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The Effect of Virtual Simulation on the Development of Basic Counseling Skills, Self-Reported Immersion Experience, Self-Reported Counselor Self-Efficacy, and Self-Reported Anxiety of Counselors-in-Training

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THE EFFECT OF VIRTUAL SIMULATION ON THE DEVELOPMENT OF BASIC
COUNSELING SKILLS, SELF-REPORTED IMMERSION EXPERIENCE, SELF-
REPORTED COUNSELOR SELF-EFFICACY, AND SELF-REPORTED ANXIETY OF
COUNSELORS-IN-TRAINING.

by

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for the degree of Doctor of Philosophy
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ABSTRACT

There is a high need for competent professional counselors because of the increasing number of children and adults presenting mental health concerns each year in the United States (National Institute of Mental Health, 2012). Counselor educators are tasked with the duty of preparing counselors-in-training (CITs) to be competent clinicians. In order for counseling professionals to be considered competent clinicians, they must demonstrate competence in three domains: (a) knowledge, (b) skills, and (c) behavior (ACA, 2014; CACREP, 2009).

The goal of this study was to contribute to further understanding the most effective instructional approach to facilitating role play while instructing pre-practicum counseling students. The purpose of this study was to examine the effect of virtual simulation training on the development of basic counseling skills, the immersion experience, levels of anxiety, and levels of counselor self-efficacy (CSE) among CITs using student-to-avatar and student-to-student role play. A quasi-experimental research design was used to investigate the effect of the treatment on the constructs.

The results of this study found that there was no statistically significant difference between the two groups across all four constructs. A split-plot analysis of variance, trend analysis, and repeated measures between factor multivariate analysis of variance were used to analyze the data. The results of this study indicated that exposure to virtual simulation training did not affect the development of basic counseling skills, immersion experience, counselor self-efficacy, and anxiety. The results also showed that virtual simulation did not hinder the development of basic counseling skills, or negatively influence immersion experience, counselor self-efficacy or anxiety.

This is dedicated to Francoise Nambazamariya, the most incredible person that I know. Thank you for instilling in me the value of education and hard work. I am truly blessed to have you for a mother.

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CHAPTER ONE: INTRODUCTION

Introduction

Mental health illnesses are common among children and adults in the United States. The National Institute of Mental Health (2012) reported that over 43 million (18%) American adults aged 18 and over were presented with a mental health illness within the previous year. In addition, over 13 percent of American children, ages 8 to 15 were diagnosed with a mental disorder within the previous year (National Institute of Mental Health, 2012). There is a growing need for highly trained counselors to address this demand.

Counselor educators are tasked with the duty of preparing counselors-in-training (CITs) to be competent clinicians upon graduation. A counselor's competence is assessed in three domains: (a) knowledge, (b) skills, and (c) behavior. In addition, counselor educators are the gatekeepers of the counseling field, which means they have a responsibility to ensure the welfare of all clients their students may provide services to in the future (Bhat, 2005; Brear, Dorrian, & Luscri, 2008; Brown, 2013). In other words, the main goal of counselor education programs is to ensure that CITs gain the knowledge, skills, and professional behaviors and dispositions necessary to become ethical and competent counseling professionals (Bhat, 2005; Brear, Dorrian, & Luscri, 2008; Brown, 2013; Swank & Lambie, 2012). Furthermore, the Council for Accreditation of Counseling and Related Education Program (CACREP, 2009) Standards and the American Counseling Association Code of Ethics (ACA, 2014) emphasize the importance of counseling professionals being competent and ethical clinicians.

The CACREP (2009) Standards consist of (a) knowledge standards and (b) skills and practice standards for each concentration within counseling (e.g. clinical mental health counseling, school counseling). For example, under the Counseling, Prevention, and Intervention content area for the clinical mental health concentrations, counseling students are

expected to “demonstrate the ability to use procedures for assessing and managing suicide risk” (CACREP, 2009, p. 30). In other words, counseling training programs are expected to teach counseling students the necessary skills to assess and provide treatment for suicidal ideations and behaviors.

Counselor educators, like educators in other disciplines, struggle with selecting mediums that provide the best pedagogical opportunities for their students (Walker, 2009). Incorporating effective mediums can facilitate a learning environment that encourages student engagement, increases student satisfaction, and creates a positive learning experience (Walker, 2009). The instructional approach most commonly used for teaching skills within counselor education and other related mental health fields is the concept of mock counseling sessions.

Mock counseling sessions are conducted by an instructor, a volunteer, or the counseling students. The mock counseling sessions consist of (a) a counselor and (b) a client. The clients in the mock sessions can be role played by the students within the course, which is referred to as student-to-student role play (Duckham, Huang, & Tunney, 2013; Pomeratz, 2003). Traditionally, the clients can also be role played by individuals not affiliated with the course (e.g. actors or volunteers), which is referred to as student-to-simulated client role play (Duckham et al., 2013; Pomeratz, 2003). Literature across the medical field (Barrows & Abrahamson, 1964; Cook & Triola, 2009; Sturn et al., 2008), nursing field (Nishizawa et al., 2006; Shawler, 2008; Yoo & Yoo, 2003), social work field (Duckham et al., 2013; Forgey, Badger, Gilbert, & Hansen, 2013), psychology field (Pomerantz, 2003), and counseling field (Hodgson, Lamson, & Feldhousen, 2007) support the use of simulated clients to teach skills to students preparing to enter helping professions.

The medical field uses virtual simulation to train medical students prior to them working with live or actual patients (Cook & Triola, 2009; Sturn et al., 2008). Within counselor education and the counseling practice, there is an underutilization of advanced technologies (Greenidge & Daire, 2005). To date, there are only two studies within counselor education that have examined the use of virtual simulation training and its impact on instructing CITs. One study examined the effects of virtual simulation training on preparing school counseling students to conduct classroom guidance lessons (Gonzalez, 2011). Another study examined the participants' perceived learning experiences after using virtual simulation training to develop and practice their interviewing and diagnosis skills (Walker, 2009). Hence, three-dimensional (3D) virtual environments have been shown to provide an innovative approach to learning in a setting that provides a simulated learning situation rather than replicating a traditional setting (Walker, 2009). Furthermore, simulation and gaming technologies provide more opportunities to enhance the learning experiences of CITs by enabling counselor educators to manipulate the following: (a) presentation of scenarios, (b) clinical environments, (c) access to diverse populations, and (d) client disorders (Greenidge & Daire, 2005).

Within the counseling field, the use of simulated patients or simulated clients has been found to be effective when teaching graduate students basic and advanced counseling skills (Hodgson et al., 2007; Fussell, Lewly, & McFarland, 2009). Simulated clients have been found to be highly authentic in simulating substance abuse clients (Hodgson et al., 2007) as well as in clients presenting with a crisis, such as suicidal and homicidal behaviors, child maltreatment, or domestic violence (Fussell et al., 2009). The increased authenticity of simulated clients contributes to the CITs being more immersed in the mock counseling sessions through enhanced learning experiences (Fussell et al., 2009).

When examining the skills development of CITs, it is essential to be aware of the students' levels of self-efficacy and anxiety. According to Larson and Daniels (1998), there is a relationship between counseling students' levels of counselor self-efficacy and anxiety. The authors reported that as CITs' levels of counselor self-efficacy increased, their levels of anxiety, as related to their clinical abilities, decreased, which resulted in improved performance.

Despite the benefits previously mentioned, counselor educators have been slow to embrace and incorporate the newer and more innovative technologies in the instruction of CITs (Duggan & Adcock, 2007; Walker, 2009). A significant part of counselor educators' responsibility is teaching CITs the necessary counseling skills to effectively work with future clients. Therefore, it is essential that counselor educators continue to explore innovative and effective instructional strategies that will enable the maximum development of CITs' clinical skills.

Theoretical Framework

Social Cognitive Theory

This study was conceptualized from Social Cognitive Theory and the use of interactive learning to observe students' growth in their ability to facilitate a counseling session as well as the students' immersion experience while facilitating a counseling session. This study aimed to observe changes in the students' self-efficacy regarding their ability to conduct a counseling session and their anxiety levels. Social Cognitive Theory centers on the principle that people's beliefs about themselves and their ability to successfully complete a task has a direct effect on their motivation to learn, and that people learn best through experiential activities (Bandura, 1986; Parajes, 2002).

In this study, participants experienced both observational learning and interactive learning. The observational learning experience occurred by traditional classroom instruction, in which the participants were provided an overview of how to appropriately utilize the fundamental counseling skills through lectures and discussions. Observational learning is defined as vicarious learning, and suggests that the experience of “seeing others cope with threats and eventually succeed can create expectations in observers that they too should be able to achieve some improvements in performance if they intensity and persist in their efforts” (Bandura, Adams, & Beyer, 1977, p. 126). Enactive learning expands on observational learning by incorporating the process of going what has been observed (Bandura, 1986). The participants’ experienced enactive learning through experiential learning activities which included role play in different formats such as didactic and triadic.

Statement of the Problem

As previously stated, in order for counseling professionals to be considered competent clinicians they need to demonstrate competence in three domains: (a) knowledge, (b) skills, and (c) behavior (ACA, 2014; CACREP, 2009). Within counselor education, the knowledge and behavior domains have received a lot of attention. In order to address the knowledge domains, organizations such as CACREP (2009) require programs under their accreditation to offer specific core classes and to cover specific content areas. Further, organizations such the National Board of Certified Counselors requires counseling professionals who seek certification under their organization to demonstrate mastery of specific counseling knowledge. Additionally, documents such as the ACA (2014) *Code of Ethics* provide specific guidelines in regards to ethical behaviors for counseling professionals. Although counseling professionals are expected

to be competent in the skills domains, limited attention has been given to effective instructional approaches that best facilitate the skills development of pre-practicum counseling students.

Once CITs have successfully passed the practicum prerequisite courses, they should have acquired the necessary clinical skills to be able to facilitate the counseling process while working with actual clients. Other health fields have incorporated technology, specifically virtual simulation, in the instruction of clinical microskills prior to the students working with actual clients, with good results. In counselor education, it is unclear what the best instructional approach is for teaching basic counseling skills to CITs prior to them working with real clients. Thus, it is essential to identify the most efficient instructional approach that will ensure CITs are prepared to work effectively with actual clients upon completion of their initial skills training, which can also increase their counselor self-efficacy and decrease their anxiety in regards to their counseling abilities.

Purpose of the Study

This study explored if there was a difference in the basic counseling skills development, immersion experience, levels of counselor self-efficacy and levels of anxiety (general and performance) between CITs taking a counseling techniques course who participated in student-to-avatar role play and those who participated in student-to-student role play. Therefore, the purpose of this study was to contribute to further understanding the most effective way to develop counseling skills among counselors-in-training (CIT). More specifically, this study sought to identify the best instructional approach to facilitating skill development through the use of role play during a pre-practicum course. In addition, this study sought to determine which factors most influenced the development of CIT's (a) counseling skills (b) immersion (c) anxiety

(general and performance), (d) self-efficacy. Knowing this, future educational programs can be designed to address these as needed.

Need for the Study

This section of the chapter provides an introduction of the constructs this study examined. The constructs examined in this study are: (a) basic counseling skills, (b) immersion experience, (c) counselor self-efficacy, and (d) anxiety. More specifically, this section will introduce the conceptual literature and empirical studies that explore the impact of simulation training and virtual simulation training on the development of basic counseling skills in counselor education, related mental health fields, and the medical field. Furthermore, this section will introduce the literature that explores the impact counselor self-efficacy and anxiety have on the development of basic counseling skills of CITs.

Basic Counseling Skills

Over 40 years ago, Truax and Carkhuff (1967) discovered that training programs in counseling psychology were ineffective at preparing competent counseling professionals. The authors noticed little difference in the level of empathy of undergraduate students and advanced counseling students. In other words, advanced training was not contributing to counseling students gaining additional counseling skills and becoming more efficient clinicians. Beginning counselors did as well as experienced practitioners in facilitating therapeutic change (Truax & Carkhuff, 1967). Counseling training programs focused on conceptual skills and content areas and ignored the counseling students' behaviors (Ivey, 1971; Ridley, Kelly, & Mollen, 2011). The counseling training programs struggled to bridge the gap between theory and practice. For example, students could explain why they should exhibit warmth, empathy, and genuineness; however, they were unsure of what to say or to do with actual clients (Ridley et al., 2011). Ivey

(1971) responded to Truax and Carkhuff's call for training reform by expanding on their idea of using skills-based training and developed the concept of basic counseling skills training.

Basic counseling skills training is rooted in the assumption that educators can decrease the therapeutic complexity for training purposes by concentrating on single skills and allowing students to practice and master them independently (Ivey, 1971; Ridley et al. 2011). In other words, instead of instructing counseling students on how to facilitate a counseling session with a client, the instructor would focus on teaching the students the individual skills used by clinicians (e.g. encouragers, reflections, confrontation). A counselor's ability to develop and maintain a positive therapeutic relationship with their clients is dependent on their attainment and mastery of the fundamental counseling skills (or micro-counseling skills) during the course of their training program (Ray, 2004).

Basic counseling skills training represents the dominant training approach in counselor education and other related mental health fields for entry level trainees (Ivey, 2003; Ray, 2004; Ridley et al., 2011). Within the field of counseling as well as the fields of social work and psychology there is some evidence that student-to-student role-play is not as effective as student-to simulated client role play (Duckham et al., 2013; Hodgson et al., 2007; Pomeratz, 2003). Furthermore, virtual simulation training has been found to be an effective training approach for teaching clinical skills within the medical field and within counselor education. However, no research study has examined the use of virtual simulation training as an instructional technique for teaching micro-counseling skills within the counselor education field. As a result of existing literature within other helping fields, the use of virtual simulation training may be a more effective instructional strategy for facilitating the development of basic counseling skills in CITs.

Immersion

When examining the effectiveness of virtual simulation, immersion is a component that must be examined. Immersion is defined as “a psychological state characterized by perceiving oneself to be enveloped by, included in, and interacting with an environment that provides a continuous stream of stimuli and experience” (Witmer & Singer, 1998, p. 225). In other words, immersion is seen as a state during which an individual feels that they are a part of an environment, virtual or real.

Gutierrez and colleagues (2007) found the participants in a fully immersed group had a higher gain in knowledge than the partially immersed group; however, the difference was not statistically significant, $F(1, 23) = 0.05$. In addition, Fussell et al. (2009) reported that the participants in their study found simulated patients to be highly authentic and experienced positive learning experiences. The majority of research on immersion or immersive experience has been conducted in the technology, education technology, and medical fields.

Counselor Self-Efficacy

Bandura (1995) describes self-efficacy as “the beliefs in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). A relationship has been found between a counselor’s sense of self-efficacy and heightened clinical performance (Ray, 2004). In addition, Larson and Daniels (1998) stated that counseling students who present with high counselor self-efficacy display a low level of anxiety related to their clinical performance and, consequently, display improved performance. Self-efficacy is considered an appropriate lens to examine an individual’s self-confidence and competence in his or her professional domain (Bandura, 1977) and is a common research topic in the counseling literature (Larson & Daniels, 1998; Mullen, Uwamahoro, Blount, & Lambie, 2015; Tang et al.,

2004). Bandura (1977) suggested that an individual's ability to accomplish a task not only requires skill and ability but also belief in their self, which provides the confidence and motivation to complete a task.

Self-efficacy is an important component to counselor competence (Barnes, 2004). The importance of counselor self-efficacy in the counseling field is evidenced by the development of numerous measures of self-efficacy (Bodenhorn & Skaggs, 2005; Mullen, Lambie, & Conley, 2014; Sutton & Fall, 1995). Melchert, Hays, Wiljanen, and Kolocek (1996) created the Counselor Self-Efficacy Scale (CSES) to examine levels of confidence in knowledge and skills regarding counseling competencies among counselors and counselors-in-training. Melchert et al. (1996) found that counseling students' scores on the CSES varied based on their experiences in their program, with the second year students presenting with more confidence than students in their first year of training. Melchert et al. (1996) also found that as counselors gained more years of clinical experience, they presented with higher levels of self-efficacy. In addition, Hill et al. (2008) found evidence of a relationship between skills training and level of confidence regarding the use of helping skills. Larson and Daniels (1998) stated that counseling students who present with high counselor self-efficacy display a low level of anxiety related to their clinical performance and, consequently, display improved performance. As a result of existing literature within counseling education, counseling self-efficacy of CITs is a reliable means of measuring the self confidence of CITs in their counseling abilities.

Anxiety

Bandura (1982) recognized the stressed state anxiety created in individuals and the impact anxiety had on cognitive development. According to the Social Cognitive Learning

Theory, learning occurs in a social environment, and if a student is in an anxious state, the learning may be interrupted or misguided, thereby limiting the student's learning experience.

Social Cognitive Theory centers on the principle that people's beliefs about themselves and their ability to successfully complete a task has a direct effect on their motivation to learn (Bandura, 1986; Parajes, 2002). Furthermore, Bandura (1986) stated that people learn best by doing (e.g. learning by observation). These learning styles can be attributed to two types of learning: observational and enactive (Bandura, 1986). Observational learning is defined as vicarious learning, and suggests that the experience of "seeing others cope with threats and eventually succeed can create expectations in observers that they too should be able to achieve some improvements in performance if they intensity and persist in their efforts" (Bandura et al., 1977, p. 126). Enactive learning occurs through the participants' experiential learning activities. According to Bandura (1986), enactive learning goes a step further than observational learning by adding the process of doing what one has observed. Furthermore, Bandura (year)noted an inverse relationship exists between anxiety and self-efficacy; as anxiety increased, self-efficacy decreased and as self-efficacy increased, anxiety decreased.

Individuals in the process of learning and performing new skills often experience an increase in their anxiety levels (Betz, 2004). Performance anxiety can induce fear for specific performance situations, which can lead to the development of fear of being under scrutiny (Tatum, Lundervold, & Ament, 2006). Furthermore, performance anxiety can potentially hinder the individuals' development (Tatum et al., 2006). Counseling students have a tendency to experience an increase in anxiety, which negatively influences counseling self-efficacy when transitioning to courses requiring demonstration of both knowledge and skills (Larson & Daniels, 1998). A relationship has been found between a counselor's sense of self-efficacy and positive

clinical performance (Ray, 2004). This study exposed the participants to an innovative instructional approach that could potentially cause increased anxiety within the CITs. As a result of existing literature within counseling education, high performance anxiety can negatively impact positive clinical performance. Therefore, it is essential to explore the impact of virtual simulation training on the anxiety levels of CITs.

