) experience conflicts with their supervisors. These students were unable to resolve the conflicts they were experiencing. One student was not able to pinpoint where the breakdown occurred during the relationship, which resulted in increased stress when striving to gain clinical knowledge at her placement. She stated, "I spent

the whole semester trying to figure out what the problem was, and I don't think she even knew." The other student found that she was unable to resolve the conflict herself, and involved university faculty in the conflict-resolution process. She stated, " I was talking about the problems with a supervisor here, and that's where I got that impression from [that the university could not resolve the problem]." No other conflicting situations were discussed, and other students were found to not experience similar situations.

Multiple supervisory styles were experienced during graduate training, which affected feedback, level of guidance and independence provided, as well as the supervisor's expectations (4-4). All participants (N=8) endorsed this category. This resulted in seven subcategories that included discussions about the participants' experiences with adjustment to differing supervisory styles, supervisor feedback, levels of guidance provided, levels of independence provided, the importance of supervisor meetings, and the influence of direct observation of therapy by the supervisor.

Students were required to adjust to differing supervisory styles throughout all of graduate training (4-4A). Eight participants (N=8) endorsed this subcategory. Students found that they were required to adapt to different supervisory styles after their first semester of clinical experience and throughout clinical training. Differences in supervision style varied between supervisors and appeared to assist students in developing clinical abilities due to its similarity with future professional working conditions. For example, Heather stated, "You kind of have to adjust to different supervisors, but I guess that's how it will be in the real world." Students were able to take differences in supervisory styles and use that experience to prepare themselves for working with multiple professionals once graduate training is complete. Supervisors were also found to be models of speech-language pathologist behavior for the students. They discussed the

impact that their behaviors had on them and how they could use that as a model for how the students would or would not perform as a clinician professionally in the future.

Feedback preferences were found to be immediate verbal or written feedback, including positive comments, with the importance of the feedback declining as semesters progressed (4-4B). All participants (N=8) endorsed this category, which resulted in two themes. All participants agreed that feedback was necessary for clinical development of therapeutic skills; however, the manner of feedback differed slightly between students. The importance of this feedback declined as clinical experience progressed.

The amount of feedback provided by supervisors was found to be adequate; however, it decreased in necessity as graduate training progressed (4-4B1). All participants (N=8) endorsed this category. Supervisors were thought to provide an adequate amount of feedback to their students. Participants also stated that feedback became less necessary as the semesters progressed beginning after the second semester of graduate training. After her second semester of clinical experience Mary stated:

> So, as far as…I mean, I don't expect them to after every session be there to be like "hey, you did a great job." But, if we meet weekly, or if we make a meeting every other week or whatever it may be, I need them to…if I'm not doing what they need me to do or what they think I should be doing, to say "you know, maybe this isn't really working" and "let's switch it" so that I can better, you know, do my job better.

Reliance on the supervisor's thoughts about each session decreased as their experience increased. They found that they could rely on their own awareness of the portions of the session that went well and those that needed to be changed for the next session.

The majority of students preferred immediate feedback that was either verbal or written and included positive feedback as well as constructive criticism (4-4B2). All participants (N=8) endorsed this theme. Participants discussed several types of feedback that they received and enjoyed receiving from their supervisors. The types that were mentioned include: delayed feedback, immediate feedback, written feedback, verbal feedback, positive feedback, and criticism. Delayed feedback is a manner of feedback that occurs after the session occurs. This waiting period could last for multiple days. Immediate feedback occurs during the session or following the session. Written feedback is a type that occurs when the supervisor writes feedback to the clinician. Verbal feedback is verbally expressed to the student by the supervisor. The type that seemed to be preferred due to its frequency of discussion was immediate, verbal or written feedback. Many students enjoyed receiving the other types of feedback, such as delayed feedback; however, did not prefer to receive that type. When Heather was asked if she preferred written or verbal feedback she stated, "both are fine." Several other participants agreed with her. There were also many students that preferred verbal feedback as well as those who only preferred written feedback. Manner of feedback preferences did not change throughout graduate training.

The participants also discussed positive feedback versus criticism. They indicated that criticism of performance was necessary to clinical development; however, they preferred this criticism to be constructive rather than destructive. They expressed a desire to incorporate this feedback to future therapy sessions to increase therapeutic effectiveness. When discussing the importance of criticism Heather stated, "I like it to be constructive criticism and not all negative "You're doing an awful job." But I think you learn a lot from people who have experience, so I

know she knows more than I do, so I don't mind her sharing information or telling me to do something differently."

The importance of positive feedback was also indicated. Participants discussed the fact that they enjoyed receiving positive feedback despite needing to learn from the constructive criticism throughout graduate training. When discussing enjoyment of positive feedback Susan stated, "and then um for them to give you positive feedback on the things that you've planned for the objectives that you've chosen. For them to give you positive impact on that makes you feel more independent." Positive statements made by supervisors allowed students to feel a degree of success despite level of performance when working with clients.

Increased guidance was needed at the beginning of graduate training as well as when working with an unfamiliar population at any point during training (4-4C). All participants (N=8) endorsed this subcategory. Participants found that they required more guidance from their supervisor when beginning graduate training. As semesters progressed, they found that this clinical guidance was less necessary. However, regardless of level of development, increased amounts of clinical guidance were needed in certain situations. For example, when students began clinical placements that involved providing services to unfamiliar populations an increased amount of guidance was needed despite experience level. Susan stated:

> Okay. Entering the next semester, I'm gonna be working with adults in a nursing home setting. I'm not very experienced with adults, especially…beyond the cognitive rehab, so the swallowing, the feeding, um…I mean all of that kinda stuff is gonna be pretty new to me, so I feel like I'm gonna need a lot of guidance there with setting goals, with teaching me techniques, with…and just interacting in a different facility with different types of people.

Susan's experience is just one example of the increased level of guidance needed when working with an unfamiliar client population despite the amount of past clinical experiences.

Role of clinician was initially identified as supervisor-dependent, but this role transitioned to be independent by the end of the second semester of graduate training (4-4C1). All participants (N=8) endorsed this theme. Participants discussed the dependent nature of their role at the beginning of graduate training. For example, at the beginning of graduate training Maria stated:

> Um..like how, you mean like how much am I…I-I kind of feel like the supervisor is really…we're actually doing it, but the supervisor is like, telling us what to do. And even though we might say, "I think we should do this," they could easily say, "No, not yet." Which, that's great; I don't, would never wanna, I need them to like help me. And at this point, you know, tell me like, what to do.

Many students made similar statements at the beginning of graduate training. However, towards the end of graduate training, the role of the clinician began to change. After the last semester of graduate training Heather stated:

> I think um, now that I've gone through my internship and I will be working with kids – I took a job at XXX to work with kids--- I think that you know, I'm very independent and it'll be good for me to know that there's a supervisor there if I have a question, but I don't feel like I need them telling me every single thing I have to do, every material I have to use, what goals I have to set. So I feel like now, at the end of the program, I feel a lot more independent than when I started.

The majority of students made similar statements regarding the development of their roles throughout graduate training.

Supervisors were perceived as providing adequate amounts of independence throughout graduate training to most graduate students, which resulted in a decrease in the necessity of supervisor meetings (4-4D). All participants (N=8) endorsed this subcategory. Beginning in the first semester of graduate training, students perceived the amount of independence that they were provided with from their supervisors as appropriate. This trend continued throughout graduate training as students experienced different supervisors and two off-campus clinical internships.

Students began clinical training requiring frequent meetings with supervisors; however, this need continually decreased as semesters and experience progressed. Initial meetings were found to be helpful when students were first developing objectives, selecting materials, and planning their therapy methods. In agreement Kelly stated, "Having meetings with supervisors to prepare…certainly makes me feel a little more comfortable, just walking in the first day of clinic." Some students found that even though they were expected to attend regular meetings towards the end of graduate training, they felt that these meetings were an unnecessary addition to their clinical training since they were able to more independently problem solve and think critically about their clients' goals.