Research Questions

Primary Research Question

The primary research question of this study was: Is there a difference in the development of basic counseling skills (as indicated by the Counselor Competencies Scale [CCS; UCF Counselor Education Faculty, 2009]) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Primary Research Question Hypothesis One. There is a difference in the external raters' evaluations of basic counseling skills between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play (as indicated by the Counselor Competencies Scale [CCS; UCF Counselor Education Faculty, 2009]).

Primary Research Question Hypothesis Two. There is a difference in the basic counseling skills self-assessment between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play (as indicated by the Counselor Competencies Scale [CCS; UCF Counselor Education Faculty, 2009]).

Secondary Research Question

The secondary question the study attempted to answer was: Is there a difference in the immersion experience and authenticity rating of mock counseling (as indicated by the Maastricht Assessment of Simulated Patients (Modified) [MaSP; Wind, Dalen, Muijtjens, & Rethans, 2004]) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Secondary Research Question Hypothesis One. There is a difference in the immersion experience between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play (as indicated by the Maastricht Assessment of Simulated Patients (Modified) [MaSP; Wind et al., 2004]).

Secondary Research Question Hypothesis Two. There is a difference in the authenticity rating of the mock counseling sessions between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play (as indicated by the Maastricht Assessment of Simulated Patients (Modified) [MaSP; Wind et al., 2004]).

Third Research Question

The third research question the study attempted to answer was: Is there a difference in overall self-efficacy scores (as indicated by the Counselor Self-Efficacy Scale [CSES; Melchert, et al. 1996]) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Third Research Question Hypothesis One. There is a difference in overall self-efficacy scores between counseling students who participate in student-to-avatar role play and counseling

students who participate in student-to-student role play (as indicated by the Counselor Self-Efficacy Scale [CSES; Melchert, et al. 1996]).

Fourth Research Question

The fourth research question the study attempted to answer was: Is there a difference in anxiety (as indicated by the Beck Anxiety Inventory [BAI; Beck & Steer, 1990]) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Fourth Research Question Hypothesis One. There is a difference in “overall” anxiety (as indicated by the Beck Anxiety Inventory [BAI; Beck & Steer, 1990]) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Fourth Research Question Hypothesis Two. There is a difference in “performance or current” anxiety (as indicated by the researcher created Subjective Unit of Distress Scale) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Research Design

A quasi-experimental research design was used to investigate the effect of the treatment on the constructs. Below is a brief overview of the research design, which will be fully explained in Chapter Three. More specifically, the study investigated if there are differences in the development of basic counseling skills, immersion experience, levels of counselor self-efficacy (CSE) and levels of anxiety between counselors-in-training taking a counseling techniques course who are exposed to student-to-avatar role play and the counseling students who are exposed to student-to-student role play.

Instrument and Variables

This study investigated four variables: basic counseling skills, immersion experience, CSE, and anxiety. More specifically, the study investigated if the use of virtual simulation training affects the development of basic counseling skills, counselor self-efficacy, and anxiety in counseling students enrolled in a counseling techniques course. The instrument chosen for measuring basic counseling skills development was the Counselor Competencies Scale (CCS; UCF Counselor Education Faculty, 2009). The CCS measures the following basic counseling skills: open and closed questions, paraphrasing, reflecting feeling, reflecting meaning, summarizing, and challenging skills. The CCS is shown to have strong internal consistency with a Cronbach alpha which ranging between .927 and .933 (Swank, Lambie, & Witta, 2012). Swank and Lambie (2012) reported an inter-rater reliability for the total CCS score at .570 and the criterion-related validity, which was reached by correlating the total score of the final CCS and the final semester grade, yielded a moderate correlation ($r = .407, p < .01$).

The instrument selected for measuring immersion experience was the Maastricht Assessment of Simulated Patients (MaSP; Wind et al., 2004). The MaSP is a self-report assessment consisting of 21 items. More specifically, the MaSP was developed to evaluate the authenticity of role play and the quality of feedback during a simulated session (Wind et al., 2004). The MaSP is shown to have good internal consistency with a Cronbach alpha which ranging between .73 and .76 (Fussell et al., 2009; Wind et al., 2004).

The instrument used to determine the counselor students' self-efficacy was the Counselor Self-Efficacy Scale (CSES; Melchert et al., 1996). The CSES is a self-report assessment and consists of 20 items that use a 5-point Likert scale indicating the degree of agreement regarding respondents' confidence in their counseling abilities. The CSES is shown to have a good internal

consistency, with a Cronbach alpha of .91. The test-retest reliability was established with the authors re-administering the test one week after the first administration, and a reliability coefficient of .85 between the two administrations was found. Larson and Daniels (1998) tested for convergent construct related validity by correlating the scores to similar scores on the Counselor Self-Efficacy Instrument (SE-I; Friedlander & Snyder, 1993) to find a high correlation of $r = .83$.

The instrument used for measuring the participants' general anxiety was the Beck Anxiety Inventory (BAI; Beck & Steer, 1990). The BAI consists of 21 items and uses a 4-point scale. The authors reported a Cronbach alpha of .92 with a sample of outpatients ($n = 160$). In addition, the authors conducted a test re-test reliability, one week after the initial intake and before starting treatment, with a subsample of outpatients ($n = 83$) and found a reliability coefficient of .75 between the two administrations. Beck, Epstein, Brown, and Steer (1988) administered the Hamilton Anxiety Rating Scale-Revised (Hamilton, 1959) to an outpatient sample ($n = 160$) and found a correlation of .51 ($p < .001$). Fydrich, Dowdall, and Chambless (1990) reported that the BAI was significantly correlated with the Trait ($r = .58, p < .001$) and State ($r = .47, p < .001$) subscales of the State-Trait anxiety Inventory (STAI; Spielberger, 1983).

The instrument used for measuring the participants' performance anxiety was the researcher developed Anxiety Subjective Units of Distress Scale (Anxiety SUDS). The Anxiety SUDS is a self-report rating scale. The Anxiety SUDS consists of a 10-point scale. Content validity of the Anxiety SUDS was ensured by having four experts in the field (counselor educators) review the scale.

Population and Sample

The population for this study was counselors-in-training (CITs), who were master's level counseling students enrolled in the counseling techniques course in a counselor education program in the southeast United States. CITs are graduate students enrolled in a counselor education program who are being prepared to become professional counselors. The CITs included counseling students enrolled in the mental health counseling track, school counseling track, and marriage, couples, and family track. The sample included CITs enrolled in a counseling techniques course during the fall 2014 semester at a large CACREP accredited program located in the southeast United States. A Purposive sample was used.

For this study, each section of the techniques course consisted of a varying number of counseling students that ranged from four to nine participants. The threat to validity was controlled by using experimental and comparison groups. The techniques course sections were divided to allow for similar group sizes. The sampling approach resulted in 12 counseling students in the experimental group and 9 counseling students in the comparison group, which created a total sample size of 21 participants.

Quasi-Experimental Research Design

For this study, a quasi-experimental research design was found to be the most appropriate based on several factors (Creswell, 2008). First, a quasi-experimental design allows for a non-randomized assignment of participants to groups (Creswell, 2008). Furthermore, a quasi-experimental design allows for the independent variable(s) to be manipulated (Shadish, Cook, & Campbell, 2002). In this study, the independent variable was the instructional intervention's (e.g. peer-to-peer role play and peer-to-avatar role play) impact on the CITs' levels of skills development, immersion experience, counselor self-efficacy, and anxiety.

The quasi-experimental research design incorporated the use of a non-equivalent control group and pretest-posttest design (Creswell, 2008). The groups were considered to be non-equivalent due to the lack of random assignment of participants. The study incorporated the use of a pretest, two midpoint tests, and a posttest to measure skills development, immersion experience, counselor self-efficacy, and anxiety to help identify threats to internal validity (Shadish et al., 2002). The pretest allowed for the groups to be more equivalent by identifying selection bias as well as the size and direction of the selection bias (Creswell, 2008).

It is important to note that a correlational research design could have been used instead of a quasi-experimental design. While a correlational study might be worthwhile and provide information about the effect the three dependent variable have on each other, it could not make valid causal inferences about the variables. In this study, the researcher used a comparison and experimental group, and was able to see if the intervention had an effect on the participants' skills development, immersion experience, counselor self-efficacy, and anxiety.

Operational Definition of Terms

For the purpose of the proposed study, it is necessary for the author to define the following terms to facilitate a better understanding of literature and the treatment discussed in Chapter Two and Chapter Three.

Anxiety

Anxiety is an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (e.g. sweating, tension, and increased pulse), doubt concerning the reality and nature of the threat, and self-doubt about one's ability to cope with it (Merriam-Webster, 2014).

Avatar

An avatar is a virtual representation of a computer user. The electronic image is manipulated by a computer user (Merriam-Webster, 2015; Walker, 2009).

CIT: A counselor-in-training is a graduate student who is enrolled in a counselor education program and is being prepared to become a professional counselor. CITs include counseling students enrolled in the mental health counseling track, school counseling track, and marriage, couples, and family track.

Inter-actor: An actor who controls the movements and speech of the avatar being engaged by a trainee (Dieker, Hynes, Stapleton, & Hughes, 2007).

Micro-counseling: Micro-counseling is defined as “a scaled-down but realistic encounter designed to focus on specific aspects of counseling that can be identified, practiced, rated, and evaluated in short periods of time prior to actual practicum or counseling experience” (Miller, Morrill, & Uhlemann, 1970, p. 171-172).

Mixed Reality: “Virtual reality with real-world augmentation (augmented virtuality)” (Hughes, Stapleton, Hughes, & Smith, 2005, p. 24).

Student-to-Student Role Play: A mock counseling session during which the clients are played by the students within the course (Duckham et al., 2013; Pomeratz, 2003).

Student-to-Simulated Client Role Play: A mock counseling session during which the clients are played by individuals not affiliated with the course (e.g. actors or volunteers) (Duckham et al., 2013; Pomeratz, 2003).

Pre-practicum Student: A counseling student who is currently enrolled in a counseling education program but has not started working towards his or her clinical hours.

Self-efficacy: Self-efficacy is defined as “the beliefs in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (Bandura, 1995, p.2).

Simulated Client/Patient: An individual who role plays a client/patient in a mock clinical session.

Techniques Student: A counseling student who is currently enrolled in a counseling techniques course or an equivalent course, during which he or she is learning basic counseling skills.

TLE TeachLive™ Lab: The TLE TeachLive™ Lab is a mixed-reality environment (originally named the STAR Simulator and then TeachME™) was originally designed to train pre-service teachers in classroom management skills. The TeachLive™ Lab was developed at the University of Central Florida in partnership with the Haberman Education Foundation and Simiosys LLC (Dieker, Hynes, Hughes & Smith, 2008).

Virtual Client: Virtual client is defined as a virtual representation of a client controlled by a third party (Dieker, Hynes, Hughes & Smith, 2008; Dieker, Hynes, Stapleton & Hughes, 2007).

Chapter Summary

Virtual simulation training may offer a solution to counselor educators who have struggled to find adequate instructional interventions to enhance their students' experiential learning experiences. Virtual simulation can provide more realistic role-playing opportunities for CITs, which has the potential to increase their counseling skills development. In the following chapters, relevant literature and the methodology of the proposed study will be discussed.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The purpose of this study was to contribute to further understanding the most effective instructional approach in the facilitation of role play while instructing pre-practicum counseling students enrolled in a counseling techniques/skills course. This study explored if there was a difference in the basic counseling skills development, immersion experience, levels of counselor self-efficacy and levels of anxiety between counselors-in-training taking a counseling techniques course who participated in weekly student-to-avatar role play and those counselors-in-training who participated in student-to-student role play.

Basic counseling skills are the primary focus of the counseling techniques/skills course in counselor education programs. The counseling techniques course or skills course is required for all counseling students during their master's program, regardless of their concentration (i.e. clinical mental health, marriage, couple, and family, and school). The focus of the counseling techniques/skills course, in CACREP accredited or CACREP aligned programs, include: (a) fundamental counseling skills, (b) basic assessment, (c) goal setting, (d) selection of interventions, and (e) evaluation of client outcome (CACREP, 2009). At the time counseling students are enrolled in a counseling techniques/skills course, they are transitioning from a primary focus on knowledge of theories to a focus on knowledge and application of skills in simulated counseling sessions. Ideally, after counseling students successfully pass the counseling techniques course, they should have acquired the necessary foundation of the counseling process to transition into practicum, during which they will be expected to apply their knowledge of theories and skills while working with actual clients. Thus, it can be said that the counseling techniques course is an integral course within CACREP accredited and CACREP aligned counseling education programs.

Over the last four decades, the majority of counseling education programs have used Ivey's (1971) microskills as the dominant instructional approach for training entry-level counseling students. According to Ridley et al. (2011) microskills training is rooted in the assumption that educators can decrease the therapeutic complexity for training purposes by concentrating on single skills and allowing students to practice and master them independently. The counseling students gain mastery of skills by watching experienced practitioners by video tape or live demonstration, conducting and taping mock counseling sessions, and receiving feedback from their instructors (Ridley et al., 2011). Microskills prevent students from feeling "confused or overwhelmed by data" and allows them to build self-confidence in an environment that models core therapeutic conditions (Ivey, 1971, p. ix).

During the transition into the counseling techniques/skills course, counseling students tend to experience an increase in anxiety, which negatively impacts counseling self-efficacy (Larson & Daniels, 1998). The counseling students' counselor self-efficacy refers to the students' perception about their ability to provide effective counseling services to clients in the future. Bandura (1995) noted that an inverse relationship exists between self-efficacy and anxiety; meaning that individuals who present with high anxiety tend to present a decrease in their self-efficacy. This chapter will explore the impact virtual simulation training has on the concept of basic counseling skills instructional method for training counseling students, and the affect counselor self-efficacy and anxiety has on counselors-in-training's skills development.

Basic counseling skills

The first construct this study will focus on is basic counseling skills. Over 40 years ago, Truax and Carkhuff (1967) discovered that counseling psychology training programs were ineffective. The authors noticed that there was little difference in the level of empathy of

undergraduate students and advanced counseling students. In addition, beginning counselors did as well as experienced practitioners in facilitating therapeutic change. At the time, counselor training programs focused on conceptual skills and content areas and ignored the counseling students' behaviors (Ivey, 1971; Ridley et al., 2011). The training programs struggled to bridge the gap between theory and practice. For example, students could explain why they should exhibit warmth, empathy, and genuineness; however, they were unsure of what to say or to do with actual clients (Ridley et al., 2011). Ivey (1971) responded to Truax and Carkhuff's (1967) call for training reform by expanding on the idea of using skills-based training and developed the concept of basic counseling skills training. As previously stated, basic counseling skills training is rooted in the assumption that educators can decrease the therapeutic complexity for training purposes by concentrating on single skills and allowing students to practice and master them independently (Ivey, 1971; Ridley et al. 2011).

Part of counseling students' clinical experiences, prior to graduating, is gaining direct counseling experience with real clients during practicum and internship. Prior to working with actual clients counseling programs provide their students with opportunities to take on the role of a counselor through the use of experiential activities and exercises (Levitov, Fall, & Jennings, 1999). The experiential activities and exercises, which primarily take place during courses titled Counseling Techniques, Counseling Skills, or Pre-practicum, provide CITs with opportunities to practice the basic counseling skills needed to successfully facilitate a counseling session. Counselor education programs utilize a variety of experiential activities when teaching basic counseling skills to CITs, the primary activity being simulated counseling sessions or mock counseling sessions (Levitov et al., 1999). Simulated counseling sessions or mock counseling sessions consist of counseling students pairing, in groups of two or more, and alternating

between the role of the counselor and the role of the client. While in the role of the client, the counseling students may either discuss a personal concern or make up the concern.

A counselor's ability to develop and maintain a positive therapeutic relationship with their clients is dependent on their attainment and mastery of the fundamental counseling skills or basic counseling skills during the course of their training program (Ray, 2004). The primary focus of counselor training programs is on the acquisition of the skills necessary for establishing and maintaining a positive therapeutic relationship. Basic counseling skills training represents the dominant training approach in counselor education and other related mental health fields for entry level trainees (Ivey, 2003; Ray, 2004; Ridley et al., 2003).

Research

In addition to the conceptual literature on the construct, there are empirical studies worth exploring because of their relevance to this study. This section of the chapter will focus on empirical studies exploring the effect of simulation training, technology, and virtual simulation training on basic counseling skills development in counselor education, related mental health fields, and the medical field.

Simulation Training

Related Mental Health Fields. Role play has been consistently used in the education of social work students (Duckham et al., 2013). Within the field of social work, it is recognized that student-to-student role-play is not as effective as student-to simulated client role play. The use of simulated clients during role play has been shown to enhance clinical skills, such as empathy, among social work students (Badger & MacNeil, 2002; Miller, 2002; Petracchi & Collins, 2006; Rogers & Welch, 2009). However, there is a lack of empirical evidence to explain why simulated clients are preferred in fields like social work over students role playing with one another.

In the field of psychology, a similar concern has been identified in regards to which type of role play is more effective when instructing students. Pomeratz (2003) reported the following as major concerns with psychology students engaging in student-to-student role play: (a) students lacking the dramatic talent or desire to portray a client, (b) students are more invested in learning the clinician role over the client role, and (c) as students progress in their studies and develop personal relationships with one and other, it becomes more difficult to be authentic in role playing. In addition, Pomeratz (2003) facilitated a study with psychology students ($N = 23$) enrolled in his Applied Clinical Psychology course to examine the effectiveness of using theater students in role play. The theater students assumed the role of the clients, and the psychology students took on the role of the clinician. The researcher used an eleven-question assessment to evaluate the psychology students' experiences working with the theater students. The psychology students reported a positive educational experience. Further, the psychology students reported that the use of actors, instead of classmates, contributed to the success of their experience. However, it is important to note that the researcher did not use a control group or comparison group to truly assess if student-to-simulated client role play was more effective than student-to-student role play. In addition, Pomeratz (year) appeared to have only used one method to collect data, and no psychometrics were reported on the assessment used to evaluate the students' experiences.

Counselor Education. Counselor educators have followed the medical field and other mental health fields in the use of simulation training. Hodgson et al. (2007) explored the use of simulated clients in the training of Marriage and Family Therapy (MFT) students to address domestic violence, child maltreatment, homicidal ideations, and suicidal ideations. A qualitative research design was employed. The study consisted of master's level MFT students ($N = 23$)

from a university in the southeast United States. The participants were enrolled in practicum. The simulated clients were family therapists from the community, and they were not paid actors. Hodgson et al. (2007) collected qualitative data at the conclusion of each simulation experience via focus groups, which lasted 15 to 60 minutes. Twelve focus groups were conducted; however, only eleven were analyzed. The researchers found the use of simulated clients in family therapy training to be effective. A limitation of Hodgson et al. (2007) is that the participants were not blinded to the simulation experience. The participants were made aware of when simulated clients were being used. In addition, the researchers did not report whether or not they triangulated their data. Furthermore, there was a large range in the reported length of the focus groups, which was the main method for collecting data.

Training Using Technology

Counselor Education. Technology was first introduced to the counseling field when behaviorists B. F. Skinner and Norman Crowder saw the potential benefits of incorporating technology with clients (Granello, 2000). In 1966, the first computerized therapy program, ELIZA, was developed (Granello, 2000; Hayes, 1997). ELIZA was developed to function as a computerized person-centered therapist and was programmed to use pattern-matching techniques to provide responses. There were limitations to ELIZA, and the primary one was the inability to understand natural language (Granello, 2000; Hayes, 1997).

Over the last century, the integration of technology in traditional classrooms has become a common practice, as blackboards have been replaced with smart-boards. Counselor educators have followed this trade and started incorporating technology into counseling courses, such as multimedia presentations and social media (Greenidge & Daire, 2005; Hayes, 2008). Hayes, Taub, Robinson, and Sivo (2003) explored the effectiveness of multimedia-delivered instruction

the development of counseling skills. A pretest-post comparison group research design was employed. Random assignment of participants was not possible due to the groups being intact. The study consisted of master's level counseling students ($N = 73$) from a large university in the southeastern United States. The participants were enrolled in a counseling techniques course. The study consisted of three groups: (a) high technology multimedia, (b) low technology multimedia, and (c) traditional instruction. Hayes et al. (2003) used a repeated measures ANOVA to analyze their data and found no statistically significant interaction, which means that the multimedia delivered instruction had no significant influence on the rate of the participants' counseling skills development. The study was well designed, specifically in its use of three groups, which allowed the researchers to have two levels to their intervention. A limitation of the study includes the appropriateness of the instrumentation used to measure the participants' skills development. The Global Scale for Rating Helper Responses (GSRR: Gazda, Asbury, Balzer, Chiders, & Walters, 1977) was used to assess the participants' counseling skills development. The GSRR was developed to measure a helping professional's ability to demonstrate a set of clinical skills and the GSRR also measures whether the use of those clinical skills add or take away from the counseling process.

Hayes and Robinson (2000) explored counseling students' attitudes towards technology using computers and multimedia instruction. A posttest comparison group research design was employed. The study consisted of master's level counseling students ($N = 44$) from a large university in the southern United States. The participants were enrolled in a counseling techniques course. Random sampling or random assignment of participants was not possible. The participants were administered one instrument that measured attitude and one instrument that measured attitude towards computer assisted instruction at the end of the semester. The

researchers found that the counseling students presented a favorable attitude towards computers and multimedia instruction. The study was well designed, as evidenced by controlling for as many external factors as possible. A limitation of the study was the administration of the assessments. The researchers only collected data on the participants' attitude at the end of the semester; therefore, there is no way of knowing whether or not the participants' attitudes were consistent or whether they changed over the course of the semester.

Virtual Simulation Training

The Medical Field. The use of standardized patients or simulated patients originated in the medical field by Howard Barrows in the 1960s (Barrows, 1968; Barrows & Abrahamson, 1964; Duckham et al., 2013). The primary use of simulated clients was in role-play, during which the medical students were working on skills such as diagnosis, assessment, or doctor-patient relations. Simulated clients continue to be widely used in the training of medical professionals. Sturn et al. (2008) conducted a systematic review of 11 studies, 10 randomized controlled trails and 1 nonrandomized comparative study. Four of the randomized controlled trails and one of the nonrandomized controlled trails studies compared operative laparoscopic cholecystectomy performance of participants who had been trained using virtual simulation with operative performance of those who had not received virtual simulation-based training. Five randomized controlled trails studies explored the difference in performance of colonoscopy/sigmoidoscopy of participants who were trained using virtual simulation-based training with participants who had not received virtual simulation-based training. One randomized control trail study compared sigmoidoscopy performance of participants who received virtual simulation-based training with participants who had received patient-based training. The authors concluded that participants who received simulation-based training before

working with real clients performed far better than their counterparts, who did not receive simulation-based training. In other words, the finding of the 11 studies demonstrated that simulation-based training resulted in skills transference from the virtual environment to the real world.

In addition, Sturn et al. (2008) concluded that simulation-based training provided a safe, effective, and ethical way for medical students to acquire surgical skills prior to working in the operation room with real patients. It is important to note that of the 11 studies reviewed by Sturn et al. (2008), only one of the studies compared simulation-based training with patient-based training. The authors reported that the participants in the 10 studies which reported the comparison group as having no simulation training were participants who did not receive training on a simulator or a training course but did continue their normal medical training. Furthermore, the researchers used a variety of simulation training programs and a wide range of participants, the lowest being $N = 8$ and the highest being $N = 38$.

The research findings in regards to the effectiveness of utilizing virtual patients within the medical field appear to be inconclusive, as evidenced by the findings from Cook and Triola's (2009) review of the current literature in this area. The authors reviewed research on virtual patients within the medical field dating back to 1971. The majority of the research studies compared the impact of using virtual patients to no intervention, and they examined both knowledge acquisition and/or skills transference. The research findings produced results that consistently showed that simulation instructional interventions are associated with improved learning outcomes. The studies that compared virtual patients to non-simulation based intervention are limited. The results from studies comparing the use of virtual patients and the use of live standardized patients found little statistical difference in the following areas: (a)

information elicited from the patient during the encounter, (b) the number of correct diagnoses, and (c) perceived post-intervention comfort with patient communication.

Counselor Education. Walker (2009) took the concept of simulation training a step further and used virtual simulation in his study. A mixed-method research design was employed. The study consisted of master's level counseling students ($N = 16$) from a university in the northern United States. The participants were enrolled in a mental health diagnosis course. Random sampling or random assignment of participants was not possible. The participants completed role play using three different learning activities: (a) 3D virtual environment, (b) literature review and discussion, (c) video and discussion. The participants were administered one instrument that measured the participants' perceived learning, which was administered to the students six times, and one instrument that measured the participants' attitudes towards using a 3D virtual environment to develop and practice their interviewing and diagnosis skills. The second instrument was developed by Walker (2009) and was used as a posttest. A one-way repeated measures ANOVA was used to analyze the data.

Walker (2009) found that participants reported significantly higher levels of perceived learning experiences during their role play using the 3D virtual environment ($M = 45.25$) than during the literature review and discussion ($M = 39.57$) and video and discussion activities ($M = 39.50$). The study was adequately designed. A limitation of the study includes the instrumentation, because Walker (2009) used an instrument which he developed and had only been used in one other study. In addition, the instrument was used as posttest only; therefore, there is no way of knowing whether there was a change in the participants' attitudes towards using a 3D virtual environment.

In addition, Gonzalez (2011) examined the effects of virtual simulation training on preparing school counseling students to conduct classroom guidance lessons. An exploratory single-case research design was employed. The study consisted of master's level professional school counseling students ($N = 4$) from a university in the southern part of the United States. The participants were enrolled in an internship course. Random sampling or random assignment of participants was not possible as the researcher used a convenient sample.

Gonzalez (2011) found that TeachLive™ had impact on the participants' ability to effectively manage a classroom when facilitating a classroom guidance lesson. The participants reported that the main benefit that occurred through the exposure to TeachLive™ was an increase in confidence. The study was adequately designed. A limitation of the study included the use of a convenient sample. In addition, Gonzalez (2011) only looked at the participants' perception in regards to the benefits of using TeachLive™. The participants' ability to effectively deliver a classroom guidance lesson was not assessed, which could have added to the richness of the data.

Immersion Experience

The second construct this study focused on was immersion experience. This section will explore the theory behind immersion experience as well as research in the areas of simulation and education.

Theory

Immersion is defined as “a psychological state characterized by perceiving oneself to be enveloped by, included in, and interacting with an environment that provides a continuous stream of stimuli and experience” (Witmer & Singer, 1998, p. 225). Within the technology literature, immersion is defined as “one's subjective impression that she or he is participating in a

comprehensive, realistic experience” (Parsons et al., 2009, p. 514). Immersion in a virtual environment also involves suspension of disbelief (Dede, 2009). In other words, immersion is seen as a state in which an individual feels that they are a part of an environment, virtual or real.

Immersion in a virtual environment can enhance educational experience by allowing: (a) allowing multiple perspectives, (b) situated learning, and (c) transfer (Dede, 2009). Immersion in a virtual environment allows for the ability to change an individual’s perspective or frame of reference, which can help foster understanding of a complex phenomenon. In addition, digital immersion has been found to build confidence in students’ academic abilities, which leads to improved performance. Finally, immersion has been found to enhance transference of knowledge through the ability to simulate the real world.

Simulations have been used in education and training to increase students’ positive learning experiences by: (a) enhancing understanding, (b) improving performance, and (c) assessing competence (Gutierrez et al., 2007). Further, the characteristics of study participants have been found to have an impact on immersiveness (Parsons et al, 2009).

Research

The majority of research on immersion or immersive experiences are conducted in the technology and education technology fields as well as the medical field. Gutierrez et al. (2007) used a knowledge structure design to explore if there was a difference in knowledge acquisition before and after a virtual simulation training within and between two groups of first year medical students ($N = 25$). The researchers used a Pathfinder and repeated measures analysis of variance was used to analyze the data. The results showed that the participants in the immersed group had a significantly higher gain in knowledge than the partially immersed group; however, the difference was not statistically significant, $F(1, 23) = 0.05$. Although Gutierrez et al. (2007) did

not find statistically significant results, the experimental group's scores were still higher than the comparison group. A limitation of this study was that the researchers left out some details in regards to the methodology used to conduct this investigation.

Although Fussell et al. (2009) did not use the term immersion or immersive experience, their research is still relevant to the immersion construct. Fussell et al. (2009) conducted a mixed methods investigation to assess the authenticity of the simulated patients (SPs) as substance abuse treatment clients. The rationale behind the study was that if counseling students are provided with an authentic experience when learning and practicing advanced counseling skills, this will contribute to their acquisition of knowledge and skills. The researchers used a convenient sample ($N = 21$). The sample consisted of practicing clinicians ($n = 15$), substance abuse students ($n = 5$), and a participant who did not report term practicing or student status. The researchers trained two simulated patients and provided them with scripts to follow during the mock sessions. The data was analyzed using descriptive statistics and content analysis. The results showed that the participants found both SPs to be highly authentic and reported positive learning experiences. A limitation to this study was in the reported research design. The authors reported that a mixed method design was used; however, the only qualitative data collected was statements the participants included on the MaSP (Wind et al, 2004), which was used to measure the authenticity of the SP.

Counselor Self-Efficacy

The third construct this study focused on was counselor self-efficacy. This section will explore the theory behind counselor self-efficacy as well as research in the areas of counselor self-efficacy and skills development and counselor self-efficacy and anxiety.

Theory

Bandura (1995) defines self-efficacy as “the beliefs in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). A relationship has been found between a counselor’s sense of self-efficacy and heightened clinical performance (Ray, 2004). In addition, Larson and Daniels (1998) found that counseling students with high counselor self-efficacy display a low level of anxiety related to their clinical performance, which thereby leads to improved performance. Self-efficacy is a popular construct to use when examining an individual’s self-confidence and competence in his or her professional domain (Bandura, 1997), and it is also a commonly researched topic in counseling literature (Larson & Daniels, 1998). Bandura (1997) suggested that in order for individuals to accomplish a task, they not only need to possess the necessary skills and ability, but they also have to believe in themselves, which provides the confidence and motivation to complete a task.

Self-efficacy is a component of counselor competence (Barnes, 2004). Counselor self-efficacy is an important concept in the counseling field, which is evidenced by the development of numerous measures of self-efficacy (Bodenhorn & Skaggs, 2005; Mullen et al., 2014; Sutton & Fall, 1995). For instance, Melchert et al. (1996) created the Counselor Self-Efficacy Scale (CSES) to examine counselors’ and counselors-in-training level of confidence of knowledge and skills regarding counseling competencies. Melchert et al. (1996) found that counseling students’ scores on the CSES varied based on their experiences in their counseling program, with the second year students presenting with more confidence than students in their first year of training. Melchert et al. (1996) also found that as counselors gained more clinical experience, they presented higher levels of self-efficacy. Furthermore, Hill et al. (2008) found that skill training had an impact on undergraduate student confidence regarding the use of helping skills.

Research

In addition to the conceptual literature on the construct, there are empirical studies worth exploring that are relevant to this study. This section of the chapter will focus on empirical studies that explore the effect of counselor self-efficacy on the development of basic counseling skills in counseling and counselor education.

Counselor Development. A relationship has been found between counseling skill development and counselor self-efficacy. Leach et al. (1997) examined whether a relationship existed between master's level and doctoral level counseling students ($N = 142$) skills development level and their counselor self-efficacy. The researchers used a correlational research design and used Pearson r and multivariate analysis of variance (MANOVA) to analyze the data. Leach et al. (1997) found a statistically significant relationship between the number of semesters of clinical experience completed and developmental level ($r = .26, p = .001$) and the amount of clients seen and developmental level ($r = .35, p = .001$). In addition, the researchers used a MANOVA and found significant difference between the participants' developmental levels (Wilks's lambda = .594. $F(5,136) = 18.59, p < .001$). Univariate analyses showed that the participants identified as being at the high developmental level also presented higher counselor self-efficacy when compared to the participants who were on the low developmental level. The study had an adequate design and the authors thoroughly analyzed their data. A limitation of the study is that the researchers did not actually measure the participants' counseling skills. Instead, the participants' counseling skills development was based on their response to one of two vignettes.

Urbani et al. (2002) examined the effect the skilled counselor training model (SCTM) and counselor self-efficacy had on participants' counseling skills, accurate self-evaluations of

counseling skills, and increased personal self-efficacy about one's ability to counsel clients. The researchers used a quasi-experimental design and the participants ($N= 61$) were master's level CITs who had completed less than nine credits in the program. The experimental group ($n = 52$) received the 23 hours of SCTM based training over the course of the semester and the comparison group ($n = 9$) did not. Urbani et al. (2002) used a univariate analysis of covariance (ANCOVA), the pretest scores as the covariate, to examine the difference between the posttest of the groups. The pretest was used as a covariate because the groups' scores lack homogeneity of variance and the difference was significant. The researchers conducted a t test and found that the experimental group had higher mean self-efficacy scores than the comparison group. The study had an adequate design. A limitation of the study was the significantly inequivalent groups.

Anxiety

The fourth construct this study focused on was anxiety. This section will explore the theory behind anxiety as well as research in the following areas: (a) anxiety and skills development, and (b) anxiety and counselor self-efficacy.

Theory

Bandura (1986) recognized the stressed state anxiety created as well as the impact anxiety had on cognitive development. According to Social Cognitive Learning Theory, learning occurs in a social environment, and if a person is in an anxious state, the learning may be interrupted or misguided, thereby causing the learning not to occur or for incorrect learning to occur.

Social Cognitive Theory centers on the principle that people's beliefs about themselves and their ability to successfully complete a task has a direct effect on their motivation to learn; also people best learn through action (e.g. learning by doing and observation (Bandura, 1986;

Parajes, 2002). These learning styles can be attributed to two types of learning: observational and enactive (Bandura, 1986). Observational learning can be defined as vicarious learning or the experience of “seeing others cope with threats and eventually succeed can create expectations in observers that they too should be able to achieve some improvements in performance if they intensity and persist in their efforts” (Bandura, Adams, & Beyer, 1977, p. 126). The enactive learning will occur through the participants’ experiential learning activities. According to Bandura (1986), enactive learning goes a step further than observational learning by adding the process of doing what one has observed. Furthermore, Bandura (year) noted an inverse relationship exists between anxiety and self-efficacy; as anxiety increased, self-efficacy decreased and as self-efficacy increased, anxiety decreased.

When individuals are in the process of learning and performing new skills, they often experience an increase in their anxiety levels (Betz, 2004). Performance anxiety can induce fear for specific performance situations, which can lead to the development of fear of being under scrutiny (Tatum, Lundervold, & Ament, 2006). Furthermore, performance anxiety can potentially hinder an individual’s development (Tatum et al., 2006).

Research

In addition to the conceptual literature on the construct, there are empirical studies that are relevant to this study. This section of the chapter will focus on empirical studies exploring the effect of anxiety on counselors in training.

Anxiety and skills development. When tasked with learning and/or performing a new skill, anxiety tends to accompany the process (Betz, 2004). Anxiety, more specifically performance anxiety, can interfere with development, cause fear for specific performance situations, and cause a fear of being under evaluation (Tatum, Lundervold, & Ament, 2006).

Hierbert and colleagues (1998) looked at the effect of education and training on counseling skills on the anxiety levels of participants. The researchers used a true experimental research design and the participants ($N = 95$) were students enrolled in pre-practicum courses. A multivariate analysis of variance (MANOVA) was used to analyze the results. The researchers found a significant mean effect for the treatment, a moderate correlation at the treatment groups between a decrease of negative self-talk and decrease in anxiety, and a low but significant correlation between decrease in anxiety and increase in positive self-talk. The study was well designed and the use of a control group increased the generalizability and validity of the study.

Anxiety and counselor self-efficacy. Larson and Daniels (1998) examined the effect of anxiety on counselor self-efficacy. The researchers found a negative correlation between counselor self-efficacy and anxiety, as measured by the State-Trait Anxiety Inventory ([STAI] Spielbeger et al., 1970), and they also found that pre-practicum students with lowered anxiety levels were those who had an opportunity to practice their counseling skills in role play. In a follow up study, Daniels and Larson (2001) examined the effect of feedback on anxiety and counselor self-efficacy. The participants ($N = 45$) were graduate students enrolled in counselor education and counseling psychology at the same university, and all were at different points in their studies. The participants were provided with a description of a mock client, had an opportunity to watch a video of the mock client, and the researchers provided feedback to the participants on their counseling skills. The researchers used a repeated measures analysis of variance and found that there was a significant interaction between feedback anxiety, meaning there was a significant difference between the participants' anxiety levels on the pretest and posttest, depending on the feedback received. The study was well designed; however, the

researchers did not control for the participants' different levels of education, training, and clinical experience.