Supervisor expectations were not explicitly stated to students and increased as graduate training progressed; however, these expectations were found to be reasonable (4-5). All participants (N=8) endorsed this category resulting in three subcategories. Students discussed their supervisor's clinical expectations throughout graduate training. This included how they came to know their supervisor's expectations and how appropriate these expectations were felt to be considering their experience level. The majority of students felt that their supervisors' expectations were reasonable; however, they were not explicitly told these

expectations by their supervisors. This unawareness provided the students with feelings of uneasiness that decreased as graduate training and clinical experience with their supervisors progressed.

The majority of graduate students did not directly learn of their supervisor's expectations throughout graduate training (4-5A). Seven participants (*n*=7) endorsed this subcategory. When learning of the supervisors' expectations, students found that they had to use experience with the supervisor as well as past experiences with different supervisors to decide what their supervisor's expectations would be. They were not explicitly told what the supervisor expected of their performance throughout the semester. For example, Mary stated, "I mean, there was no talk of "This is what I expect of you."" This lack of information was not found to negatively affect the students' experience. This trend continued throughout graduate training. When asked if adjusting to supervisor's expectations allowed for navigation through the supervisor-supervisee relationship, Debra stated, "Mmmhmm," in agreement. Realization of supervisor expectations was found to improve the students' relationship with their supervisor since they now had a benchmark of where their performance should be.

Supervisors' expectations were initially high, however reasonable, when beginning graduate training and increased throughout semesters (4-5B). Eight participants (N=8) endorsed this subcategory. Prior to the first semester of graduate training, participants discussed how they were under the impression that their supervisor's expectations were high, however appropriate. When discussing the high nature of initial supervisor expectations, Maria stated, "I think in the end that just forces you to be better." In further semesters, students continued to discuss the increase of supervisor expectations as clinical experience progressed. This increase in

supervisor expectations was not met with opposition from the students. They adapted to the changes and felt as if they were equipped to meet expectations.

Overall, supervisor expectations were thought to be reasonable. Students discussed this beginning the first semester of graduate training and continued throughout graduate training. Julie concurred when asked if she felt like her supervisor's expectations were reasonable. She stated, "I think so. I don't think there was anything unreasonable about anything I did." The actions she completed were those expected from her supervisor. Two participants found that their supervisor's expectations were sometimes unreasonable. For example, one did not feel like the expectation to create brand new therapy materials each session was reasonable and the other student did not go into detail about her supervisor's unreasonable expectations.

Graduate students' expectations of their supervisors decreased with experience (4-5C). Seven participants (*n*=7) endorsed this category. Graduate students were found to have high expectations beginning graduate training. Types that were found to occur include: expectations to receive feedback, guidance, and communication from supervisors. These expectations decreased in importance as graduate training and clinical experience progressed. Many participants mentioned the need for supervisors to provide strong support when making clinical decisions, providing modeling of treatment to clients, and performing assessments when beginning graduate training; however, as training progressed students found that they expected general input from their supervisors rather than the high levels of support mentioned earlier. For example, after the fourth semester of graduate training, Mary stated, "But they weren't as…I didn't expect as much from them as I have in the past, I don't think." The other participants made similar statements while progressing through clinical training.

Cluster 5: Clinician development occurs throughout graduate training and influences many areas of the student's life including their clinical abilities and their stress levels causing them to cope using several management strategies

All participants (N=8) endorsed this cluster resulting in four categories. The first category described the students' view of their new role of a clinician. It resulted in five subcategories. The second category discussed the participants' view of how they measured personal success and satisfaction throughout graduate training. The third category described the participants' view of their clinical growth once graduate training was completed. The fourth and final category discusses the participants' experiences with stress during graduate training and their coping strategies.

Graduate students' role as a therapist throughout training increased from completion of simple therapeutic tasks to complex tasks including their ability to be flexible, and develop rapport with clients (5-1). All participants (N=8) endorsed this category, which resulted in four subcategories. These subcategories discussed the students' overall thoughts on their clinical abilities, development of flexibility, development of client rapport, as well as overall clinical performance level. Many students found that they were able to complete clinical tasks when beginning clinical training; however, they were able to successfully complete more complex tasks as graduate training progressed. Overall abilities also increased as clinical experience continued to occur.

Clinical abilities and responsibilities transitioned from foundational to skilled during clinical training (5-1A). All participants (N=8) endorsed this subcategory. Participants discussed what they felt they were able to complete independently as a clinician throughout graduate training. The abilities that they discussed towards the beginning of graduate training were

simpler in nature when compared to abilities described further in graduate training. For example, when discussing her clinical abilities Mary stated, "But as far as maybe coming up with ideas, being able to sort of lay out like a plan, a therapy plan. I feel like that should be more, I'm, I should be able to do that without them saying, you know, "These are the steps, this is what you have to do."" Other students also described their beginning abilities as broad, and when semesters progressed, their skills increased as well. In the third and fourth semesters of graduate training, students identified many higher-level skills that they were able to competently complete such as behavior management, clinical problem solving, and to consider multiple perspectives when working with clients.

Participants felt that they were accountable for completing simpler activities towards the beginning of clinical training such as: preparation, planning, and implementation of goals. For example, when asked what she was responsible for, Ann stated, "You know taking basic data." As graduate training progressed, responsibilities increased in complexity.

Table 7

Cluster 5: Clinician development occurs throughout graduate training and influences many areas of the student's life including their clinical abilities and their stress levels causing them to cope using several management strategies

Categories	*n*	Subcategories	*n*
1. Graduate students' role as a therapist	8	A. Transition of clinical abilities	A: 7
		B. Increasing flexibility	B: 8
		C. Client rapport	C: 8
		D. Graduate student performance level	D: 8
2. Measuring personal success & satisfaction	8		
3. Management of internal and external stressors	8	A. Experiencing internal & external stressors	A: 8
		B. Overall overwhelming experience	B: 7
		C. Coping with stressors	C: 8

Table 8
Cluster 5: Clinician development occurs throughout graduate training and influences many areas of the student's life including their clinical abilities and their stress levels causing them to cope using several management strategies

Categories	n	Subcategories	n
4. Experiencing clinical growth	4		

For example, when asked what she was responsible for during her fifth semester of training, Heather stated, "It's my responsibility to provide [parents] with the opportunity to improve by what we do and what we work on." Other responsibilities included: evaluating clients and choosing their treatment objectives, assessment selection and administration, and independently completion of clinical work.

Graduate students experienced increased flexibility throughout graduate training, which was identified as a necessary, but difficult clinical skill to acquire (5-1B). All participants (N=8) endorsed this subcategory. The participants repeatedly discussed the importance of flexibility, how difficult it is to develop, and the increasing amount they possessed. After the first semester of graduate training, students were still experiencing difficulty being flexible during therapy sessions. For example, Ann stated, "And I also don't know how to write data when I'm being flexible. Because if I said I was going in and using my objectives and then I change in the session, which I do, then – then the supervisors are like "what is the data?" And I'm like "well…"" After the third semester of graduate training, many students mentioned that they were experiencing growth in the area of flexibility. For example, Debra stated, "and just being flexible with what I'm doing in therapy and changing the needs of the clients. Which I grew a lot in this semester, but I think there [is] still room for growth there." Overall, flexibility was found to be an important skill that was viewed as necessary but difficult to develop. Though the ability to be flexible within a session increased in ease throughout graduate training.

All participants were able to identify their ability to connect with their clients by the end of their fourth semester of graduate training (5-1C). All participants (N=8) endorsed this subcategory. Participants discussed their ability to develop rapport with clients throughout graduate training. Towards the beginning of graduate training, participants described their relationships with their clients as "improving." This appeared to have been influenced by the students' focus on the procedural and skill-based aspects of the therapy session. By the end of their fourth semester of clinical training, all participants found that they were able to identify and connect with their clients. For example, when Julie was asked if she was able to connect with her clients, she stated, "I think so. As far as connecting with them as a person, yes." This occurred during her fourth semester of graduate training similarly to other students.

Participants indicated that they were performing well as therapists by the end of their second semester of graduate training (5-1D). All participants (N=8) endorsed this subcategory, which resulted in two sub-subcategories. At the beginning of graduate training participants did not feel as if they were performing adequately compared to what they thought was successful performance. As graduate training progressed into their second semester, students were found to think that they were now performing well as a therapist during clinical work.

Graduate students identified comfort with general aspects of clinical training procedures at the end of their first semester and also transitioned to comfort with being in the role of therapist that increased with confidence level (5-1D1). All participants (N=8) endorsed this theme. During the beginning of graduate training, participants felt most comfortable with the procedural nature of clinical work. For example, Marie stated, "I am comfortable with the therapy session," after completion of the first semester of graduate training. As clinical training progressed, the participants' comfort level with higher-level tasks increased. For example, Ann

stated, “I fell like I could give resonant voice therapy comfortably by myself now.” The only times that comfort level was found to decrease is when clinicians began working with unfamiliar populations at unfamiliar clinical practicum sites. Confidence was also found to increase throughout graduate training as experience increased. Once graduate training was complete, for example, Kelly stated:

> I feel like now I’ve graduated, got a degree, got the books, and then you know, at home that I can go back to and I feel you know, maybe I don’t remember everything, but I feel pretty confident that I can go back and find what I need when I need it.

This indicates the increase in confidence that occurred when faced with clinical problem solving opportunities even if the students aren’t able to recall all of the information they were provided with during graduate training.

The ability of students to clinically perform independently increased throughout graduate training (5-1D2). All participants (N=8) endorsed this theme. Participants felt as if their independence level increased throughout graduate training. Though independence was found to increase, it was not found to be as complete as stated by the students. Participants still found that they depended on their supervisor at some level. For example, when Ann was asked how independently she felt that she was performing she stated, “Ninety percent.” Most students agreed that they were performing at an almost completely independent level by the time graduate training was complete; however, they were never completely independent clinicians indicating that they still desired a level of support from their clinical fellowship supervisor.

Personal success and satisfaction was found to be client-dependent at times and was measured through progress, feedback, faculty approval, academic achievement, and personal feelings and/or effort (5-2). All participants (N=8) endorsed this category. Participants

discussed several factors that contributed to the their feelings of personal success and satisfaction. Towards the beginning of graduate training, these feelings were dependent on grades and faculty feedback. For example, Julie stated, "I think that I was probably successful going into it, I just didn't feel that way. And so, to like have feedback from them um…was helpful I guess I would say." As graduate training continued, measures of personal satisfaction gained some client dependence. This client-dependence was documented through their response to the clinician as well as their progress. For example, Susan stated:

> Well with the geriatrics, there's not much, like cognitively there wasn't much advancements with most of our clients, but you know with dysphagia, especially if you can upgrade their diet and allow them to have better standards as far as eating and enjoyment. Just to see upgrades on that and see how they progressed with that. That was rewarding.

At the end of graduate training, half of the participants found that they felt successful due to personal feelings of effort rather than depending on outside sources of success as indicators. They no longer needed an outside source of approval to feel as if they had been clinically successful because they could now personally gauge their successes, or lack thereof,

The overwhelming nature of graduate training caused students to manage both internal and external pressures by requesting and receiving advice from academic and clinical faculty and completing their required schoolwork prior to the due date (5-3). All participants (N=8) endorsed this category resulting in three subcategories. They discussed the pressures that resulted in stress experienced during graduate training, the overwhelming nature of graduate school, and stress management techniques employed to decrease stress levels.

Graduate students experienced both internal and external pressures throughout training resulting in stress regarding their new expectations (5-3A). All participants (N=8) endorsed this subcategory. Much stress and anxiety was experienced throughout graduate training. Some of the pressures experienced were found to be internal and included an increased level of emotions as well as feelings of a need to successfully complete all tasks. For example, Susan stated, "I felt like there was a constant pressure to do my best." External stressors were also documented. For example, Kelly stated, "There was a little bit of pressure from my supervisor." Other external stressors resulted from: expectations to complete clinical work, working with unfamiliar client populations, and performance pressures from supervisors.

Graduate training was overall found to be an overwhelming experience for students that decreased with time and experience (5-3B). Seven participants (*n*=7) endorsed this subcategory. The majority of the statements made regarding the overwhelming nature of graduate training occurred between the first and third semester. At the beginning of graduate training Maria stated, for example, "Um, well, actually I've been really overwhelmed, to be honest." Many similar statements were made during this time in the students' training. Towards the end of graduate training the tone of the nature of graduate training changed. Heather stated, "So I couldn't imagine my first semester feeling comfortable with you know, doing therapy for 45 kids, we start out slow, but I mean, I really enjoyed my internship I didn't feel overwhelmed or really stressed out about it, so I think that shows the growth." Other students experienced similar feelings regarding their feelings towards graduate training.

Graduate students managed stress and anxiety through consultation with academic and clinical faculty members and completing required schoolwork (5-3C). All participants (N=8) endorsed this subcategory. Since graduate training increased the levels of stress in many

graduate students, they had to find ways to manage these feelings. The majority of stress management occurred by discussing difficulties with both academic and clinical faculty members. In regards to this type of stress management, Susan stated, "I mean, talking to my supervisors helps a lot, too, if I feel like I'm struggling." Completing required schoolwork was found to be a way that many students coped with the stressors they were experiencing. Many students prioritized the work that needed to be completed and gave up free time to work. This resulted in decreased stress during graduate training.

Clinical growth occurred throughout graduate training due to many academic as well as clinical factors (5-4). Four participants (*n*=4) endorsed this category, which resulted in a discussion of the general occurrence of clinical growth and the causes of it. This discussion did not occur until the last semester of graduate training due to the nature of the question posed. All four participants that returned for a final interview agreed that they experienced clinical growth throughout graduate training. Many factors contributed to this growth including academic and clinical factors. When discussing the factors contributing to clinical growth Ann stated, "That's been sort of just accumulation of knowledge through clinic and classes and everything else." The other three participants made similar statements regarding the factors contributing to their clinical growth.

Core Category: Undergraduate and graduate coursework prepares students to overcome clinical challenges and experience clinical growth, which allows them to meet their high self-expectations by putting forth effort into clinical as well as academic facets of training

Students experienced many aspects of graduate training that impacted clinical development. Three major factors were found to influence clinical development and included: academic coursework, clinical experiences, and supervisory experiences. Academic coursework

was discussed as a means to prepare students for clinical work, but was not identified as a factor that could completely prepare a clinician for future clinical problems. It was identified as a necessary foundation, but wasn't a complete professional preparation aid on its own. Clinical experiences were viewed to play a foundational role in the students' clinical growth that encompassed many aspects of clinical training as a whole. Students identified challenges, clinical learning experiences such as preparation and procedure, and their role as a clinician throughout graduate training. These challenges and experiences served as a facilitator for clinical growth in the students' professional development. The students that documented challenges were able to take these experiences and use them as teachable moments in the future. The supervisory experiences were documented as primarily positive; however, some negative experiences occurred. These experiences were thought to have molded aspects of the clinician's performance such as how they performed therapy and what they expected from themselves and their superiors.

Students also discussed the stressors that accompanied the great amounts of effort and experience that occurred throughout graduate training. This stress was managed in differing ways indicating the need for faculty to be available as a support system while students are coping with the changes occurring during graduate training. The great amount of effort required for graduate training demanded organizational skills that were developed throughout training. Organizational skills included time management, which was identified as a high priority skill to develop when completing a graduate training program.

VI. Discussion

Analysis of the forty-four interview transcripts resulted in a model of clinical development including one core category, five clusters, and twenty-three categories. The model incorporated aspects of student effort, organization, and learning styles as well as the influence of graduate and undergraduate coursework on the clinical learning process. The influences of academic and clinical learning experiences along with the challenges experienced were also examined as the students identified clinical growth throughout graduate training. Supervisory experiences were found to affect the students' ability to be flexible when working with various professionals who have differing working styles and expectations of performance. Clinical abilities were also influenced by stress levels and the coping strategies, whether emotion-based or problem-based, were employed by students. Since clinical development is a rather elusive topic, grounded theory was used to develop a model of clinical development based on the experiences of eight graduate students in speech-language pathology. The following section discusses the study's results in relation to the derived model.