Chapter Summary

There is a growing need for competent professional counselors due to the increase in individuals seeking mental health services. In order for counselor educators to educate and train counseling professionals who are competent in the areas of knowledge, skills, professional behaviors, and disposition, they need to utilize the most effective instructional approaches. The use of role play, student-to-student or student-to-simulated client, has become a popular pedagogical approach used in teaching clinical skills to counseling students as well as students in other helping professions. Further, counselor education has embraced the use of technology in the instruction of counseling students and has started to move towards incorporating virtual simulation training to enhance the counseling students' learning experience. When examining the effectiveness of virtual simulation, immersion is a component that must be examined. Immersion experience has been found to have a relationship with authenticity, in regards to simulated patients/clients and skills development.

Self-efficacy is a component of counselor competence (Barnes, 2004). Counselor self-efficacy has been shown, through empirical research, to have a relationship with counselor development. In addition, counselor self-efficacy has been shown to have a relationship with counseling skills development. Anxiety can interfere or hinder the development of counselor self-efficacy among counseling students. Researchers have found that training and experience affect the levels of anxiety in CITs. In addition, anxiety has a negative correlation with counselor self-efficacy. Further, role play and feedback are interventions that have been found to reduce

levels of anxiety. The literature discussed in this chapter influences the development of this study.

CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this study was to evaluate the effect of virtual simulation training on the development of basic counseling skills, the immersion experience, levels of anxiety, and levels of counselor self-efficacy (CSE) among counselors-in-training (CITs) using student-to-avatar and student-to-student role play. In chapter one, the topic of this study was introduced and the major parts of the study were discussed. In chapter two, the literature was reviewed. In this chapter, the methodology used in conducting this study will be described, which included: (a) the research design, (b) data collection, (c) details of the intervention used, (d) the procedures that were used for collecting and analyzing the data, and (e) ethical considerations of the study as it relates to the theories and empirical research on the effect of simulation and virtual simulation training on skills development of CITs and other mental health related fields, as well as the interaction of counselor self-efficacy and anxiety on skills development of CITs. This chapter provides a detailed description of the methodology used in conducting this study. In addition, this chapter also includes a discussion of the population, threats to validity, the instruments utilized, and the research question and hypotheses. Furthermore, the methodology for the data collection, rationale and explanation of the intervention the experimental group received, and the procedures for collecting, preparing, and analyzing the data gathered will also be discussed.

Research Question and Hypotheses

Primary Research Question

The primary question this study attempted to answer was: Is there a difference in the development of basic counseling skills as indicated by the CCS (UCF Counselor Education Faculty, 2009), between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Primary Research Question Hypothesis One. There is a difference in the external raters' evaluations of basic counseling skills between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play, as indicated by the CCS (UCF Counselor Education Faculty, 2009).

Primary Research Question Hypothesis Two. There is a difference in the basic counseling skills self-assessment between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play, as indicated by the CCS (UCF Counselor Education Faculty, 2009).

Secondary Research Question

The secondary question the study attempted to answer was: Is there a difference in the immersion experience and authenticity rating of the mock counseling sessions as indicated by the the MaSP (Wind et al., 2004) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Secondary Research Question Hypothesis One. There is a difference in the immersion experience between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play, as indicated by the the MaSP (Wind et al., 2004).

Secondary Research Question Hypothesis Two. There is a difference in the authenticity rating of the mock counseling sessions between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play, as indicated by the the MaSP (Wind et al., 2004).

Third Research Question

The third research question the study attempted to answer was: Is there a difference in overall self-efficacy scores as indicated by the CSES (Melchert, et al. 1996) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Third Research Question Hypothesis One. There is a difference in overall self-efficacy scores between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play, as indicated by the CSES (Melchert, et al. 1996).

Fourth Research Question.

The fourth research question the study attempted to answer was: Is there a difference in anxiety as indicated by the (BAI; Beck & Steer, 1990) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play?

Fourth Research Question Hypothesis One. There is a difference in overall anxiety as indicated by the (BAI; Beck & Steer, 1990) between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Fourth Research Question Hypothesis Two. There is a difference in “performance or current” anxiety as indicated by the researcher created Subjective Unit of Distress Scale between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Research Design

Population and Sampling Procedures

The population for this study was counselors-in-training (CITs), who were master's level counseling students enrolled in the counseling techniques course in a counselor education program. The CITs included counseling students enrolled in the mental health counseling track, school counseling track, and marriage, couples, and family track. A purposive sample was drawn from CITs enrolled in three sections of a counseling techniques course during the fall 2014 semester at a large CACREP accredited program located in the southeastern United States.

According to Gall, Gall, and Borg (2007), a purposive sample was the most appropriate sampling method for this study because: (a) the sample accounts for the natural group of the techniques sections allowing for a non-randomized group, (b) the sample is based on the researcher's knowledge and experience with a given population, and (c) the sample is believed to be representative of a greater population. The participants did not have to be randomly assigned to either the experimental group or the comparison group because the techniques sections meet the criterion for natural groups. Further, the CITs had to be enrolled in the techniques course because those met the following criterion: (a) being pre-practicum students and (b) had not taken a course that covered basic counseling skills. Finally, the sample was a good representation of pre-practicum CITs at counselor education programs accredited by CACREP or who are CACREP aligned.

The main shortcoming of a purposive sample is judgment error in the development of the sample. Whereas each section of the techniques course can have a maximum of 15 to 20 students per section for this study, each section of the techniques course consisted of a varying number of counseling students that ranged from four to nine participants.

Participants

Students. The comparison group consisted of nine participants and the experimental group consisted of twelve participants. The comparison group included one marriage, couples, and family student (11.1%), three clinical mental health students (33.3%), four school students (44.4%), and one participant who did not respond to this question (11.1%). The experimental group included four marriage, couples, and family students (33.3%), four clinical mental health students (33.3%), and four school students (33.3%). The comparison group included one African American participant (11.1%), one Hispanic participant (11.1%), and seven Caucasians participants (77.8%). The experimental group included one Asian American participant (8.3%), one Hispanic participant (8.3%), eight Caucasians participants (66.7%), and two participants who identified as “other” (16.7%). The comparison group included six female participants (66.7%) and three male participants (33.3%). The experimental group included 12 female participants (100%) and no male participants (see Table 1).

Table 1: An evaluation of the comparison group and the experimental group at the beginning of the study to confirm similarity of the groups.

	Experimental Group		Comparison Group	
<i>Program Track</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Marriage, Couples, and Family	4	33.3	1	11.1
Clinical Mental Health	4	33.3	3	33.3
School	4	33.3	4	44.4
<i>Ethnicity</i>				
African American	0	0	1	11.1
Asian American	1	8.3	0	0
Hispanic	1	8.3	1	11.1
Caucasian (Non-Hispanic)	8	66.7	7	77.8
Other	2	16.7	0	0
<i>Gender</i>				
Women	12	100	6	66.7
Men	0	0	3	33.3

External Raters. The raters consisted of three third year counselor education doctoral candidates at the same institution where the study was conducted (see Table 3). The external raters included one African American (33.3%) rater, one Hispanic (33.3%) rater, and one Caucasian (33.3%) rater. The external raters included three female (100%) raters. The raters had counseling experience ($M = 4.67$, $SD = 1.2$), teaching experience ($M = 1$, $SD = 0$), and supervising experience ($M = 1$, $SD = 0$). The teaching and supervising experiences were at a graduate level in a counseling education program. All three external raters had taught techniques of counseling course and provided clinical supervision to counseling practicum students and where they used the CCS to evaluate their students' progression.

Table 2: External Rater's Demographic information.

External Raters		
	<i>n</i>	%
<i>Ethnicity</i>		
African American	1	33.3
Hispanic	1	33.3
Caucasian (Non-Hispanic)	1	33.3
<i>Gender</i>		
Female	3	100%
Male	0	0
	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Experience</i>		
Counseling	4.67	1.2
Teaching	1	0
Supervision	1	0

Preliminarily Analysis

The groups were similar on the BAI, as indicated by the pretest, with the comparison group average ($M = 14.78$, $SD = 10.71$) and the experimental group average ($M = 13.25$, $SD = 12.15$), $t(1,19) = .04$, $p = .74$. The groups were similar on the CSES given as a pretest with the comparison group average ($M = 69.33$, $SD = 15.63$) and the experimental group average ($M = 63.42$, $SD = 7.98$), $t(1,19) = 3.22$, $p = .27$, being within half a standard deviation of the other. The groups were similar on the Self Report CCS, as indicated by the pretest, with comparison group average ($M = 62.44$, $SD = 14.17$) and the experimental group average ($M = 59.92$, $SD = 11.60$), $t(1,19) = .46$, $p = .66$, being within one standard deviation of the other. The groups were similar on the CCS, completed by the external raters, as indicated by the pretest with the comparison group average ($M = 56.89$, $SD = 8.84$) and the experimental group average ($M = 58.33$, $SD = 7.67$), $t(1,19) = .17$, $p = .69$, being within one standard deviation of the other. The groups were similar on the Anxiety SUDS, as indicated by the pretest, with the comparison group average ($M = 4.00$, $SD = 1.97$) and the experimental group

average ($M = 6.08$, $SD = 2.02$) being within one standard deviation of the other. Based on the descriptive statistics and the mean pretest scores the groups were homogenous as can be seen in Table 3.

Table 3: An evaluation of the comparison group and the experimental group at the beginning of the study to confirm similarity of the groups cont.

	Experimental Group		Comparison Group	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
<i>BAI</i> Pretest	13.25	12.15	14.78	10.71
<i>CSES</i> Pretest	63.42	7.98	69.33	15.63
<i>CCS Self Report</i> Pretest	59.92	11.60	62.44	14.17
<i>CCS</i> Pretest	58.33	7.67	56.89	8.84
<i>Anxiety SUDS</i> Pretest	6.08	2.02	4.00	1.97

Research Design

An ethical researcher needs to provide the logical reasoning that guided the selection of the utilized research design (Gay, Mills, & Airasian, 2006). Before selecting a research design, a researcher needs to examine the information he or she needs to collect in order to answer the research question(s). For this study, a pretest-posttest quasi-experimental research design (Creswell, 2008; Shadish et al., 2002) was found to be the most appropriate, based on several factors: (a) the design allows for a non-randomized assignment of participants to groups; (b) the design allows for the independent variables to be manipulated; (c) the design allows for a non-equivalent control group pretest-posttest design; and (d) the design enables for selection bias to be accounted. In this study, the independent variable was the experiential instructional approach

(i.e. peer-to-avatar vs. peer-to-peer role play) and the impact it had on the CITs basic counseling skills development, immersion experience, counselor self-efficacy, and anxiety. Although the instructors of the courses are not included in the treatment group or comparison group, they were still participants in the study.

In this study, the main difference between the experimental group and the comparison group was that those participants in the experimental group were exposed to the avatar-to-student role play while the participants in the comparison group were exposed to the traditional student-to-student role play. An additional difference between the groups was the instructors. Each section was taught by a different instructor therefore this difference may have resulted in lectures and other course related activities being delivered differently.

During the weekly mock counseling sessions, the participants in the comparison group were divided into two groups of three and one group of four. The participants would then take turns taking on the following roles: (a) counselor, (b) client, and (c) observer. The participants in the experimental group were divided into pairs and took turns taking on the following roles, during the weekly mock counseling sessions: (a) counselor and (b) observer. For the experimental group, Stacey Adkins, the female avatar housed in the TeachLive™ virtual simulation program, was always the client.

The techniques course sections were divided to allow for similar group sizes. The sampling approach resulted in 12 counseling students in the experimental group and 9 counseling students in the comparison group, which created a total sample size of 21 participants.

Measurement of Constructs

This study investigated if the use of virtual simulation training affects basic counseling skills development, immersion experience, counselor self-efficacy, and anxiety in counseling

students enrolled in a counseling techniques course. The study used five instruments to examine the four constructs identified above: (a) the Counseling Competencies Scale (CCS; UCF Counselor Education Faculty, 2009), (b) the Maastricht Assessment of Simulated Patients (MaSP; Wind, et al., 2004), (c) the Counselor Self-Efficacy Scale (Melchert et al., 1996), (d) the Beck Anxiety Inventory (Beck et al., 1988), and (e) a researcher developed Anxiety Subject of Units Scale (Anxiety SUDS). In addition, the participants were required to complete a researcher-developed Demographics Questionnaire.

Counseling Competencies Scale. The Counselor Competencies Scale (CCS; UCF Counselor Education Faculty, 2009) was used to measure basic counseling skills among CITs after recorded mock counseling sessions at four points during the course. The CCS consists of 32 items that yield three subscales (counseling skills, professional dispositions, and professional behaviors), which are intended to measure counseling competencies. In addition, the CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations. Evaluation counseling competencies within the Counseling Skills domain requires reviewing a counseling session and assessing competency across 12 skills areas: (a) nonverbal skills, (b) encouragers, (c) open-ended and closed-ended questions, (d) reflection of content or paraphrasing, (e) reflection of feeling, (f) advanced reflection-reflection of meaning, (g) advanced reflection-summarization, (h) confrontation, (i) goal setting, (j) focus of counseling, (k) facilitate therapeutic environment-empathy/care, and (l) facilitate therapeutic environment-respectful/positive regard.

The items on the CCS were derived from the counseling literature and reviewed by a panel of content experts (counselor educators), which provided measures of content validity

(Swank & Lambie, 2012; Swank et al., 2012). Scores on the CCS have strong internal consistency with a Cronbach alpha, which range between .92 and .93 (Swank et al., 2012). The authors reported an interrater reliability for the total CCS score at .57 and the criterion-related validity, which was reached by correlating the total score of the final CCS and the final semester grade, yield a moderate correlation ($r = .40, p < .01$).

Another instrument was considered to measure the participants' counseling skills development. The Global Scale for Rating Helper Responses (GSRR: Gazda et al., 1977) has been used in previous studies within counselor education to examine skills development in pre-practicum counseling students (Hayes et al., 2000) and in practicum counseling students (Ray, Oliva, & Robinson, 2006). The GSRR was considered to not be developmentally appropriate for this study. The GSRR not only measures whether or not an individual is able to demonstrate a set of skills, it also measures whether the use of those skills adds or takes away from the counseling process. This study only examined the development of the CITs' basic counseling skills.

Maastricht Assessment of Simulated Patients. The Maastricht Assessment of Simulated Patients modified (MaSP: Wind et al., 2004) was used to examine CITs' immersion experiences during their weekly mock counseling sessions by both the comparison group and the experimental group. The MaSP is a self-report assessment consisting of 21 items, forming two subscales: (a) Authenticity, and (b) Feedback, designed to evaluate the performance of simulated patients in an education setting. More specifically, the MaSP was developed to evaluate the authenticity of role play and the quality of feedback during a simulated session (Wind et al., 2004).

The MaSP uses a 4-point Likert scale that consists of “complete disagreement” (1 point), “moderate disagreement” (2 points), “moderate agreement” (3 points), and “complete

agreement” (4 points), indicating the degree of agreement. In addition, respondents have the option to select “not applicable,” and at the end of the assessment, respondents are asked to rate the simulated patient’s general performance by giving them a rating between 1 and 10, with 10 being the highest rating.

This study only used the authenticity subscale, given that the second subscale of the MaSP examines the quality of feedback after the simulated session, which did not occur in this study. The first subscale examined the authenticity of the simulated patient (SP) during the situated session and consists of 10 items. The 10 items are: (a) SP appears authentic, (b) SP might be a real patient, (c) SP is clearly role-playing, (d) SP appears to withhold information unnecessarily, (e) SP stays in his/her role all the time, (f) SP is challenging/testing the student, (g) SP simulates physical complaints unrealistically, (h) SP’s appearance fits the role, (i) SP answers questions in a natural manner, and (j) SP starts conversation with the student(s) during time out. The authenticity subscale was modified, as it was originally developed to be used with medical students and uses terms that align with the medical model. Two minor changes were made to the assessment. The term “simulated patient (SP)” was changed to “simulated client (SC)” and the tenth item, which states “SP starts conversation with the student(s) during time out,” was eliminated because it was not relevant to this study.

The creators of the MaSP ensured content validity by conducting structured interviews with fourth year medicals students, experienced tutors, and experts in the field of simulated patients and were asked to identify key features of a good and bad simulated patient performance in an educational setting (Wind et al., 2004) The MaSP is shown to have good internal consistency with a Cronbach alpha ranging between .73, for the entire assessment, and .76, for the authenticity scale (Fussell et al., 2009; Wind et al., 2004). A limitation of using a modified

version of the MaSP is that the subscales have not been validated independently. For this study, an initial content validity was obtained by having four researchers review the subscale.

Counselor Self-Efficacy Scale. The Counselor Self-Efficacy Scale (CSES: Melchert et al., 1996) was selected to examine the levels of the CITs' counselor's self-efficacy at the beginning and at the end of the study. The CSES is a self-report assessment and consists of 20 questions regarding the knowledge and skill competencies related to the practice of individual and group counseling. The authors positively worded half the questions and negatively worded the other half to avoid response bias. The CSES uses a 5-point Likert scale that consists of "never," "rarely," "sometimes," "frequently," and "almost always," indicating the degree of agreement regarding respondents' confidence in their counseling abilities. The questions are scored and provide total raw scores ranging from 20 to 100, with high scores corresponding with high levels of counselor self-efficacy.

The CSES is shown to have a strong internal consistency with a Cronbach alpha of .91. The test-retest reliability (.85) was established by the authors (Melchert et al., 1996), re-administering the test one week after the first administration. Larson and Daniels (1998) tested for convergent construct related validity by correlating the scores to similar scores on the Counselor Self-Efficacy Instrument (SE-I: Friedlander & Snyder, 1993) to find a high correlation $r = .83$.

The Counselor Self-Efficacy Instrument (SE-I: Friedlander & Snyder, 1993) was considered to measure the CITs' counselor self-efficacy levels in this study. Larson and Daniels (1998) found the CSES and the SE-I to be highly correlated when they tested for convergent construct related validity. The CSES was selected due to it being one of the most frequently used instruments in research to measure counseling self-efficacy. Further, the CSES was selected due

to the researcher having previous experience utilizing the instrument in previous research and having no previous experience with the SE-I.