The Results as they Relate to the Goals of the Study and the Derived Theoretical Model

The goals of this study were to (1) identify the experiences, reactions, and coping strategies used by novice therapists throughout graduate training and (2) determine how a graduate student's anxiety, supervisory expectations, supervisory needs, and skill change over time. This section will describe the degree to which these goals were achieved with respect to the derived theoretical model.

Experiences, reactions, and coping strategies used during graduate training. The participants provided much insight into their experiences during graduate training. This section

outlines the experiences, reactions, and coping strategies used during graduate training including: preferred learning styles, a model of clinical learning, and coping with stressors.

Learning Styles. The participants discussed their preferred learning styles during the first three semesters of graduate training. They described their preferred style as a combination of hands-on and visual; which easily aligns with portions of David Kolb's learning cycle (2004). The preferred learning style of hands-on and visual expressed by the students coincides most directly with a combination of accommodators and divergers, despite using all portions of the cycle during the complete learning process. They preferred to have hands-on involvement with the clinical work while also visually observing their supervisors to learn. The students also expressed interest in academic professors providing practical application opportunities within the classroom. Students did not identify abstract construction as a preferred way of gaining novel information, which would have been similar to the assimilator way of thinking. In regards to the perceiving dimension, these students fell towards the concrete experience end and away from the abstract experience end. In regards to the processing dimension, these students fell between active experimentation and reflective observation due to their hands-on experience providing trial-and-error and supervisor feedback providing information for personal reflection. Even though many students preferred certain portions of the cycle, the cycle must be complete for students to fully grasp the subject at hand. Since the students did not explicitly discuss two portions of the learning cycle, it can be assumed that they did not realize they were learning the material until the hands-on portion of the cycle occurred or that they enjoyed the hands-on part of the cycle and therefore preferred it.

Learning preferences discussed by these Millennial students coincided with the generational learning theory. They expressed interest in practical, concrete knowledge. They

were less interested in learning the theoretical basis for the methods that they were employing, which may be due to the more abstract nature of this information. The students also expressed a desire to be told of their supervisor's expectations. This is similar to the structure-craving, rule-based nature of students who are a part of the Millennial generation.

Supervisors and academic faculty can adjust to the Millenial style of clinical learning by using methods that assist these students in the learning process. For example, providing practical, concrete ways that theoretical information can be clinically applied may increase the likelihood that Millenial students will find the more abstract portions of the coursework to be relevant. Clinical scaffolding of expectations allows students to independently complete clinical tasks while still feeling as if rules are still in place to provide them with the structure they need. Using this method may allow the student to move from expert-level scaffolding to self-scaffolding as easily as possible thus lessening the pressures of self- as well as supervisor expectations. Self-scaffolding occurs when the student is able to realize where their level of knowledge begins to require problem solving to obtain unknown information that assists in task completion. This may require a level of flexibility that is difficult for Millenial learners to grasp due to their preference for structure.

Clinical learning model. Bloom's revised taxonomy provides a general model of learning that includes six levels: remembering, understanding, applying, analyzing, evaluating, and creating (Anderson, et al., 2001). Knowledge of these steps applied to a clinical perspective provides supervisors with information regarding the student's understanding of novel material. Due to the large amounts of unfamiliar information and experiences provided to students in graduate training, application of this model could prove to be useful in discerning what information a student has fully grasped, and what information should continue to be focused on

during weekly meetings or in the classroom. Throughout graduate training, participants identified their ability to remember and understand the information presented to them. The students also discussed a need for opportunities for application as well as analysis. Once a supervisor enables a student to apply what he/she has learned, an opportunity to analyze the performance should be provided which allows the student and/or supervisor to evaluate their success as well as the student's reasoning for their actions. Once all steps have been completed, the student should then be able to create, which occurs when they can complete the task with no assistance and full understanding.

The problem-solving taxonomy developed by Shapiro and Moses (1989) includes nine stages of development that occur and can be applied to the graduate training experience as a non-linear process. They include: identification, disequilibrium, reflection, exploration, solidification, negotiation, modification of perspective, evaluation, and construction. Identification occurred throughout graduate training when students were able to identify clinical problems that occurred. At the beginning of graduate training, disequilibrium occurred when the students felt uncomfortable solving the problem themselves. The students were very reliant on their supervisors for models of clinical behaviors. Reflection was observed when the students were able to reflect back on therapy sessions and use their own perspective to evaluate the causes of failures and difficulties. Exploration occurred throughout graduate training when the students indicated the need for supervisor availability for questions and discussion of clinical problems. The students did not directly discuss activities of solidification and negotiation; however, this doesn't deny its occurrence in their problem solving development. Solidification and negotiation may have occurred when the students began to move from a self-centered perspective of the problems to a perspective similar to their supervisors. Evaluation occurred throughout graduate

training as the students evaluated the effectiveness of their performance during therapy. Finally, construction occurred from the middle to the end of training once students began modifying the methods they would have once used during therapy sessions.

Students began graduate training during the identification stage and disequilibrium occurred primarily at the beginning of graduate training and transitioned to reflection as training progressed. Exploration, however, occurred throughout graduate training as the students indicated that they continually needed support, even if just a small amount at the end of graduate training. Solidification and evaluation occurred across graduate training, while evaluation occurred throughout the training's entirety. Construction occurred from the middle of graduate training to the end indicating a similar progression to Shapiro and Moses's model (1989). The overlap of this progression indicates that problem solving development is nonlinear and that use of the model in supervision should be individualized to the student due to differences in learning styles and experience levels.

Psychosocial factors & coping. Participants identified many stressors experienced during all five semesters of graduate training as well as methods of coping due to its overwhelming nature. Internal as well as external stressors, such as time management and faculty expectations, were experienced throughout graduate training. These were managed through a combination of emotion-based and problem-based coping strategies. The most widely used form of emotion-based coping that was documented included seeking social support from faculty members, while the most widely used form of problem-based coping included completion of work ahead of time. Levels of stress experienced as well as coping strategies employed should be considered while clinical development occurs within a student. This indicates the need for support from academic as well as clinical faculty while experiencing graduate training. Faculty members who have

experienced graduate training can provide insight that may assist students in successfully coping with the stressors experienced during graduate training.

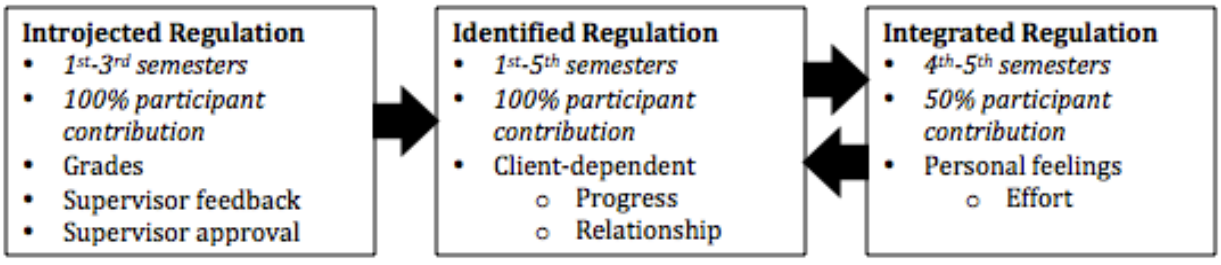
Changes in graduate student's anxiety, supervisory expectations, supervisory needs, and skill over time. Students discussed the many positive experiences that occurred throughout training. They experienced many successes including client progress, positive interactions with supervisors, and overall clinical growth. Documentation of this development provides a model that can be used as a foundation to guide clinical instructors as they mold inexperienced students into effective, independent clinicians. The following section discusses clinical development in regards to their personal success and satisfaction, supervisor expectations, perceived successful therapeutic outcomes, and the model of supervision employed by supervisors.

Measuring personal success & satisfaction. Organismic integration theory (OIT), a portion of self-determination theory, can be applied to the development of the student speech-language pathologist when discussing the ways in which they measure personal success and satisfaction. According to Deci & Ryan (1985), OIT includes four regulation steps that an individual must progress through to become internally motivated to complete tasks. They include: external regulation, introjected regulation, identified regulation, and integrated regulation (Deci & Ryan, 1985). This relationship can be seen in figure 1. During the first through third semesters of training, students identified introjected regulation as causes of feelings of personal success. These regulators included grades, supervisor feedback, and supervisor approval of decisions as a means of motivation. As graduate school progressed, students moved through identified regulation. This occurred from the first to the fifth semesters of graduate training and included regulators that were client dependent such as their progress and rapport. During the fourth and fifth semesters of graduate training, four of the five participants

experienced integrated regulation when describing their feelings of personal success. These students felt successful internally and were not relying on outside sources. As a student progresses through the different levels of regulation, it can be assumed that the students begin to cycle between identified and integrated regulation. As a student, or new professional speech-language pathologist, clients with unfamiliar disorders or difficulties will require differing types of regulation that change as the clinician's confidence and comfort level with diagnostics and treatment increase. For example, when providing services to a client with an unfamiliar disorder a clinician may rely on the client's response to treatment and their therapeutic relationship until a comfort level and understanding is reached with the desired treatment approach.

Supervisors can use this information in combination with application of the learning theories discussed previously when providing clinical learning opportunities. Application of the progression of regulation may lead to insight regarding what the clinician needs from the supervisor to become an effective, independent clinician. Internal and external facets of motivation determine a student's locus of control, which indicates the importance of consideration of motivation during the students' clinical development.

Figure 1
Internal Motivation Development



Supervisor expectations. When beginning graduate training, students identified that they had high expectations of themselves and their supervisors. They also identified their supervisor's expectations as initially high when beginning graduate training. These expectations began to

level as experience progressed. The expectations of their supervisors steadily decreased as they became increasingly independent, despite not directly learning of their supervisor's expectations. This indicates an increased amount of self-efficacy. Bandura (1977) discussed the impact of an individual's beliefs about the outcomes of their actions. He found that once an individual realizes their efficacy expectations, behaviors are employed based on their expectations of the outcome. The participants' ability to successfully meet the supervisor's expectations, along with their increasing levels of independence indicates that supervisors provided opportunities for self-efficacious behavior.

Providing clinical training that is scaffolded may also increase the ease with which students feel as if they have self-efficacy. Wood, Bruner, & Ross (1976) discussed the application of scaffolding in the learning environment. Scaffolded learning occurs when the supervisor meets the student at their performance level and allows them to successfully complete tasks using processes such as direction maintenance, demonstration, and frustration control. All of which can be provided in the clinical learning environment for successful self-efficacious opportunities. Supervisors can keep the student moving in a direction towards goal completion, demonstrate correct behaviors needed to complete the tasks, and manages the student's frustrations with possible failed attempts or failed clinical problem solving.

Perceived successful therapeutic outcomes. Students experienced successes as well as the failures during graduate training. They discussed the progress that was seen in their clients as occurring beginning in the second semester of graduate training. They found that their successes in the therapy room stemmed from many sources, which were both client- and clinician-dependent. These factors were also internal as well as external. Limited research has been conducted regarding the factors that contribute to the effectiveness of a therapist within the field

of speech-language pathology. Wampold (2011) described several qualities of effective therapists, many of which were identified by the participants. This model coincides with the limited amount of evidence available surrounding this topic since the participants found that multiple therapeutic qualities influenced their effectiveness. As clinical growth occurred, clinicians began to realize that there was more to successful outcomes than the methodology employed. They realized that both they and the client play a role and that the therapeutic alliance was also an integral part of this process. This indicates that many students may realize that more skills than can be taught in a classroom or by a supervisor influence the effectiveness of the treatment they provide. The ability to teach all the skills necessary for effectiveness is still an elusive question at this time. This insight gained by the students may have promoted the flexibility that was gained and provided the students with a desire to move toward a more client-centered approach during treatment since they were considering more than just their specific therapeutic methods.

Model of supervision. The participants discussed the overall enjoyable nature of the supervisory model employed by their supervisors. They also identified that high levels of clinical growth occurred once training was complete. Because of this discussion, it can be assumed that the method of supervision used by the supervisors was successful. This section provides a description of the model of supervision experienced by these students.

Guidance, independence, and meetings. Supervisors began clinical training by providing high levels of guidance and lower levels of independence to their students. This amount of guidance decreased throughout graduate training, while the level of independence provided increased. As students experienced increased independence, supervisor meetings were found to decrease in frequency. Meetings began at once per week, but many students identified this

frequency to decrease to an as needed basis. Students found this appropriate as semesters and experience progressed.

Supervisor expectations. Supervisors did not provide students with explicit knowledge of their expectations for their performance; however, students identified the ability to meet them. McCrea and Brasseur (2003) discussed the need for supervisors to explicitly define their expectations to students; however, the results of this study indicate that not providing these explicit requests plays a role in transitioning student motivation to internal and increasing the self-efficacy of the graduate student throughout graduate training. Without explicit explanation of expectations, students were required to complete clinical tasks using motivation that stems from a more internal source than an external expectation from a supervisor. This allows the chance for increased problem solving as well as an internal locus of control to develop within the student since they are required to independently learn. Development of an internal locus of control allowed students to experience feelings of self-efficacy, which may have increased their confidence thus improving independence.

Feedback. The participants identified the amount of feedback provided by their supervisors as appropriate. The found that the frequency that they needed to receive this feedback decreased as semesters progressed. Immediate feedback that was either verbal or written was found to be the preferred type of feedback during training. Students discussed the importance of constructive criticism in clinical development; however, they also indicated that positive feedback was important during training. McCrea and Brasseur (2003) did not identify a superior style of feedback to use during clinical training, but they did discuss the importance of framing questions in a way that supports critical thinking. The importance of critical thinking

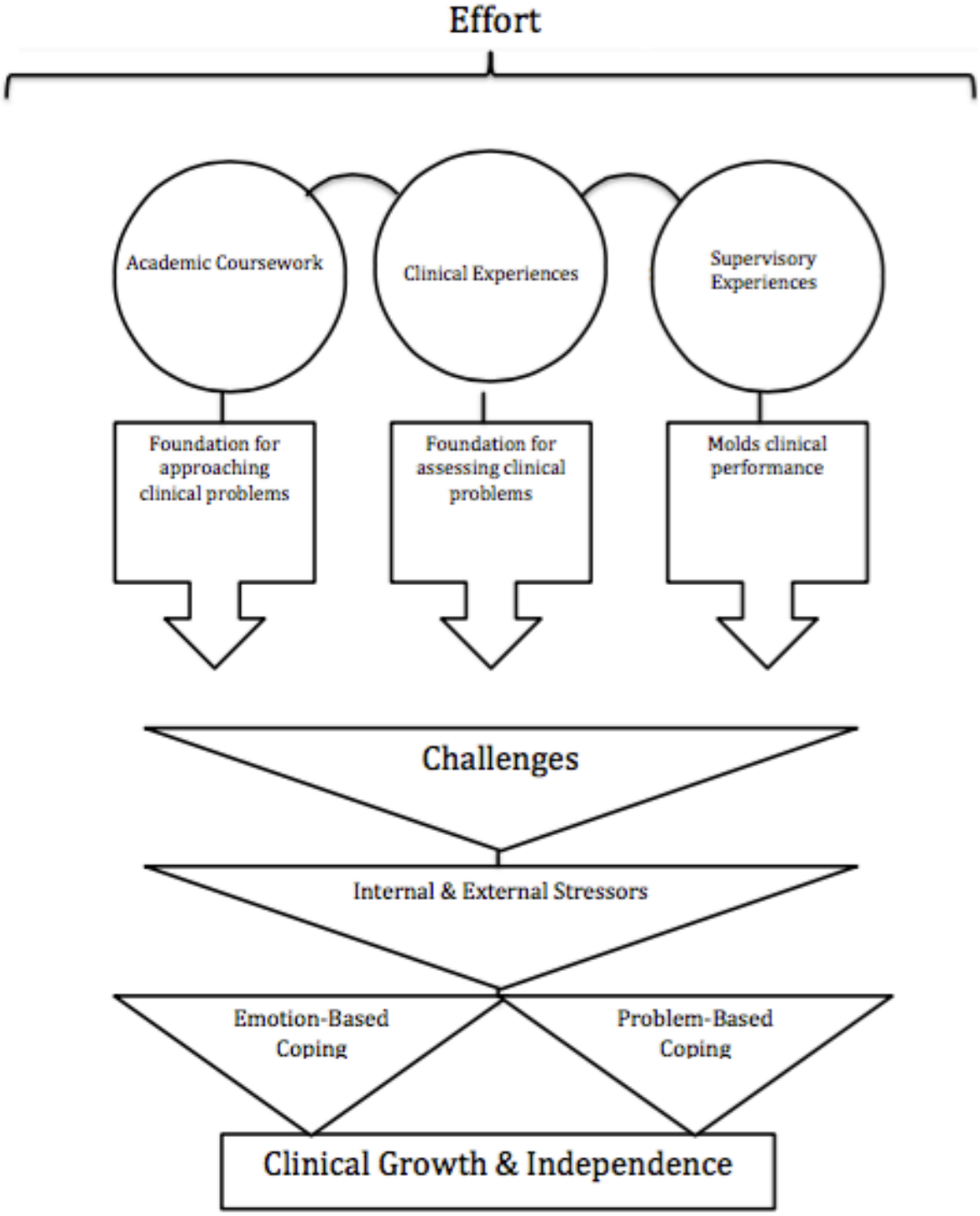
was discussed by the participants; however, the category did not become saturated therefore it cannot be applied to this model of supervision.