Beck Anxiety Inventory. The Beck Anxiety Inventory (BAI: Beck & Steer, 1990) was selected to measure the CITs' general anxiety levels at the beginning and at the end of the study. The BAI is a self-report assessment and consists of 21 items designed to measure symptoms of anxiety. The 21 items on the BAI were derived from three existing measures of anxiety: (a) The Anxiety Check List (Beck, Steer, & Brown, 1985), (b) the PDR Check List (Beck, 1978), and (c) the Situational Anxiety Check List (Beck, 1982). Beck et al. (1988) eliminated items that were similar or identical prior to using factor analysis, which led to the current 21-item scale. The BAI uses a 4-point Likert scale with a range from "not at all" (0 points) to "severely, I could barely stand it" (3 points). The items are scored and provide total raw scores, with the maximum score being 63. The high scores correspond with high levels of anxiety: total scores between the ranges of 0 and 7 reflect a minimal level of anxiety, scores between 8 and 15 reflect a mild level of anxiety, scores between 16 and 25 reflect a moderate level of anxiety, and scores between 26 and 63 reflect a severe level of anxiety.

Since its initial publication, the BAI has continued to be widely used and shown to have a good internal consistency (Beck & Steer, 1990). The BAI has a strong Cronbach alpha of .92 with a sample of outpatient clients ($n = 160$). In addition, the authors conducted a test re-test reliability, one week after the initial intake and before starting treatment, with a subsample of outpatient clients ($n = 83$) and found a reliability coefficient of .75 between the two administrations.

The BAI has been shown to be significantly related to other accepted measures of anxiety, both in self-reported and clinically-rated instruments. Beck et al. (1988) administered

the Hamilton Anxiety Rating Scale-Revised (Hamilton, 1959) to an outpatient sample ($n = 160$) and found a correlation of .51 ($p < .001$). Fydrich et al. (1990) reported that the BAI was significantly correlated with the Trait ($r = .58, p < .001$) and State ($r = .47, p < .001$) subscales of the State-Trait Anxiety Inventory (STAI; Spielberger, 1983).

The State-Trait Anxiety Inventory (STAI; Spielberger, 1983) was considered to measure the CITs' self-reported anxiety levels in this study. As previously mentioned, Fydrich et al. (1990) reported that the BAI was significantly correlated with the Trait and State subscales of the State-Trait Anxiety Inventory. The BAI was selected due the STAI having been found to be correlated with the Beck Depression Inventory.

Anxiety Subjective Units of Distress Scale. The fifth instrument was the researcher-developed Anxiety Subjective Units of Distress Scale (Anxiety SUDS), which was selected to measure the CITs' performance anxiety levels prior to completing their four recorded mock counseling sessions. The Anxiety SUDS is a self-report rating scale. The Anxiety SUDS consists of a 10 point scale ranging from "completely calm and focused on performance" (0 points) to "extremely anxious and cannot continue with performance" (10 points). An initial content validity was established of the Anxiety SUDS by having four experts in the field (counselor educators) review the scale. In this study, the Anxiety SUDS measured the dependent variable of anxiety, which produced a raw score for each participant at four distinct times. The variable was a continuous variable. The Anxiety SUDS was selected to measure the participants' levels of anxiety in connection to facilitating a mock counseling session. This deferred from the BAI, which measured the participants' overall levels of anxiety.

Intervention

This section of the chapter provides an overview of the intervention implemented in this study. The intervention was 16 weeks and the difference between the experimental group and the comparison group was TeachLive™, which was used for 10 weeks by the participants in the experimental group. Each section was taught by a different instructor. All of the instructors were second year doctoral program candidates in the same counselor education program as the participants. However, all three sections followed the same syllabus and used the same book (Young, 2013) (see Appendix H).

Intervention

This study consisted of only two treatment intervention. The intervention consisted of an instructional intervention, TeachLive™, which was utilized by the experimental group's CITs over the course of ten weeks in addition to the content of course, which included lectures, discussions, and experiential activities. Both the experimental group and the comparison group were instructed using the same syllabus and the same book. The instructional intervention was implemented during the weekly mock counseling sessions. The experimental group utilized an adult avatar, named Stacey Adkins, housed in the TeachLive™ program during their weekly mock counseling sessions. The weekly mock counseling sessions were used to provide the participants an opportunity to practice the skills they were learning in their course.

The TeachLive™ inter-actor was provided with weekly objectives and directives (see Appendix G). The inter-actor was the TeachLive™ employee responsible for Stacey's functioning during the weekly sessions. The objectives consisted of an explanation of the skill or skills the participants had learned that week and the inter-actor was also given directives on how to present and respond to the participants as they facilitated the weekly mock counseling session.

For example, during the week the students worked on the use of closed and opened questions, the inter-actor was directed to provide one-word responses to closed questions. The participants in the experimental group were provided with a copy of the Weekly Mock Counseling Session Form (Appendix ?), which consisted of the same objectives as those documented on the TeachLive™ Session Objectives Form (Appendix ?).

TeachLive™. The TeachLive™ program is a virtual simulation program. The TeachLive™ Lab was located in the UCF Teaching Academy building. The lab was located in a classroom equipped with a large television screen on a mobile cart, on which the avatar was projected. On the mobile cart are two sensors that follow the movements of the participants as they interact with the avatar. In addition, there is a webcam that sends a live video feed to another UCF building several miles away where the inter-actors are housed. The inter-actor was able to observe the participants and respond to their actions through the character of the avatar being engaged. The participants sat in a chair placed a few feet from the mobile cart. There was nothing between the mobile cart and the participants.

Comparison Group

Both the experimental group and the comparison group were instructed using the same syllabus and the same book. The comparison group was not exposed to the instructional intervention, TeachLive™. In this study, instructional intervention referred to the teaching strategy that was implemented in the experimental group, the TeachLive™ program. During the weekly mock counseling sessions, the comparison group practiced their skills with a peer instead of an avatar.

When the comparison group was ready to conduct their weekly mock counseling sessions, the class divided into their respected groups, two groups of three and one group of four.

The tenth student in the comparison group opted out of having their data used in this study. The group member would then take turn role playing the client, the counselor, and the observer(s). The participants in the comparison group were provided with a copy of the Weekly Mock Counseling Session Form. The objectives consisted of an explanation of the skill or skills the participants had learned that week and directives on how to present and respond while role playing the client.

Procedures

During the first class meeting, all CITs were provided with the following information: (a) explanation of the study, (b) information on confidentiality, (c) participant consent form, and (d) explanation of the assessments that the students were required to complete over the course of the study. In addition, the CITs in the experimental group were introduced to the TeachLive™ program utilized in their course. The consent form provided the students with a description of the study, and the participant's rights and responsibilities. The Informed Consent Form (see Appendix B) also provided the students with an option to opt-out of participating in the study. Only one participant made the choice to opt-out of the study. The participant would have been part of the comparison group. Whether a student decided to participate or not participate in the study did not influence their grade in the counseling techniques course. The confidentiality portion of the consent form prohibited students, whether they chose to participate in the study or not, from discussing the class' involvement in the research study with anyone outside of their classmates, their instructor, and the researcher.

During the first week of instruction, the CITs were administered the CSES and BAI, in person. The CITs were also administered the CSES and BAI after the experimental group had completed their 10-week instructional intervention starting the third week of the semester. In

addition, the participants and instructors who were part of the experimental group were oriented to the TeachLive™ program. The participants and instructors were shown a video of how the TeachLive™ sessions would be facilitated. Prior to the participants conducting their first TeachLive™ session they were provided with further orientation to the process. Once the study began, each participant participated in a five-minute mock counseling session during class in order to practice the skills being taught in their course for ten consecutive weeks.

Over the course of the study, the participants conducted and recorded four mock counseling sessions. The participants were able to conduct as many practice sessions as they needed. The counseling techniques course required the students to complete three mock counseling sessions. Therefore, this study only required the participants to conduct one additional mock counseling session. This study used a pretest-posttest quasi-experimental design; therefore, the additional session was needed to establish a baseline prior to instruction. The participants completed the mock counseling sessions outside of class time. In addition, all the participants conducted the mock counseling session with a peer and they worked with the same peer for all four sessions. The participants in the comparison group were paired with a peer with whom they did not work with during their weekly mock counseling sessions. The participants were responsible for finding a secure space and the proper equipment to record the sessions. All the participants were provided with resources available to them through the university that are free to students. They were also provided with USB flash drives on which to save their mock counseling sessions.

All the assessments were collected by the researcher, who verified that all items were answered and sealed in an envelope. In a secure location, the envelopes were opened, reviewed, and hand scored. Each assessment was scored using a calculator. Once the assessments were

scored, Statistical Package for the Social Sciences (SPSS) version 22 was used to house the database of participant sub-scores and total scores, and demographic information, for both the participants and external raters. The CCS was also completed by external raters who were instructed on how to keep all data confidential and secure (see Appendix A for instructions provided to external raters). Once the external raters returned the CCS assessments, the researcher verified that each assessment was completed and scored correctly. After the assessments were reviewed, the data was added to the existing database in SPSS.

External Raters

Three external raters, not including the researcher, were used in this study. The external raters were responsible for watching and evaluating the participants' recorded mock counseling sessions using the CCS. The external raters were formally trained on the use of the CCS. The training consisted of the following: (a) learning about the CCS and how it was developed, and (b) watching a counseling session and using the CCS to evaluate the counselor and receiving feedback on the evaluation. In addition, each rater had two years of experience using the CCS. The external raters only had access to the recorded sessions made available by the researcher. The external raters did not have access to any other data collected.

The researcher completed an orientation with the external raters prior to the beginning of the study. The raters were provided with instructions on how to complete each evaluation (see Appendix A). The inter-rater agreement level was assessed prior to the raters beginning to evaluate the participants' recorded sessions. The external raters watched and evaluated the same counseling session using the CCS one time. A reliability analysis was conducted and found Cronbach alpha to be .84 (see Table 4). Given that the inter-rater reliability was found to be at an acceptable level, as it exceeds .80 (Swank et al., 2012). The external raters were randomly assigned seven participants at

each data collection point to evaluate. Each of the three raters was responsible for evaluating seven participants at each data point, for a total of 24 sessions.

Table 4: External Raters' Inter-rater Agreement Level prior to the Beginning of the Study.

Reliability Statistics		
Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items	N of Items
.840	.840	7

Course Format

Experimental Group. Each week, both sections of the experimental group reported to their class meeting location and the instructors facilitated the class for the first hour. During the second hour, the participants completed their weekly mock counseling sessions using TeachLive™. The participants, in both sections, were paired with a peer in their respective section. The participants were provided with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form.

For section one, the first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Upon arriving in the TeachLive™ lab, the participants were briefly oriented to the space and reminded of how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Forms (see Appendix F). While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants

while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session.

Once the first pair of participants returned to the classroom, the second pair transitioned to the TeachLive™ lab. While the participants were in the class, either prior to or after completing their session, they used the time to discuss the content covered in the lecture and process their weekly mock session with their partner and instructor. Upon arriving in the TeachLive™ lab, the second pair of participants were briefly oriented to the space and reminded of how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Forms (see Appendix F). While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form, which were documents the researcher distributed to the participants. The course instructor proceeded to process the mock counseling sessions by reviewing the peer observations and discussing or clarifying any questions or concerns the participants had.

For section two, the first pair of participants transitioned to the TeachLive™ lab while the other pairs stayed in the classroom with the instructor. Upon arriving in the TeachLive™ lab, the participants were briefly oriented to the space and reminded of how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Forms (see Appendix

F). While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session.

Once the first pair of participants returned to the classroom, the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab, the participants were briefly oriented to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Forms. While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session.

Once the second pair of participants returned to the classroom, the third pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab, the participants were briefly oriented to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Forms. While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session.

Once the third pair of participants returned to the classroom, the fourth pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab, the participants were briefly oriented to the space and how the sessions would be conducted weekly. Each participant

facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form. While one participant facilitated the mock counseling session, their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minute left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form. The instructor proceeded to process the mock counseling sessions by reviewing the peer observations and discussing or clarifying any questions or concerns the participants had.

Comparison Group. Each week, the comparison group reported to their class meeting location and the instructor facilitated the class for the first hour. During the second hour, the participants completed their weekly mock counseling sessions. The participants were placed in two groups of three and one group of four. The participants were provided with the following documents at the beginning of their class meeting: (a) the Weekly Mock Counseling Session Instructions, and (b) the MaSP.

Each week the participants were divided into their groups and were reminded of how the mock sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (see Appendix F). While one participant facilitated the mock counseling session, one of their partners played the role of the client, and one or two of the remaining partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minute left in their session. The participants transitioned back to the

classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The instructor proceeded to process the mock counseling sessions by reviewing the peer observations and discussing or clarifying any questions or concerns the participants had.

Software

The data collected during this study was entered into the Statistical Package for the Social Sciences (SPSS) version 20.0 and the entries were double-checked to avoid errors.

Variables

This study had one independent variable (IV) and four dependent variables (DVs). The IV was the instructional intervention, which consisted of two levels and was represented by the experimental group and comparison group. The DVs were (1) the participants' counseling skills development, (2) immersion experience, (3) self-efficacy, and (4) anxiety. In the SPSS database, 318 variables were created. The first variable identified the participant-identified number (*ParticipantID*). The next variables identified the participant's demographic information which included (a) group membership (*GroupMembership*), (b) biological gender (*Gender*), (c) age (*Age*), (d) ethnicity (*Ethnicity*), (e) program track (*ProgramTrack*), (f) experience (*Experience*), (g) courses taken before fall 2014 (*PriorCounselingCourses*), and (h) counseling courses you are currently taking (*CurrentCounselingCourses*). The descriptive statistics were obtained from the demographic questionnaire that the participants completed at the beginning of the study.

The following variables consisted of the data gathered from the instruments used to measure the four constructs this study examined. The first set of variables were the raw scores of (a) the BAI pretest (*PreBAI_1 – PreBAI_Total Score*), (b) the CSES pretest (*PreCSES_1 – PreCSES_Total Score*), (c) the CCS self-report pretest (*PreCCS1SelfReport –*

PreCCSTotalScoreSelfReport), (d) the Anxiety SUDS pretest (*PreSUDSScale*), and (e) the CCS pretest (*PreCCSI – PreCCSTotalScore*). Both the individual and total scores were entered into SPSS. The next set of variables were the raw scores of (a) the MaSP (*MaSPSession1 – MaSPSession4*) from the first four weeks, (b) the CCS self-report midpoint-one (*CCSISelfReport_2nd – PreCCSTotalScoreSelfReport_2nd*), (c) the Anxiety SUDS midpoint-one (*SUDSScale_2nd*), and (d) the CCS midpoint-one (*CCSI_2nd – PreCCSTotalScore_2nd*),

The next set of variables were the raw scores of a) the MaSP (*MaSPSession5 – MaSPSession7*) from the fifth through seventh week, (b) the CCS self-report midpoint-two (*CCSISelfReport_3rd – PreCCSTotalScoreSelfReport_3rd*), (c) the Anxiety SUDS midpoint-two (*SUDSScale_3rd*), and (d) the CCS midpoint-two (*CCSI_3rd – PreCCSTotalScore_3rd*). And the final variables were the raw scores of a) the MaSP (*MaSPSession8 – MaSPSession10*) from the eighth through the tenth week, (b) the CCS self-report posttest (*CCSISelfReport_4th – PreCCSTotalScoreSelfReport_4th*), (c) the Anxiety SUDS posttest (*SUDSScale_4th*), (d) the CCS posttest (*CCS_2nd1 – PreCCSTotalScore_2nd*), (e) the BAI posttest (*PostBAI_1 – PostBAI_Total Score*), (f) the CSES posttest (*PostCSES_1 – PostCSES_Total Score*). The following are the variables representing the data collected from the external raters: (a) rater identification number (*RaterID*), (b) biological gender (*Gender*), (c) age (*Age*), (d) ethnicity (*ethnicity*), (e) counseling experience (*YearsOfCounselingExperience*), (d) teaching experience (*YearsOfTeachingExperience*), and (f) supervision experience (*YearsOfSupervisionExperience*).

Data Collection

Prior to beginning this study, the researcher obtained the approval of the university's Institutional Review Board (IRB). The letter can be view in Appendix B. Upon receiving IRB approval, the researcher used a purposive cohort sample, which was believed to represent the

desired population (Gay et al., 2006). To protect the rights and confidentiality of the participants, all identifying information was removed and the data was aggregated.

The participants were naturally divided into three sections. All the students enrolled in the techniques course were pre-practicum students, meaning they had not started their clinical field experience. Three instructors participated in the study, each instructor taught one section, and all three sections met once a week for 16 weeks, however two sections met for fewer weeks due to university closures. The three instructors were second year doctoral students. The university offers three tracks in the counseling program: (a) mental health counseling, (b) school counseling, and (c) marriage, family and couple therapy.

All three sections of the techniques course were taught using the following instructional approaches: (a) instructor verbally presenting the course content, which included lectures and discussions, and (b) experiential activities, which included role-play exercises and other experiential activities. The instructors used the same book, followed the same syllabus (see Appendix H) and weekly objectives (refer to Appendix F to view the objectives used during the weekly mock counseling sessions), and implemented the same experiential activities, with the same objectives and within the same timeframe.

There were five data collection points, which included (a) pre-test, (b) midpoint one, (c) midpoint two, (d) weekly, and (e) post-test, each of which are explained below. The data collection points, (a) midpoint one, (b) midpoint two, and (c) post-test, correspond to the due dates for the recorded mock sessions. A script that explained the directions for complementing the assessments was read to the participants (see Appendix A). The participants were also provided with a copy of each of the scripts (see Appendix A). The participants placed their completed assessments in an envelope provided by the researcher and submitted them to the

researcher. The researcher collected all envelopes from the participants either during the class break or at the end of the class to avoid any interruption of the participants' instruction time.

Pretest. The first data collection point was the pre-test, which occurred during the first week of class. During the class meeting, the researcher explained the purpose, benefits, and potential risks of this study. Those students (21 of 22 potential participants) who accepted the invitation to participate in the study were presented with the Informed Consent form and were administered the following assessments: (a) participant demographic questionnaire, (b) CSES, and (c) BAI (all three assessments can be found in Appendix A). The participants were provided with a unique participant identification. In addition, the participants were required to complete four recorded mock counseling sessions with a classmate. The length of the first and fourth recorded mock session was 15 minutes and they served as pretest and posttest. The length of the second session was five minutes and the third session was ten minutes. The length of the sessions did not deviate from the lengths usually required in the course. Three raters, not including the researcher, were responsible for reviewing and scoring all four mock sessions using the CCS. External raters were used to reduce researcher bias. The raters were randomly assigned seven different participants for each round of recordings they reviewed and evaluated.