Helpfulness & unhelpfulness. Students identified several factors as important to the supervisor-supervisee relationship. Communication, specifically the manner in which it was provided, was identified as particularly important. Students also discussed the importance of availability for assistance and answers to questions as an important trait in a supervisor. The most unhelpful behavior that was identified was found to be providing too much or too little guidance. This indicates the importance of understanding of the student's development by the supervisors. If this understanding doesn't occur, the amount of guidance each student needs may be difficult to successfully provide.

Derived model of development

The model of clinical development derived from the findings that can be seen in figure 2, begins with a level of effort that must be applied to all aspects of graduate training, academic coursework, clinical experiences, and supervisory experiences. The academic coursework as well as the clinical experiences that occur provide the students with a foundation for assessing clinical problems. This foundation develops through general learning as well as problem solving skill development. Supervisory experiences then mold clinical performance throughout training. These three basic aspects of training provide challenges that the students must overcome, which cause stress. Coping typically occurs in an emotion- or problem-based manner. Coping with the stressors from the many challenges that occur during graduate training allows the student clinician to gain knowledge and confidence the clinical growth that sparks independent clinical practice.

Figure 3
Core Category



Conclusion

In summary, the use of grounded theory led to the emergence of a hierarchical model of the development of a speech-language pathologist. The model incorporates the interaction of individual graduate student experiences in a single graduate training program with environmental factors, such as the supervisor, clinical and academic experiences that occurred. Together, these factors synergistically influenced the clinical growth that the students experienced.

The students' learning experience as well as their specific learning styles corresponded with current clinical learning models and were used to understand the students' progression through the graduate training experience. Specifically, clinical problem-solving skill development as well as a general progression of the clinical learning process was able to be organized in a descriptive manner that can be used to evaluate the level of guidance the student may need as he or she progresses through the different stages of learning. For example, a student that is in the disequilibrium stage of problem solving development will need more supervisor guidance to problem solve than a student that has moved to the reflection stage. The learning styles of the students were found to coincide with a Millennial generational learning theories indicating the importance of how generation differences influence leaning style.

The stressors of graduate training were clearly discussed by the students as well as the coping strategies that were employed. This knowledge can be used as an indicator of the resources that need to be made readily available to graduate students during training, so that successful coping can occur with minimal negative coping experiences. Many of the students expressed a desire to discuss problems they were encountering with faculty members; therefore, graduate programs may find it helpful to prepare faculty members for this mentoring role.

Evaluation of overall clinical development in regards to the students' progression through a motivation continuum can provide insight into the types of motivation that must be present for independent clinical performance to develop. The students clearly began training as a more externally motivated clinician and progressed to be internally motivated when providing treatment and problem solving during clinical situations. This may have occurred as self-efficacy was built with increased experience. The more experience the students acquired, the more self-efficacious they felt in their ability to complete clinical activities independently.

Existing supervision models were compared to the model that was employed by the supervisors of the participants and provided a framework that could be used to understand the experiences of the students. Although the model experienced by the graduate students in this study varied significantly in comparison to the typical speech-language pathology supervision model, they were found to experience clinical growth indicating flexibility and the ability to be successful in conditions that do not coincide with existing models. The model developed from this study includes decreasing supervisor guidance, including weekly meetings, and increasing independence. Explicit discussion of expectations did not occur; however students were found to meet the many supervisors' expectations. Frequency of feedback was found to decrease as training progressed and students preferred immediate, verbal feedback.

Limitations of the Study & Future Research Directions

A number of limitations should be considered during interpretation of results of this study. First, it should be noted that clinical development is an individual process and cannot be generalized to each student in the same fashion. For example, students may enter graduate training with different learning styles, prior experiences, and differing base of knowledge. Second, the students in this study were experiencing training in a single graduate training

program. ASHA has particular requirements for accredited university programs; however, each program differs in various ways, which may influence their students' overall experience and clinical development. Finally, a definition of "successful clinical development" is ambiguous at this time and therefore could not be applied to the final performance of these therapists.

While this study generated a model designed to explore the clinical development of speech-language pathologists, the effectiveness of the model was not addressed. Therefore, future research should aim to empirically test the soundness of the model by clinical supervisors and other faculty members. Clinical development is clearly a multi-faceted process and requires a deeper look into the specific relationships between the students' experiences, reactions, and outcomes of the students' training.

Direction for future research should aim to provide information gained from longitudinal studies documenting students' progression through a clinical problem-solving model and clinical learning model. It would also be beneficial to evaluate therapeutic outcomes, changes in student therapist effectiveness, as well as the accompanying stressors and the coping strategies employed by students during graduate training. Finally, it would be beneficial to explore the experiences and effectiveness once employment is obtained and whether there are student factors that can predict how successful a student will be once employed.

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APPENDIX A

Consent form

(NOTE: DO NOT SIGN THIS DOCUMENT UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

Student Informed Consent
For a Research Study Entitled
Student Training and Development in Speech-Language Pathology

You are invited to participate in a research study that investigates the training and development of speech-language pathology students. Through this study, we hope to document therapist development and the effect student training has on the therapeutic process and therapeutic outcomes. This study is being conducted by Dr. Laura Plexico, Dr. Daniel Phillips, and Ms. Laura Willis in the Auburn University Department of Communication Disorders. You were selected as a possible participant because you are able to adequately communicate your experiences, you are a student entering a graduate program in speech-language pathology, you are at the beginning of your clinical training and development, and you are over 19 years of age.

What will be involved if you participate? Participation in this study will require completion of questionnaires and participation in several interviews regarding your training experiences and expectations. If you decide to participate, we will ask you to a) participate in an interview at the beginning of each semester, b) complete some questionnaires at the beginning of each semester, and c) complete some questionnaires upon completion of client sessions. Completion semester interview and questionnaires will take a maximum of 90 minutes. During the interview you will be asked to describe your experiences and expectations regarding the training process in as much detail as possible. The interview will be digitally recorded for the purpose of analysis for this research project. We ask that you describe you experience as honestly as possible so as to ensure our interpretation of your information is accurate. We as the researchers wish to be certain that we fully understand your experience. For that reason, we will send you a copy of the results and a feedback form to the address that you will provide on the form below. We will ask that you return the feedback form in the addressed and stamped envelope that will be provided for you. It will be very important for the study that you let us know if our analysis is accurate or not. For that reason, we strongly urge you to return the feedback form that will be sent to you with the study description; even if just to confirm that the findings are correct.