The first session was recorded during the third week of the study, which served as the pretest. The participants in both groups had to complete two assessments along with the recorded session. The Anxiety SUDS was completed prior to conducting the recorded mock session and the CCS was completed after the session. The researcher provided each participant with a USB drive on which they uploaded their videos. The three sections followed the same syllabus; however, the class meeting times differed due to different circumstances (i.e. holidays, campus closure due to football games, etc.).

Midpoint One. The second data collection point occurred during the seventh week of this study and after the experimental group had received four weeks of treatment. The researcher provided the participants with an empty USB drive and a copy of the Anxiety SUDS and CCS prior to the week the materials were due. The participants were provided with an envelope, marked with their participant identification number, to place the completed assessments and recordings of the mock sessions. The researcher checked each participant's envelope to ensure that assessments were completed and that the videos were accessible.

Midpoint Two. The third data collection point occurred during the tenth week of this study after the experimental group had received seven weeks of treatment. The researcher provided the participants with an empty USB drive and a copy of the Anxiety SUDS and CCS prior to the week the materials were due. The participants were provided with an envelope, marked with their participant identification number, where they placed the assessments and recordings.

Post-test. The fourth data collection point was the post-test. This collection point occurred during the thirteenth week the sections met when the experimental group had received all ten weeks of treatment. The researcher again provided the participants with an empty USB drive and a copy of the Anxiety SUDS and CCS prior to the week the materials were due. In addition, the participants completed the CSES, and BAI.

Weekly. Over the course of the study, the participants engaged in weekly mock counseling sessions, which differed from the recorded mock sessions. The weekly mock sessions were conducted during the class time and are used to practice the basic counseling skills the participants learn each week. The recorded mock sessions were conducted outside of the class time and are used to evaluate the participants' ability to effectively utilize the counseling skills

being taught in the course. Both groups completed the recorded mock sessions with a peer from their section. The experimental group completed their mock counseling sessions with the avatar “Stacey” housed in the TeachLive™ program, while the comparison group completed their mock counseling sessions with a peer in their section. The participants were provided with a copy of the Weekly Mock Counseling Session Form, which provided an outline of the session objectives (see Appendix F). The researcher provided the participants with the weekly assessment during each class meeting and collected the completed assessment at the end of class.

Ethical Considerations

It is also important to note that there were minimal risks for CITs who participated in this study. There was a possibility of experiencing transference of emotions towards virtual client Stacey Adkins during the weekly mock counseling sessions. As participants engaged with the avatar, the simulated client’s response were provided by an inter-actor (an actress) who was able to see and hear the participants in real time allowing for an appropriate response. The participants were not informed about the inter-actor during the course of the study. In other words, the participants were not provided with detailed information about how the TeachLive™ program works in order to maintain suspension of disbelief. One of the main limitations of this study is a novelty effect. The participants in the experimental group were exposed to an advanced and innovative technology that might have led to some participants feeling a pressure to perform well or experience an increased level of anxiety.

Summary

This chapter presented a description of the sample and external raters’ demographics, the data collection procedures, and the instruments used collect the data. Further, it provided an

outline of the treatment and ethical considerations. The data analyses and results are discussed in Chapter Four.

CHAPTER FOUR: RESULTS

Introduction

This chapter presents the results of a study of counselors-in-training (CITs) and the effect of virtual simulation training on the development of basic counseling skills. This study used a quasi-experimental research design to examine if a difference existed in the levels of basic counseling skills development, immersion experience, levels of anxiety, and levels of counselor self-efficacy (CSE) between counselors-in-training taking a counseling techniques course who were exposed to student-to-avatar role play and counselors-in-training who were exposed to student-to-student role play.

Analysis

The following analyses were used to determine the difference between the experimental group and the comparison: (a) Mixed Between-Within Subjects ANOVA (or Split Plot ANOVA), (b) Repeated Measures Between Factors MANOVA, and (c) Trend Analysis. In addition, Hedge's g was calculated to determine the effect size.

Mixed Between-Within Subjects ANOVA. The researcher utilized the Split Plot ANOVA (SPANOVA) for research question one, three, and four to analyze scores on the CCS, BAI, CSES, and SUDS from pretest to posttest. The SPANOVA is an effective method for analyzing data in this study because it combines the between-subjects design and the within-subjects design into one analysis, which helps in not losing power (Tabachnick & Fidel, 2007). This study investigated the effect the treatment had on two groups (the experimental group and the comparison group) over the course of the study. In other words, this study has two independent variables: (a) a between-subject variable (group membership: experimental or comparison), and (b) a within-subjects variable (time). In this study, the four constructs were

measured multiple times with the CCS and the SUDS being measured four times (pretest, midpoint one, midpoint two, and posttest) and the BAI and the CSES being measured two times (pretest and posttest).

Repeated Measures Between Subjects MANOVA. The researcher utilized the Repeated Measures Between Subjects MANOVA for research question one to analyze the raw scores of the individual items on the CCS. A Repeated Measures Between Subjects MANOVA is an effective method for the analysis of the grouping variable with repeated measures and treating them as simply multiple dependent variables (Tabachnick & Fidel, 2007). The CCS was used to measure the participants' basic counseling skills levels. Only the Counseling Skills subscale score was used, which consisted of 12 items. The Repeated Measures Between Subjects MANOVA treated each of the 12 items as a dependent variable with 4 different measures (pretest, midpoint one, midpoint two, and posttest). It is important to note that there are limitations to when using Analysis of Covariate (ANCOVA), MANOVA, and other similar analyzes. Henson (1998) cautious against the use of ANCOVA and other similar analyzes with quasi-experimental research design because using intact groups can lead to violation of assumptions, such as homogeneity of regression assumption.

Trend Analysis. A Trend Analysis was used to analyze the raw scores of the individual items on the MaSP. A Trend Analysis is an effective method for analyzing data that is collected multiple times. Tabachnick and Fidel (2007) recommend using Trend Analysis, instead of either profile analysis or repeated measures of ANOVA "if it makes conceptual sense within the context of the research design" (p. 332). The MaSP was collected weekly for the duration of ten weeks. The MaSP was used to measure the participants' immersion experience.

Statistical Power Analysis. When using most statistics, it is appropriate to analyze the power levels of the sample. G*Power (Faul & Erdfelder, 2012) was used to determine the minimum sample size, at the .80 level given $\alpha = .05$. The A priori power analysis indicated that a total sample of 34 participants was needed to detect a moderate effect of the treatment for the dependent variables. Given that the required sample size was not met ($N = 21$), a sensitivity analysis was completed (Balkin & Sheperis, 2011). The sensitivity analysis indicated that a critical F value of 4.32 would be needed to detect a moderate effect of the treatment.

Effect Size. Significance testing helps in exploring group differences; however, it does not assess the degree to which IVs and DV are related (Tabachnick & Fidel, 2013). In addition, statistical tests are strongly influenced by sample sizes (Thompson, 2002). An effect size provides a standardized indication of the difference between the experimental and control group. In this study, Hedges g , with 95% confidence intervals, was calculated for the effect size because it is bias to sample size, meaning unlike Eta squared Hedges g is sensitive to the sample size (Lakens, 2013).

Sample Demographics and Descriptive Statistics

The sample demographics and descriptive statistics are discussed below to further define the participants and their influence on the results. For this study, the sample demographics was defined as the personal characteristics held by participants (Super, 2013). Further, descriptive statistics was defined as the non-physical characteristics beyond the demographic information of the participants (Super, 2013).

Sample Demographics

The sample was divided into three techniques classes that met Monday evenings, Wednesday afternoons, and Thursday evenings. The first section met from 6:00pm until 8:50pm, the second section met from 1:30pm until 4:20pm, and the third section met from 6:00pm until 8:50pm. The three sections were divided into two treatment groups as indicated in Table 5.

Table 5: The Distribution of Participants in the Techniques Classes.

<i>Class Sections</i>	Experimental Group		Comparison Group	
	n	%	N	%
Monday Evening	4	19%		
Wednesday Afternoon	8	38.1%		
Thursday Evening			9	42.9%
Total	12	57.1%	9	42.9%

Experimental Group. The first demographic examined was the characteristic of gender. The sample contained 18 female participants (85.7%) and 3 male participants (14.3%). The experimental group included 12 female participants (100%) and no male participants. There was a difference between the groups on the characteristic of gender as evidenced by there being no male participants in the experimental group.

The next demographic examined was the characteristic of ethnicity. The sample contained one African American participant (4.8%), one Asian American participant (4.8%), two Hispanic participants (9.5%), fifteen Caucasian participants (71.4%), and two participants who identified as “other” (9.5%). The experimental group included one Asian American participant (8.3%), one Hispanic participant (8.3%), eight Caucasians participants (66.7%) and two participants who identified as “other” (16.7%). There was no significant difference between the groups on the characteristic of ethnicity.

Another demographic examined was the characteristic of program track. The sample contained five marriage, couples, and family students (23.8%), seven clinical mental health students (33.3%), and eight school counseling students (38.1%). The experimental group included four marriage, couples, and family students (33.3%), four clinical mental health students (33.3%), and four school counseling students (33.3%). There was no significant difference between the groups on the characteristic of program track.

Another demographic examined was the characteristic of age. The sample ranged in age from 22 years old to 65 years old ($M = 29.19$, $SD = 11.11$). The experimental group ranged from 23 years old to 65 years old ($M = 29.63$, $SD = 13.07$). The experimental group and comparison groups were similar on age as evidenced by there not being significant differences between the two groups.

Another demographic examined was the characteristic of clinical experience. The sample ranged in clinical experience, from no experience to three years ($M = .76$, $SD = .89$). The experimental group ranged in clinical experience, from no experience to 2 years ($M = .83$, $SD = .72$). There was no significant difference between the groups on the characteristic of clinical experience.

Another demographic examined was the characteristic of prior counseling knowledge. The sample varied in number of counseling courses taken prior to the fall 2014 semester. The sample ranged from four to ten courses ($M = 6.43$, $SD = 1.67$). There was no difference between the groups. The experimental group ranged in number of counseling courses taken prior to the fall 2014 semester, from four to ten courses ($M = 6.67$, $SD = 1.63$).

The final demographic was the characteristic of current counseling courses being taken. The sample ranged in number of counseling courses being taken during fall 2014, from two to four courses ($M = 3.05$, $SD = .50$). The experimental group ranged in number of counseling courses taken

prior to fall 2014, from three to four courses ($M = 3.08$, $SD = .29$). There was no significant difference between the groups on the characteristic of number of counseling the participants were taking during the semester the study was conducted.

Comparison Group. The first demographic examined was the characteristic of gender. The sample contained 18 female participants (85.7%) and 3 male participants (14.3%). The comparison group included six female participants (66.7%) and three male participants (33.3%). There was a difference between the groups on the characteristic of gender as evidenced by there being no male participants in the experimental group.

The next demographic examined was the characteristic of ethnicity. The sample contained one African American participant (4.8%), one Asian American participant (4.8%), two Hispanic participants (9.5%), fifteen Caucasian participants (71.4%), and two participants who identified as “other” (9.5%). The comparison group included one African American participant (11.1%), one Hispanic participant (11.1%), and seven Caucasians participants (77.8%). There was no significant difference between the groups on the characteristic of ethnicity.

Another demographic examined was the characteristic of program track. The sample contained five marriage, couples, and family students (23.8%), seven clinical mental health students (33.3%), and eight school counseling students (38.1%). The comparison group included one marriage, couples, and family student (11.1%), three clinical mental health students (33.3%), four school counseling students (44.4%), and one participant who did not respond to this question (11.1%). There was no significant difference between the groups on the characteristic of program track.

Another demographic examined was the characteristic of age. The sample ranged in age from 22 years old to 65 years old ($M = 29.19$, $SD = 11.11$). The comparison group ranged in age from 22 years old to 50 years old ($M = 28.33$, $SD = 8.5$). The experimental group and comparison groups were similar on age as evidenced by there not being significant differences between the two groups.

Another demographic examined was the characteristic of clinical experience. The sample ranged in clinical experience, from no experience to three years ($M = .76$, $SD = .89$). The comparison group ranged in clinical experience, from no experience to 3 years ($M = .67$, $SD = 1.12$). There was no significant difference between the groups on the characteristic of clinical experience.

Another demographic examined was the characteristic of prior counseling knowledge. The sample varied in number of counseling courses taken prior to the fall 2014 semester. The sample ranged from four to ten courses ($M = 6.43$, $SD = 1.67$). There was no difference between the groups. The comparison group ranged in number of counseling courses taken prior to the fall 2014 semester, from four to nine courses ($M = 6.11$, $SD = 1.45$).

The final demographic was the characteristic of current counseling courses being taken. The sample ranged in number of counseling courses being taken during fall 2014, from two to four courses ($M = 3.05$, $SD = .50$). The comparison group ranged in number of counseling courses taken prior to fall 2014, from two to four courses ($M = 3.00$, $SD = .77$). There was no significant difference between the groups on the characteristic of number of counseling the participants were taking during the semester the study was conducted.

Table 6: Sample Demographic Information.

	Experimental Group		Comparison Group	
<i>Gender</i>	<u><i>n</i></u>	<u><i>%</i></u>	<u><i>n</i></u>	<u><i>%</i></u>
Female	12	100	6	66.7
Male	0	0	3	33.3
<i>Ethnicity</i>				
African American	0	0	1	11.1
Asian American	1	8.3	0	0
Hispanic	1	8.3	1	11.1
Caucasian (Non-Hispanic)	8	66.7	7	77.8
Other	2	16.7	0	0
<i>Program Track</i>				
Marriage, Couples, and Family	4	33.3	1	11.1
Clinical Mental Health	4	33.3	3	33.3
School Counseling	4	33.3	4	44.4
	<u><i>M</i></u>	<u><i>SD</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Age</i>	29.8	13.1	28.3	8.5
<i>Clinical Experience</i>	.83	.72	.67	1.1
<i>Prior Counseling Courses Taken</i>	6.7	1.8	6.1	1.5
<i>Current Counseling Courses</i>	3.1	.30	3	.71

Descriptive Statistics

Primary Research Question. The Counselor Competencies Scale (CCS; UCF Counselor Education Faculty, 2009) was used to measure the development of the basic counseling skills of the CITs. The assessment was given to the participants at four points (a) the beginning of the semester (pretest), (b) before the middle of the semester (midpoint one), (c) after the middle of semester (midpoint two), and (d) at the end of the semester (posttest). The CCS was used to measure the participants' basic counseling skills in the following methods: (a) self-evaluation by the participants and (b) evaluation by external raters.

Self-report. The sample was normally distributed ($M = 61.00$, $SD = 12.49$) on the pretest (see Figures 1 and 2). On the pretest the groups reported the following scores on the self-reported CCS, with the experimental group average ($M = 59.92$, $SD = 11.60$) being 2.52 points lower than the comparison group average ($M = 62.44$, $SD = 14.17$), which is less than a standard deviation of the other.

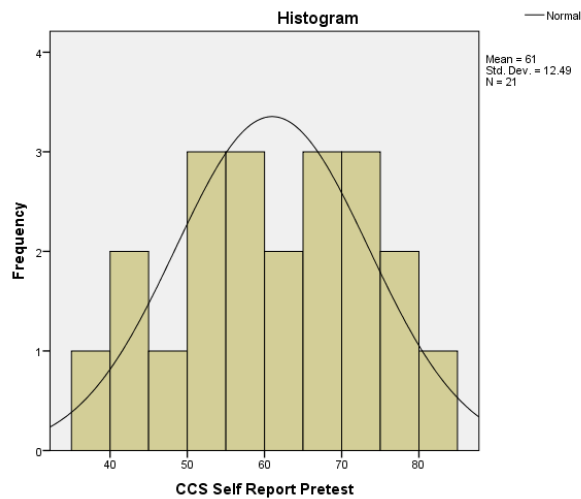


Figure 1: Distribution of CCS self-report pretest scores (histogram).

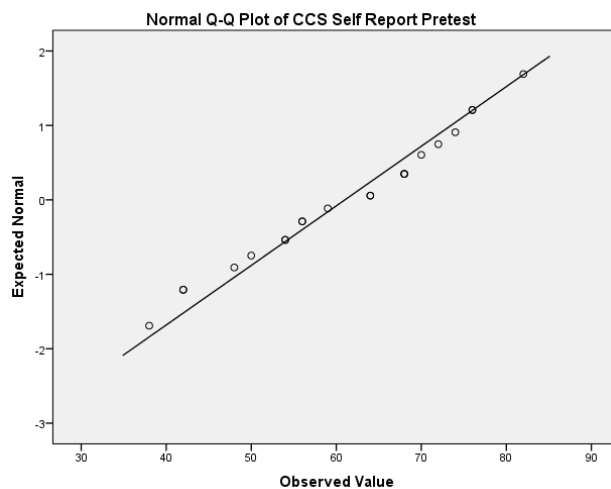


Figure 2: Distribution of CCS self-report pretest scores (Q-Q plot).

On the second collection point (midpoint one), the sample was normally distributed ($M = 64.10$, $SD = 12.29$) (see Figures 3 and 4). At midpoint one the groups reported the following scores on the self-reported CCS, with the experimental group average ($M = 62.17$, $SD = 12.83$) being 4.5 points lower than the comparison group average ($M = 66.67$, $SD = 11.75$), which is within half a standard deviation of the other.

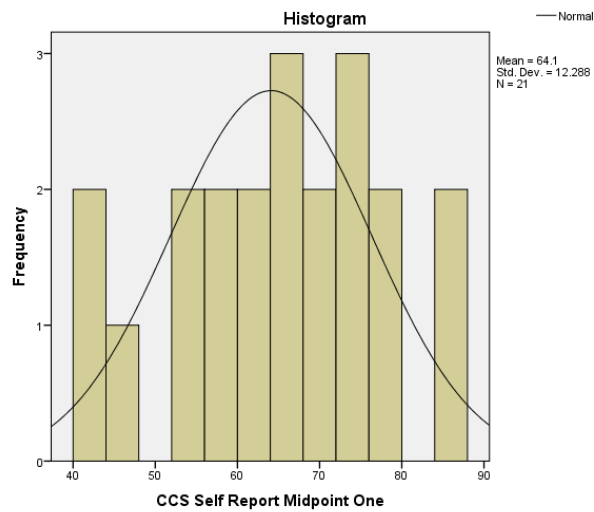


Figure 3: Distribution of CCS self-report midpoint one scores (histogram).

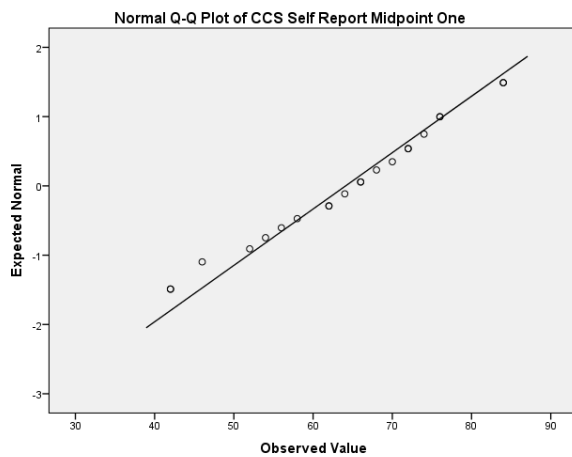


Figure 4: Distribution of CCS self-report midpoint one scores (Q-Q plot).

On the third collection point (midpoint two), the sample was normally distributed ($M = 66.76$, $SD = 9.60$) (see Figures 5 and 6). At midpoint two, the groups reported the following scores on the self-reported CCS, with the experimental group average ($M = 65.33$, $SD = 9.39$) being 3.34 points lower than and the comparison group average ($M = 68.67$, $SD = 10.10$), which is within a half standard deviation of the other.

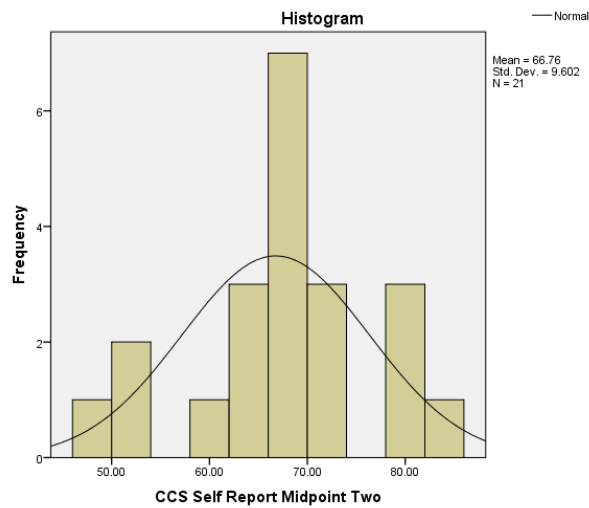


Figure 5: Distribution of CCS self-report midpoint two scores (histogram).

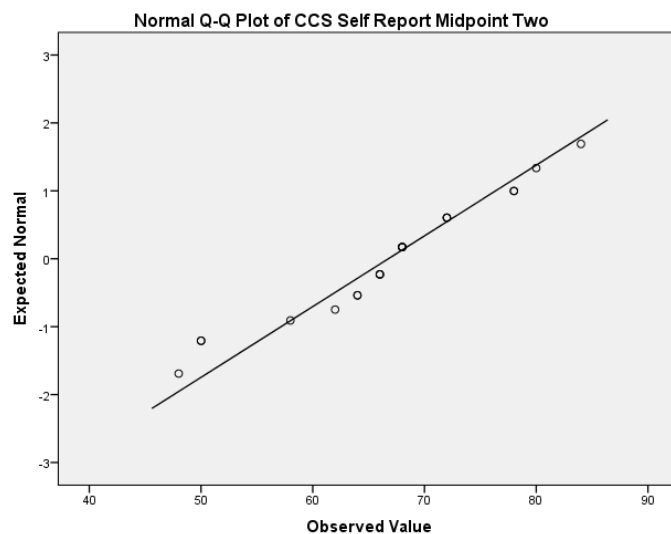


Figure 6: Distribution of CCS self-report midpoint two scores (Q-Q plot).

On the fourth collection point (posttest), the sample was normally distributed ($M = 72.29$, $SD = 8.03$) (see Figures 7 and 8). On the posttest, the groups reported the following scores on the self-reported CCS, with the experimental group average ($M = 72.00$, $SD = 8.78$) being 0.67 points lower than and the comparison group average ($M = 72.67$, $SD = 7.42$), which is less than half a standard deviation of the other.

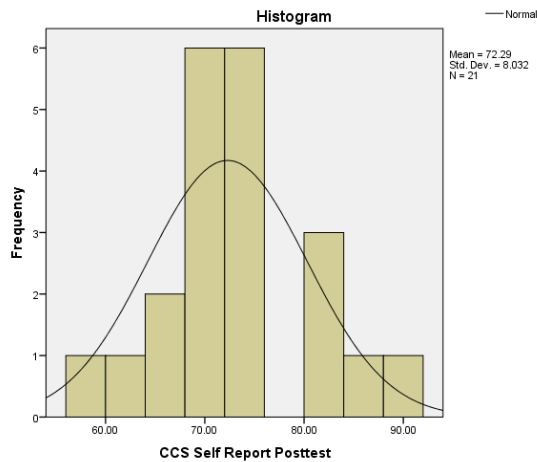


Figure 7: Distribution of CCS self-report posttest scores (histogram).

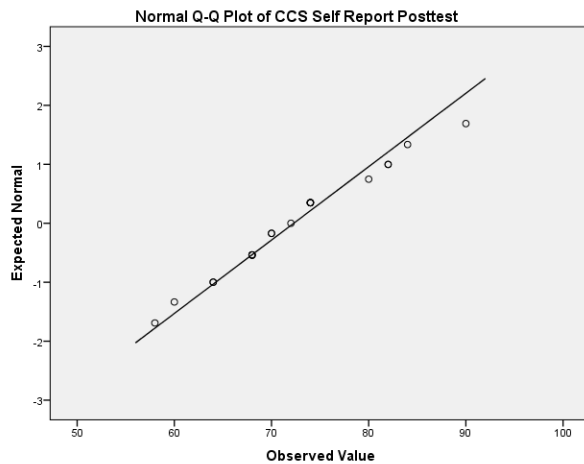


Figure 8: Distribution of CCS self-report posttest scores (Q-Q plot).

The researcher examined the changes between the data collection points for the groups finding that both groups reported continuous development of their basic counseling skills. Further, the comparison group reported higher scores on the CCS at each of the four data collection points

Table 7: Descriptive Statistics for Basic Counseling Skills Development (Self-Report).

	<u><i>N</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Pretest</i>				
Experimental Group		12	59.92	11.60
Comparison Group		9	62.44	14.17
Sample	21		61.00	12.49
<i>Midpoint One</i>				
Experimental Group		12	62.17	12.83
Comparison Group		9	66.67	11.75
Sample	21		64.10	12.29
<i>Midpoint Two</i>				
Experimental Group		12	65.33	9.39
Comparison Group		9	68.67	10.10
Sample	21		66.76	9.60
<i>Posttest</i>				
Experimental Group		12	72.00	8.78
Comparison Group		9	72.67	7.42
Sample	21		72.29	8.03

External raters. The sample was normally distributed ($M = 61.00$, $SD = 12.49$) on the pretest (see Figures 9 and 10). On the pretest, the groups reported the following scores on the CCS, with the experimental group average ($M = 57.71$, $SD = 8.07$) being 0.62 points lower than and the comparison group average ($M = 58.33$, $SD = 7.67$), which is within less than half a standard deviation of the other.

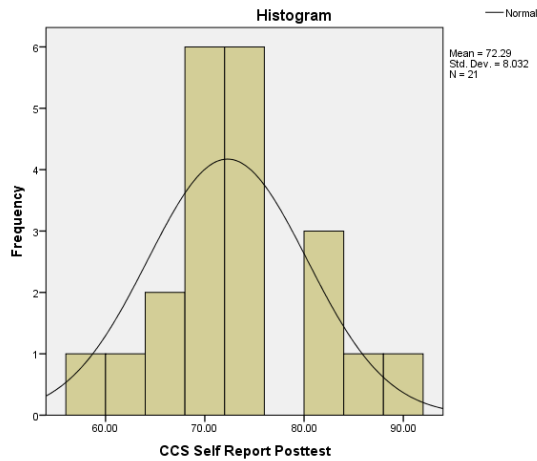


Figure 9: Distribution of CCS posttest scores (histogram).

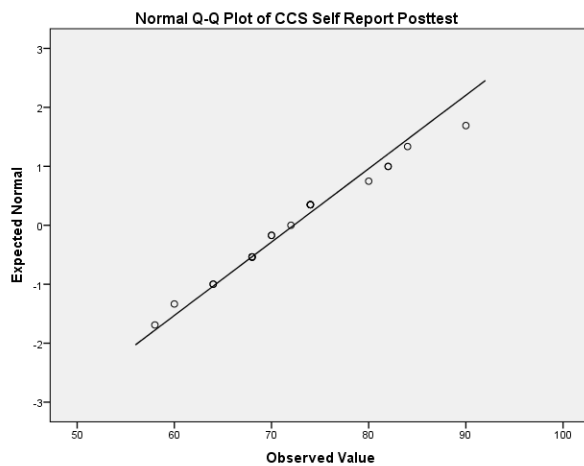


Figure 10: Distribution of CCS posttest scores (Q-Q plot).

On the second collection point (midpoint one), the sample was normally distributed ($M = 65.24$, $SD = 4.63$) (see Figures 11 and 12). At midpoint one the groups reported the following scores on the CCS, with the experimental group average ($M = 64.33$, $SD = 4.25$) being 2.11 points lower than and the comparison group average ($M = 66.44$, $SD = 5.08$), which is half a standard deviation of the other.

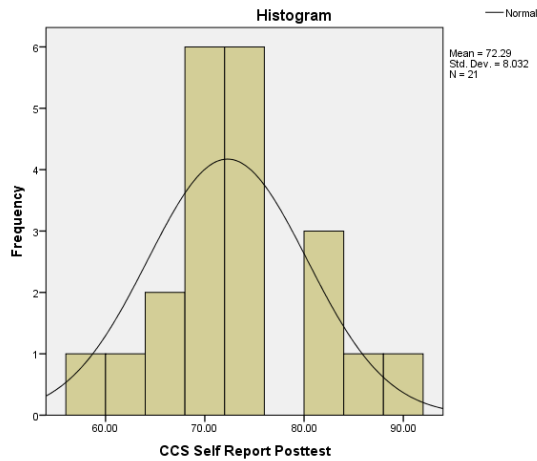


Figure 11: Distribution of CCS posttest scores (histogram).

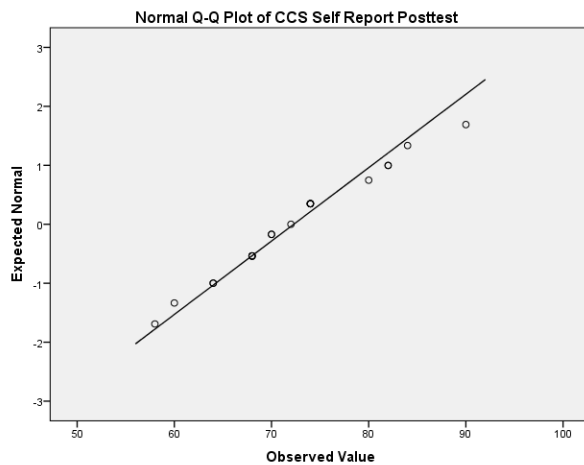


Figure 12: Distribution of CCS posttest scores (Q-Q plot).

On the third collection point (midpoint two), the sample was normally distributed ($M = 67.95$, $SD = 6.39$) (see Figures 13 and 14). At midpoint two the groups reported the following scores on the CCS, with the experimental group average ($M = 67.75$, $SD = 6.90$) being 0.47 points lower than and the comparison group average ($M = 68.22$, $SD = 6.04$), which is half a standard deviation of the other.

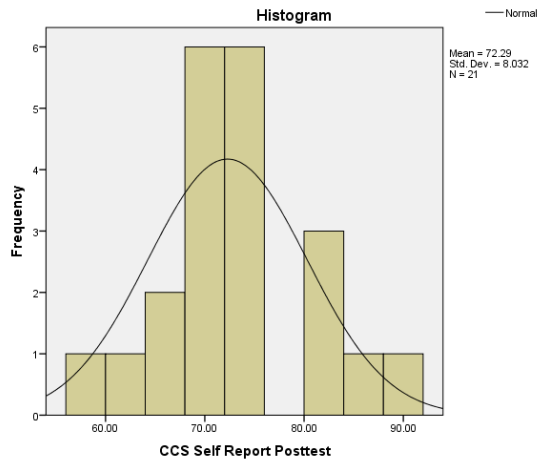


Figure 13: Distribution of CCS self-report posttest scores (histogram).

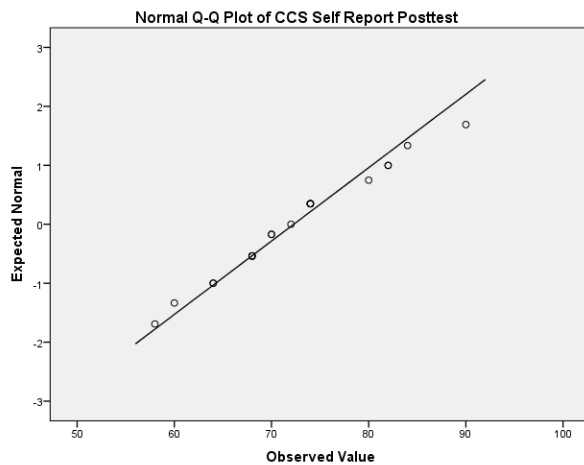


Figure 14: Distribution of CCS posttest scores (Q-Q plot).

On the fourth collection point (posttest), the sample was normally distributed ($M = 70.95$, $SD = 5.31$) (see Figures 15 and 16). On the posttest the groups reported the following scores on the CCS, with the experimental group average ($M = 71.00$, $SD = 7.90$) being 0.11 points higher than and the

comparison group average ($M = 70.89$, $SD = 6.09$), which is less than half a standard deviation of the other.

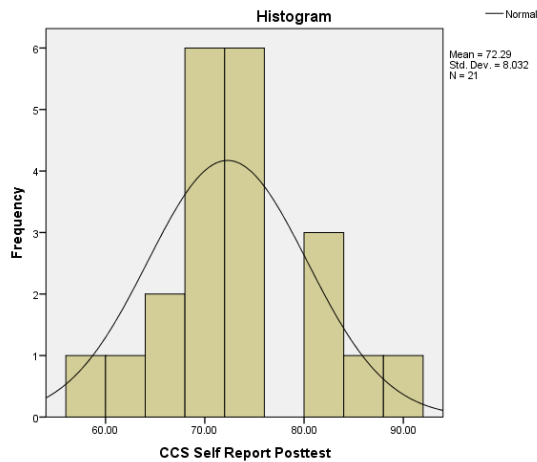


Figure 15: Distribution of CCS posttest scores (histogram).

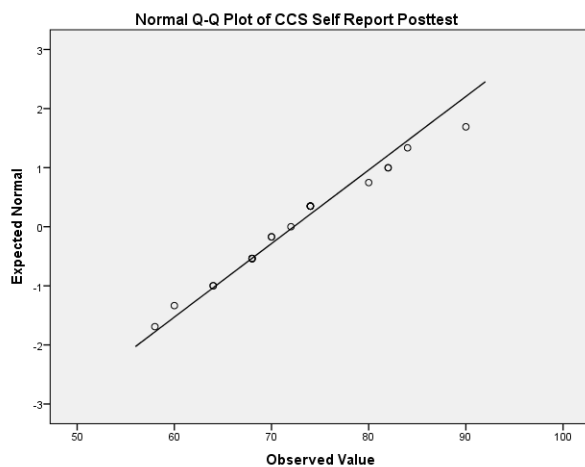


Figure 16: Distribution of CCS posttest scores (Q-Q plot).

The researcher examined the changes between the data collection points for the groups and found the comparison group CCS total scores were higher than the experimental group at the pretest, midpoint one and midpoint two. The experimental group's scores were slightly higher than the comparison group on the posttest.

Table 8: Descriptive Statistics for Basic Counseling Skills Development

	<u><i>N</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Pretest</i>				
Experimental Group		12	58.33	7.67
Comparison Group		9	56.89	8.84
Sample	21		57.71	8.07
<i>Midpoint One</i>				
Experimental Group		12	64.33	4.25
Comparison Group		9	66.44	5.08
Sample	21		65.24	4.63
<i>Midpoint Two</i>				
Experimental Group		12	67.75	6.90
Comparison Group		9	68.22	6.04
Sample	21		67.95	6.39
<i>Posttest</i>				
Experimental Group		12	71.00	7.9
Comparison Group		9	70.89	6.09
Sample	21		70.95	5.31

Secondary Research Question. The Maastricht Assessment of Simulated Patients modified (MaSP: Wind et al., 2004) was used to examine the CITs' immersion experiences during their weekly mock counseling sessions. The assessment was given weekly, for a total of ten administrations. This study only used the Authenticity subscale because the researcher wanted to assess For item one, "SC appeared authentic," the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 3.29$, $SD = .85$) on the pretest (session one). During the pretest the groups reported the following scores on the "SC appeared authentic", with the experimental group average ($M = 3.00$, $SD = .85$) and the comparison group average ($M = 3.67$, $SD = .71$) being within a standard deviation of the other.

On the second data collection point (session two), the sample was normally distributed ($M = 3.29$, $SD = .90$). During session two the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.00$, $SD = .85$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 3.29$, $SD = .78$). During session three the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.08$, $SD = .52$) and the comparison group average ($M = 3.56$, $SD = 1.01$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 3.57$, $SD = .78$). During session four the groups reported the following scores on the “SP appears authentic”, with the experimental group average ($M = 3.25$, $SD = .87$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 3.43$, $SD = .93$). During session five the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.08$, $SD = 1.01$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other.

Table 9: Descriptive Statistics for Immersion Experience (SP Appears Authentic).