Are there any risks or discomforts? We do not anticipate any risks associated with your participation in this study. However, sometimes when people talk about experiences they have had they can experience some emotional distress. You can discontinue the interview at any time and appropriate referrals will be provided for you. However, expenses for treatment resulting from this study will be incurred by you, the participant.

Participant's initials_____

Are there any benefits to yourself or others? We cannot promise you that you will receive any direct benefit from participating in this study.

Are there any costs? There are no costs associated with this study

If you change your mind about participating, you can withdraw at any time during the study. **Your participation in this study is entirely voluntary and your refusal to participate will involve no penalty**

or loss of benefits to which you are otherwise entitled. You are also free to withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to withdraw from the study, any information about you and any data that you have provided will be destroyed upon your request.

Your privacy will be protected. Your participation in this study will be known only to Laura Plexico, Dan Phillips, Laura Willis, the supervisor, and participating client. Any information or data obtained in connection with this study and that can be identified with you will remain anonymous. Your identity, and that of any individuals whom you discuss during the interview, will be known only to Laura Plexico. When transcribing the taped interview, pseudonyms (i.e., false names) will be used for your name and for the names of any other individuals whom you discuss. Any details in the interview recording that might identify you or any individuals with whom you discuss will also be altered during the transcription process. Laura Plexico and the transcriptionist will be the only individuals with access to the tape recorded interview. Laura Plexico and the co-investigators will have access to the interview transcript, and these will bestored in a secure place under lock and key.

Upon completion of the post client questionnaires, you will place the questionnaires and seal them within a precoded envelope, sign the back and hand them to an administrative assistant. The primary investigator will get the coded data from the administrative assistant for recoding. After recoding the data will be entered by a graduate assistant into a spreadsheet. The primary investigators and Laura Plexico's research assistants will be the only individuals with access to the recoded data. Laura Plexico will be the only person with access to the original codes and those codes will be stored in a secure place under lock and key.

When Laura Plexico has completed the study, she will discuss the research findings with you and provide you with a written report of the findings. The data collected from your participation during this study may be used by Laura Plexico and the co-investigators for other research purposes or for developing a paper for presentation or publication in a professional journal. If so, none of your identifiable information will be included.

If you have questions about any aspect of the study you can contact Laura Plexico by phone at (334) 844-9620 or email lwp0002@auburn.edu. She will be happy to answer any questions you might have.

If you should have any questions about your rights as a research participant, you can contact the Office of Human Subjects Research or the Institutional Review Board by phone at (334) 844-5966 or email at hsubjec@auburn.edu or IRBChair@auburn.edu. You will be provided a copy of this form to keep.

Participant's initials_____

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

_____ _____

Participant's signature Date Investigator obtaining consent Date

_____ _____

Printed Name Printed Name

APPENDIX B

Participant demographic form

Student Participation Criteria

The participant must meet all of the following characteristics:

- You are a student entering a graduate program in speech-language pathology
- You are at the beginning of your clinical training and development
- You are treating or evaluating clients at the Auburn University Speech and Hearing Clinic
- Over 19 years of age

Demographic form

Name:_____

Age:_____

Race:_____

Sex: _____

Do you have a Bachelor's Degree in Communication Disorders? Yes No

Where did you complete your undergraduate work:_____

Please describe your undergraduate clinical experience (amount and type):

_____

_____

_____

Have you ever been diagnosed with a language disorder? Yes No

If Yes, has it been resolved. Yes No

Have you ever been diagnosed with a speech disorder? Yes No

If Yes, has it been resolved. Yes No

APPENDIX C
Document request and code ID form

Document Request & Code ID Form for Student Interview

In order to make sure that I am really understanding your experience correctly, I would like to ask you to read our findings and correct us if I misunderstand anything. After the interview is transcribed and analyzed (probably in about 2 years - it takes a while!) I will ask you to give me feedback on whether we have adequately captured your experience. I will send to you a copy of the analysis and a sheet requesting feedback with an addressed, stamped envelope. I will look forward to your feedback. It is very important to us as it is the only way we know if we are on track or not. It allows you the opportunity to make sure we get it right and lets us know if we did get it right!

I, _____, would be willing to give you feedback on the analysis of my interview.

_____ Yes _____ No

I, _____, am interested in receiving a copy of my interview transcript as well.

_____ Yes _____ No

You can send these documents to me at the following addresses or can contact me at the number below to seek feedback on your findings:
Mail Address:
_____

_____

_____

E-mail Address:
_____

Phone Number:
_____

Code ID#: _____

APPENDIX D
Interview guide
Interview on Training and Development

In our interview, I will be asking you about your **experiences** as a student in a speech-pathology training program. I am interested in your experience and how your experiences have influenced you. I am not beginning this interview with **expectations** of what your answers will be, and am really interested in your own experience and what your training experiences have meant **in your own life**. To the extent possible I would prefer that you not mention specific client or supervisor names in our discussion. It is appropriate and I encourage you to think about the interactions you have had with specific supervisors and clients, but when you describe those experiences and interactions I would prefer that you exclude his or her name.

[**Review consent form, have the demographic questionnaire answered, and the receipt and document request form completed.]

The overarching question of this interview is: **What is your experience of being a student in a clinical training program?**

The interview questions are as follows:

GENERAL INFORMATION

1) How would you describe your general working and learning style?

2) How would you describe your work ethic?

3) How do you measure personal success and satisfaction?

CLINICAL

1) What types of things do you do and experience as a student in the ____ semester of a clinical training program in Speech-Language Pathology?
    a) Are certain things you do more effective than others?
        i) How do you currently view your role as a clinician at this point in your training and development?
            (1) How do you feel about the therapeutic process in terms of your skills and abilities?

(2) What do you feel you should be accountable for in terms of independence and skills at this point in your training?

(3) How would you currently describe your performance as a therapist?

(4) What kind of pressures, if any, are you experiencing at this point in your training and development?

(a) How are you currently managing those pressures?

(5) How comfortable are you in your role as a therapist?

ii) Broadly speaking, what factors do you feel contribute to successful therapeutic outcomes?

iii) Please describe how you felt about working with your clients this semester.

(1) Do you feel you were able to connect with and identify with your clients this semester? Explain.

(2) Were your clients able to meet your expectations in terms of their behavior and progress?

(3) Are there some clients you feel better about than others? Why

b) Describe how you feel about the process (logistics) of preparing for a session?

i) What are they and why were they more unhelpful?

c) How do you feel about therapy vs evaluations in terms of your ability and level of comfort?

i) Did your comfort level change over the course of the semester?

d) Have you faced any challenges this semester in your training and development as a therapist?

SUPERVISION

2) What are your current expectations and needs from your supervisors as a student in the ____ semester of a clinical training program in Speech-Language Pathology?
    a) What would be perceived as helpful from your supervisors at this point in your training?
    b) What would be perceived as unhelpful from your supervisors at this point in your training?
    c) How do you feel about getting feedback?
        i) How would you prefer to get feedback?
        ii) When do you like to get feedback?
        iii) Do you feel you are receiving adequate feedback?
    d) Did you experience any personal or clinical conflicts with your supervisors this semester?
        i) Was that conflict resolved and how?
    e) Do you feel your supervisors' expectations of you were reasonable at this point in your training?
    f) Do you feel you are receiving an appropriate amount of independence from your supervisor?
    g) Please describe any general feelings you have had regarding your supervisory experience thus far.

ACADEMIC

3) What are your current expectations and needs from the academic faculty as a student in the ____ semester of a clinical training program in Speech-Language Pathology?
    a) What role do you feel your academic courses play in your clinical training and development?

b) Please describe any general feelings you have had regarding your academic experience thus far.

(Credibility Questions)

1) I've finished asking the questions that I have, but I'm wondering if there is anything that I haven't asked that would seem important or would better help me understand your experience of being a student during ___ semester of your training?
2) How did you experience the interview?
    i) Do you have any suggestions for future interviews?
    ii) Is there anything about me, or the way I asked questions that might have influenced the answers you gave?

APPENDIX E

Table 3
Cluster, category, subcategory, and theme titles

1: To successfully complete graduate training, students have increasing expectations of themselves that are met by putting forth effort into organization, time management, and finding their preferred learning styles
- 1-1: Students mindfully put forth effort while exhibiting a strong work ethic that plateaus after the second semester of graduate training
  - 1-1A: Exhibiting the amount of effort required for completion of graduate training
  - 1-1B: Students possess a strong work ethic that remains stable over the course of graduate training
- 1-2: Organization is an important aspect of training that can improve overall success, preparation, and the student's ability to learn
  - 1-2A: The need for successful time management skills increases throughout graduate training and is a difficult skill to learn
- 1-3: When beginning graduate school, self-expectations may be unrealistic and mismatched with clients or supervisors; however, as graduate training continues self-expectations increase
- 1-4: Working and learning styles fluctuate between hands-on and visual styles during the first semester, but plateau at the end of the first semester
  - 1-4A: Students prefer using a combination of hands-on and visual learning styles throughout graduate training
  - 1-4B: By the end of the third semester of graduate training, students' overall working and learning styles began to remain the same
- 1-5: When beginning graduate training, undergraduate academic and/or clinical coursework was found to be a helpful preparation aid

2: Academic coursework is a foundational aspect of graduate training that cannot fully prepare a student clinician despite its helpful nature thus indicating the need for academic faculty members to provide connections, a framework to work under, as well as advice to students
- 2-1: Academic coursework is experienced as an overwhelming process; however, it is found to be helpful, increases a student clinician's comfort level, and is an overall positive experience
  - 2-1A: Academic coursework is overwhelming and difficult to complete when also assigned clinical work
    - 2-1A1: Students found academic coursework to be overwhelming throughout graduate training, which increased pressure
    - 2-1A2: Students experienced difficulties managing both clinical work and coursework, which affected their preparation for therapy as well as application abilities
  - 2-1B: Overall, students find academic coursework to be helpful, positive, and enjoyable

2-2: Academic coursework is a foundational aspect of graduate training and requires application, which may be difficult

2-2A: Academic coursework plays a large, foundational role in the training of a clinician

2-2B: Application of academic coursework to clinical practice is necessary; however, proves to be difficult

2-3: Students expect academic faculty to provide connections between academic coursework and clinical work, to provide advice to students, as well as to provide a framework for diagnosis and treatment of communication disorders

2-4: Academic coursework cannot fully prepare a clinician for all future clinical problems

3: Despite the challenges faced by students completing a graduate-level program, all participants experienced clinical growth, which is due to the many clinical learning and academic experiences that occurred during training

3-1: Orientation is an important foundational aspect of beginning clinical training that provides an overview of the culture of clinic

3-2: Challenges were experienced throughout graduate training and transitioned from an overall therapeutic ability focus to challenges involving specific difficulties experienced

3-3: Clinical learning encompasses all aspects of graduate training and increases the clinician's ability to conduct therapy sessions comfortably and effectively

3-3A: When beginning graduate training, most clinicians preferred conducting therapy sessions when compared to administering formal evaluations; however, as graduate training progressed, clinicians began to enjoy administration of evaluations

3-3B: Adjustment to the procedural nature of clinic begins during the first weeks of graduate training and continues as students work at different clinical sites with differing procedures

3-3C: Therapeutic outcomes are both client- and clinician-dependent and depend upon many external and internal factors

3-3D: The difficulty of therapy session preparation decreases as graduate training progresses, which includes the amount of time required, and increases the clinician's comfort level

3-3D1: After the first semester of graduate training, students began to experience a decrease in required preparation time as well as a decrease in difficulty of preparation prior to each therapy session

3-3D2: Students experience an inability to completely prepare for clinical work

3-3D3: Therapy session preparation routines decrease preparation time required

3-4: Many factors contribute to the effectiveness of a clinician, which may not be realized by the student until graduate training has progressed

3-4A: During the end of the second semester of graduate training, students began to see progress in their clients' performance, which continued throughout graduate training

3-5: In general, the graduate students enjoyed clinical experiences, clinical training, supervisor and faculty interactions, and the independence they were provided with while in the role of clinician

4: Despite the negative supervisory experiences that some graduate students overcame, many positive experiences occurred increasing the student's ability to be flexible when working with different professionals' working styles and expectations

4-1: Graduate students experienced both negative and positive interactions with clinical supervisors

4-1A: Negative supervisor interactions were typically influenced by the manner of communication provided by the supervisor

4-1B: All graduate students experienced many positive supervisor interactions

4-2: Supervisory behaviors were perceived as helpful and unhelpful during graduate training, and these behaviors involve both supervisor availability as well as levels of guidance provided

4-2A: The greatest action by the supervisor perceived as helpful involves general availability for assistance and questions

4-2B: Many unhelpful perceptions of supervisors occur when too much or too little guidance is provided to the graduate student

4-3: Most graduate students did not experience a personal conflict with their clinical supervisors, and those that did were not able to resolve the conflict

4-4: Multiple supervisory styles were experienced during graduate training, which affected feedback, level of guidance and independence provided, as well as the supervisor's expectations

4-4A: Students were required to adjust to differing supervisory styles throughout all of graduate training

4-4B: Feedback preferences were found to be immediate verbal or written feedback, including positive comments, with the importance of the feedback declining as semesters progressed

4-4B1: The amount of feedback provided by supervisors was found to be adequate; however, it decreased in necessity as graduate training progressed

4-4B2: The majority of students preferred immediate feedback that was either verbal or written

4-4B2A: The importance of positive feedback was discussed and negative supervisor feedback was preferred to be constructive so students could use the information for future therapy sessions

4-4C: Increased guidance was needed at the beginning of graduate training as well as when working with an unfamiliar population at any point during training

4-4C1: Role of clinician was initially identified as supervisor-

dependent, but this role transitioned to be independent by the end of the second semester of graduate training

4-4D: Supervisors were perceived as providing adequate amounts of independence throughout graduate training to most graduate students, which resulted in a decrease in the necessity of supervisor meetings

4-4E: The importance of supervisor meetings prior to therapy sessions decreased as graduate training progressed

4-5: Supervisor expectations were not explicitly stated to students and increased as graduate training progressed; however, these expectations were found to be reasonable

4-5A: The majority of graduate students did not directly learn of their supervisor's expectations throughout graduate training

4-5B: Supervisors' expectations were initially high, however reasonable, when beginning graduate training and increased throughout semesters

4-5C: Graduate students' expectations of their supervisors decreased with experience

5: Clinician development occurs throughout graduate training and influences many areas of the student's life including their clinical abilities and their stress levels causing them to cope using several management strategies

5-1: Graduate students' role as a therapist throughout training increased from simple to complex including their ability to be flexible, and develop rapport with clients

5-1A: Clinical abilities transitioned from simple to complex during clinical training

5-1A1: Student felt that their responsibilities increased from simple preparation and implementation activities to complex clinical activities

5-1B: Graduate students experienced increased flexibility throughout graduate training, which was identified as a necessary, but difficult clinical skill to acquire

5-1C: All participants were able to identify their ability to connect with their clients by the end of their fourth semester of graduate training

5-1D: Participants indicated that they were performing well as therapists by the end of their second semester of graduate training

5-1D1: Graduate students identified a comfort level with the general aspects of clinical training procedures at the end of their first semester and transitioned to comfort with being in the role of therapist to clients that increased with confidence

5-1D2: Level of performance independence increased throughout graduate training

5-2: Personal success and satisfaction was found to be client-dependent at times and was measured through progress, feedback, faculty approval,

academic achievement, and personal feelings and/or effort

5-3: The overwhelming nature of graduate training caused students to manage both internal and external pressures by requesting and receiving advice from academic and clinical faculty and completing their required schoolwork prior to the due date

- 5-3A: Graduate students experienced both internal and external pressures throughout training resulting in stress regarding their new expectations
- 5-3B: Graduate training was overall found to be an overwhelming experience for students that decreased with time and experience
- 5-3C: Graduated students managed stress and anxiety through consultation with academic and clinical faculty members and completing required schoolwork

5-4: Clinical growth occurred throughout graduate training due to many academic as well as clinical factors