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session One</i>				
Experimental Group		12	3.00	.85
Comparison Group		9	3.67	.71
Sample	21		3.29	.85
<i>Session Two</i>				
Experimental Group		12	3.00	.85
Comparison Group		9	3.78	.44
Sample	21		3.29	.90
<i>Session Three</i>				
Experimental Group		12	3.08	.52
Comparison Group		9	3.56	1.01
Sample	21		3.29	.78
<i>Session Four</i>				
Experimental Group		12	3.25	.87
Comparison Group		9	4.00	.00
Sample	21		3.57	.78
<i>Session Five</i>				
Experimental Group		12	3.08	1.01
Comparison Group		9	3.89	.33
Sample	21		3.43	.93

On the sixth collection point (session six), the sample was normally distributed ($M = 3.19$, $SD = .93$). During session six the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 2.75$, $SD = .97$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 3.38$, $SD = .74$). During session seven the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.00$, $SD = .74$) and the comparison group average ($M = 3.69$, $SD = .33$) being within a standard deviation of the other. On the eighth collection point (session eight), the sample was

normally distributed ($M = 3.29$, $SD = .72$). During session eight the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 2.63$, $SD = .58$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 3.38$, $SD = 1.02$). During session nine the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.08$, $SD = 1.01$) and the comparison group average ($M = 3.89$, $SD = .33$) being a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 3.52$, $SD = .62$). During session ten the groups reported the following scores on the “SC appeared authentic”, with the experimental group average ($M = 3.25$, $SD = .62$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the comparison group’s ratings of “SC appeared authentic” were consistently similar to the experimental group’s ratings over the course of the ten sessions. Overall, the comparison group reported that the student-client they worked with weekly appeared authentic at a higher rate than the experimental group.

Table 10: Descriptive Statistics for Immersion Experience (SC Appeared Authentic) cont.

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	2.75	.97
Comparison Group		9	3.78	.44
Sample	21		3.19	.93
<i>Session Seven</i>				
Experimental Group		12	3.00	.74
Comparison Group		9	3.69	.33
Sample	21		3.38	.74
<i>Session Eight</i>				
Experimental Group		12	2.63	.58
Comparison Group		9	3.89	.33
Sample	21		3.29	.72
<i>Session Nine</i>				
Experimental Group		12	3.00	1.21
Comparison Group		9	3.89	.33
Sample	21		3.38	1.02
<i>Session Ten</i>				
Experimental Group		12	3.25	.62
Comparison Group		9	3.89	.33
Sample	21		3.52	.60

For item two on the MaSP, “SC could be a real client,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 3.67$, $SD = .86$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.42$, $SD = 1.08$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 3.67$, $SD = .73$). During session two the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.50$, $SD = .91$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the

other. On the third collection point (session three), the sample was normally distributed ($M = 3.62$, $SD = .50$). During session three the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.50$, $SD = .52$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 3.57$, $SD = .68$). During session four the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.25$, $SD = .76$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 3.76$, $SD = .70$). During session five the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.58$, $SD = .90$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other.

Table 11: Descriptive Statistics for Immersion Experience (SC could be a real client).

	<u><i>N</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Session One</i>				
Experimental Group		12	3.42	1.08
Comparison Group		9	4.00	.00
Sample	21		3.67	.86
<i>Session Two</i>				
Experimental Group		12	3.50	.91
Comparison Group		9	3.89	.33
Sample	21		3.67	.73
<i>Session Three</i>				
Experimental Group		12	3.50	.52
Comparison Group		9	3.78	.44
Sample	21		3.62	.50
<i>Session Four</i>				
Experimental Group		12	3.25	.76
Comparison Group		9	4.00	.00
Sample	21		3.57	.68
<i>Session Five</i>				
Experimental Group		12	3.58	.90
Comparison Group		9	4.00	.00
Sample	21		3.76	.70

On the sixth collection point (session six), the sample was normally distributed ($M = 3.29$, $SD = .90$). During session six the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 2.92$, $SD = .99$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 3.38$, $SD = .67$). During session seven the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 2.92$, $SD = .52$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the eighth collection point (session eight), the sample was

normally distributed ($M = 3.33$, $SD = .91$). During session eight the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 2.91$, $SD = .99$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 3.33$, $SD = .91$). During session nine the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 2.83$, $SD = .99$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 3.48$, $SD = .81$). During session ten the groups reported the following scores on the “SC could be a real client”, with the experimental group average ($M = 3.17$, $SD = .93$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the comparison group’s ratings of “SC could be a real client” were consistently similar to the experimental group’s ratings over the course of the ten sessions. Overall, the comparison group reported that the simulated client they worked with weekly could be a real client at a higher rate than the experimental group.

Table 12: Descriptive Statistics for Immersion Experience (SC Could be a real client) cont.

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	2.92	.99
Comparison Group		9	3.78	.44
Sample	21		3.29	.90
<i>Session Seven</i>				
Experimental Group		12	2.92	.52
Comparison Group		9	4.00	.00
Sample	21		3.38	.67
<i>Session Eight</i>				
Experimental Group		12	2.92	.99
Comparison Group		9	3.89	.33
Sample	21		3.33	.91
<i>Session Nine</i>				
Experimental Group		12	2.83	.99
Comparison Group		9	3.89	.33
Sample	21		3.29	1.01
<i>Session Ten</i>				
Experimental Group		12	3.17	.93
Comparison Group		9	3.89	.33
Sample	21		3.48	.81

For item three on the MaSP, “SC was clearly role playing,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 1.81$, $SD = .93$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 1.83$, $SD = .72$) and the comparison group average ($M = 1.78$, $SD = 1.20$) being within a standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 1.90$, $SD = .94$). During session two the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.08$, $SD =$

.79) and the comparison group average ($M = 1.67$, $SD = 1.12$) being within a standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 2.00$, $SD = .95$). During session three the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.00$, $SD = .74$) and the comparison group average ($M = 2.00$, $SD = 1.23$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 1.95$, $SD = 1.02$). During session four the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.25$, $SD = .97$) and the comparison group average ($M = 1.56$, $SD = 1.00$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 1.62$, $SD = .74$). During session five the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 1.83$, $SD = .84$) and the comparison group average ($M = 1.33$, $SD = .50$) being within a standard deviation of the other.

Table 13: Descriptive Statistics for Immersion Experience (SC was clearly role playing).

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session One</i>				
Experimental Group		12	1.83	.72
Comparison Group		9	1.78	1.20
Sample	21		1.81	.93
<i>Session Two</i>				
Experimental Group		12	2.08	.79
Comparison Group		9	1.67	1.12
Sample	21		1.90	.94
<i>Session Three</i>				
Experimental Group		12	2.00	.74
Comparison Group		9	2.00	1.23
Sample	21		2.00	.95
<i>Session Four</i>				
Experimental Group		12	2.25	.97
Comparison Group		9	1.56	1.01
Sample	21		1.95	1.02
<i>Session Five</i>				
Experimental Group		12	1.83	.84
Comparison Group		9	1.33	.50
Sample	21		1.62	.740

On the sixth collection point (session six), the sample was normally distributed ($M = 2.10$, $SD = 1.09$). During session six the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.25$, $SD = .97$) and the comparison group average ($M = 1.89$, $SD = .1.27$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 1.95$, $SD = .92$). During session seven the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.17$, $SD = .94$) and the comparison group average ($M = 1.67$, $SD = .87$) being within a standard deviation of the other. On the eighth collection point (session

eight), the sample was normally distributed ($M = 1.77$, $SD = .83$). During session eight the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.00$, $SD = .85$) and the comparison group average ($M = 1.44$, $SD = .73$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 1.95$, $SD = .96$). During session nine the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.25$, $SD = .87$) and the comparison group average ($M = 1.56$, $SD = .73$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 1.81$, $SD = .75$). During session ten the groups reported the following scores on the “SC was clearly role playing”, with the experimental group average ($M = 2.00$, $SD = .74$) and the comparison group average ($M = 1.56$, $SD = .75$) being within a standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the experimental group’s ratings of “SC was clearly role playing” were consistently similar to the comparison group’s ratings over the course of the ten sessions. Overall, the experimental group reported that the simulated client they worked with weekly were presenting with concerns and/or issues that did appear to be made up at a higher rate than the comparison group.

Table 14: Descriptive Statistics for Immersion Experience (SC was clearly role playing) cont.

	<u><i>N</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Session Six</i>				
Experimental Group		12	2.25	.97
Comparison Group		9	1.89	1.27
Sample	21		2.10	1.09
<i>Session Seven</i>				
Experimental Group		12	2.17	.94
Comparison Group		9	1.67	.87
Sample	21		1.95	.92
<i>Session Eight</i>				
Experimental Group		12	2.00	.85
Comparison Group		9	1.44	.73
Sample	21		1.77	.83
<i>Session Nine</i>				
Experimental Group		12	2.25	.87
Comparison Group		9	1.56	.73
Sample	21		1.95	.86
<i>Session Ten</i>				
Experimental Group		12	2.00	.74
Comparison Group		9	1.56	.73
Sample	21		1.81	.75

For item five on the MaSP, “SC stayed in his/her role the entire session,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 3.83$, $SD = .39$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.83$, $SD = .39$) and the comparison group average ($M = 3.89$, $SD = .33$) being within less than a half standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 3.57$, $SD = .58$). During session two the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.67$, $SD = .50$) and the comparison group average ($M = 3.67$, $SD = .71$) being within less than a half standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 3.62$, $SD = .50$). During session three the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.58$, $SD = .52$) and the comparison group average ($M = 3.67$, $SD = .50$) being within a half standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 3.76$, $SD = .44$). During session four the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.67$, $SD = .50$) and the comparison group average ($M = 3.89$, $SD = .33$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 3.57$, $SD = .75$). During session five the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.25$, $SD = .87$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other.

Table 15: Descriptive Statistics for Immersion Experience (SC stayed in his/her role the entire session).

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session One</i>				
Experimental Group		12	3.83	.39
Comparison Group		9	3.89	.33
Sample	21		3.86	.36
<i>Session Two</i>				
Experimental Group		12	3.67	.50
Comparison Group		9	3.67	.71
Sample	21		3.57	.58
<i>Session Three</i>				
Experimental Group		12	3.58	.52
Comparison Group		9	3.67	.50
Sample	21		3.62	.50
<i>Session Four</i>				
Experimental Group		12	3.67	.50
Comparison Group		9	3.89	.33
Sample	21		3.76	.44
<i>Session Five</i>				
Experimental Group		12	3.25	.87
Comparison Group		9	4.00	.00
Sample	21		3.57	.75

On the sixth collection point (session six), the sample was normally distributed ($M = 3.62$, $SD = .74$). During session six the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.33$, $SD = .89$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 3.62$, $SD = .74$). During session seven the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.33$, $SD = .89$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the eighth collection

point (session eight), the sample was normally distributed ($M = 3.48$, $SD = .60$). During session eight the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.17$, $SD = .58$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 3.57$, $SD = .81$). During session nine the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.25$, $SD = .97$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 3.71$, $SD = .56$). During session ten the groups reported the following scores on the “SC stayed in his/her role the entire session”, with the experimental group average ($M = 3.58$, $SD = .67$) and the comparison group average ($M = 3.56$, $SD = .33$) being within less than a half standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the comparison group’s ratings of “SC stayed in his/her role the entire session” were consistently similar to the experimental group’s ratings over the course of the ten sessions. The comparison group’s ratings increased after the third session and had a slight decrease at the tenth session, while the experimental group’s ratings decreased after the third session and had slight increase at the tenth session. Overall, the comparison group reported that the simulated client they worked with weekly stayed in their role as the client the entire session at a higher rate than the experimental group.

Table 16: Descriptive Statistics for Immersion Experience (SC stayed in his/her role the entire session) cont.

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	3.33	.89
Comparison Group		9	4.00	.00
Sample	21		3.62	.74
<i>Session Seven</i>				
Experimental Group		12	3.33	.89
Comparison Group		9	4.00	.00
Sample	21		3.62	.74
<i>Session Eight</i>				
Experimental Group		12	3.17	.58
Comparison Group		9	4.00	.00
Sample	21		3.48	.60
<i>Session Nine</i>				
Experimental Group		12	3.25	.97
Comparison Group		9	4.00	.00
Sample	21		3.57	.81
<i>Session Ten</i>				
Experimental Group		12	3.58	.67
Comparison Group		9	3.56	.33
Sample	21		3.71	.56

For item six on the MaSP, “SC challenged/tested me,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 2.76$, $SD = .89$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.75$, $SD = .74$) and the comparison group average ($M = 2.78$, $SD = 1.09$) being within less than a half standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 2.86$, $SD = .91$). During session five the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.92$, $SD = .90$) and the comparison group average ($M = 2.78$, $SD = .97$) being within a standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 2.57$, $SD = .87$). During session three the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.92$, $SD = .67$) and the comparison group average ($M = 2.11$, $SD = .94$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 2.62$, $SD = .92$). During session four the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.67$, $SD = .65$) and the comparison group average ($M = 2.56$, $SD = 1.24$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 2.33$, $SD = .102$). During session five the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.33$, $SD = .99$) and the comparison group average ($M = 2.33$, $SD = 1.12$) being within less than a standard deviation of the other.

Table 17: Descriptive Statistics for Immersion Experience (SC challenged/tested me).

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session One</i>				
Experimental Group		12	2.75	.74
Comparison Group		9	2.78	1.09
Sample	21		2.76	.89
<i>Session Two</i>				
Experimental Group		12	2.92	.90
Comparison Group		9	2.78	.97
Sample	21		2.86	.91
<i>Session Three</i>				
Experimental Group		12	2.92	.67
Comparison Group		9	2.11	.94
Sample	21		2.57	.87
<i>Session Four</i>				
Experimental Group		12	2.67	.65
Comparison Group		9	2.56	1.24
Sample	21		2.62	.92
<i>Session Five</i>				
Experimental Group		12	2.33	.99
Comparison Group		9	2.33	1.12
Sample	21		2.33	1.02

On the sixth collection point (session six), the sample was normally distributed ($M = 2.76$, $SD = 1.14$). During session six the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.92$, $SD = .99$) and the comparison group average ($M = 2.56$, $SD = 1.33$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 2.57$, $SD = 1.08$). During session seven the groups reported the following scores on the “SC challenged/tested me “, with the experimental group average ($M = 2.75$, $SD = .97$) and the comparison group average ($M = 2.33$, $SD = 1.23$) being within a standard deviation of the other. On the eighth collection point (session eight), the sample

was normally distributed ($M = 2.81, SD = 1.05$). During session eight the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.83, SD = .94$) and the comparison group average ($M = 2.78, SD = 1.20$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 2.52, SD = 1.03$). During session nine the groups reported the following scores on the “SC challenged/tested me” during session nine, with the experimental group average ($M = 2.58, SD = .99$) and the comparison group average ($M = 2.44, SD = 1.24$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 2.86, SD = 1.11$). During session ten the groups reported the following scores on the “SC challenged/tested me”, with the experimental group average ($M = 2.83, SD = 1.11$) and the comparison group average ($M = 2.89, SD = 1.17$) being within less than a half standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the experimental group’s ratings of “SC challenged/tested me” were consistently higher than the comparison’s ratings over the course of the ten sessions. The experimental group’s ratings were slightly lower than the comparison group’s rating at the beginning of the study, session one, and at the end of the study, session ten. However, between session two and session nine the experimental group’s ratings were higher than the comparison group’s ratings. Overall, the experimental group reported that the simulated client they worked with weekly challenged or tested them during their sessions at a higher rate than the comparison group.

Table 18: Descriptive Statistics for Immersion Experience (SC challenged/tested me) cont.

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	2.92	.99
Comparison Group		9	2.56	1.33
Sample	21		2.76	1.14
<i>Session Seven</i>				
Experimental Group		12	2.75	.97
Comparison Group		9	2.33	1.23
Sample	21		2.57	1.08
<i>Session Eight</i>				
Experimental Group		12	2.83	.94
Comparison Group		9	2.78	1.20
Sample	21		2.81	1.03
<i>Session Nine</i>				
Experimental Group		12	2.58	.90
Comparison Group		9	2.44	1.24
Sample	21		2.52	1.03
<i>Session Ten</i>				
Experimental Group		12	2.83	1.11
Comparison Group		9	2.89	1.17
Sample	21		2.86	1.11

For item seven on the MaSP, “SC simulated concerns unrealistically,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 1.24$, $SD = .54$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 1.42$, $SD = .67$) and the comparison group average ($M = 1.00$, $SD = .00$) being within a standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 1.39$, $SD = .59$). During session two the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group

average ($M = 1.67$, $SD = .65$) and the comparison group average ($M = 1.00$, $SD = .00$) being within a standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 1.71$, $SD = .64$). During session three the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 1.92$, $SD = .67$) and the comparison group average ($M = 1.44$, $SD = .53$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 1.67$, $SD = .80$). During session four the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 2.08$, $SD = .79$) and the comparison group average ($M = 1.11$, $SD = .33$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 1.43$, $SD = .81$). During session five the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 1.75$, $SD = .96$) and the comparison group average ($M = 1.00$, $SD = .00$) being within less than a standard deviation of the other.

Table 19: Descriptive Statistics for Immersion Experience (SC simulated concerns unrealistically).

	<u><i>N</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>
<i>Session One</i>				
Experimental Group		12	1.42	.67
Comparison Group		9	1.00	.00
Sample	21		1.24	.54
<i>Session Two</i>				
Experimental Group		12	1.67	.65
Comparison Group		9	1.00	.00
Sample	21		1.39	.59
<i>Session Three</i>				
Experimental Group		12	1.92	.67
Comparison Group		9	1.44	.53
Sample	21		1.71	.64
<i>Session Four</i>				
Experimental Group		12	2.08	.79
Comparison Group		9	1.11	.33
Sample	21		1.67	.80
<i>Session Five</i>				
Experimental Group		12	1.75	.96
Comparison Group		9	1.00	.00
Sample	21		1.43	.81

On the sixth collection point (session six), the sample was normally distributed ($M = 1.62$, $SD = .81$). During session six the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 1.92$, $SD = .90$) and the comparison group average ($M = 1.22$, $SD = .44$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 1.90$, $SD = .83$). During session seven the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 2.42$, $SD = .67$) and the comparison

group average ($M = 1.22$, $SD = .44$) being within a standard deviation of the other. On the eighth collection point (session eight), the sample was normally distributed ($M = 1.76$, $SD = .94$). During session eight the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 2.25$, $SD = .97$) and the comparison group average ($M = 1.11$, $SD = .33$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 1.71$, $SD = .90$). During session nine the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 2.25$, $SD = .87$) and the comparison group average ($M = 1.00$, $SD = .00$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 1.57$, $SD = .81$). During session ten the groups reported the following scores on the “SC simulated concerns unrealistically”, with the experimental group average ($M = 1.92$, $SD = .90$) and the comparison group average ($M = 1.11$, $SD = .33$) being within a standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the experimental group’s ratings of “SC simulated concerns unrealistically” were consistently similar to the comparison group’s ratings over the course of the ten sessions. Overall, the comparison group reported that the simulated client they worked with weekly presented concerns in a realistically during their sessions at a higher rate than the experimental group.

Table 20: Descriptive Statistics for Immersion Experience (SC simulated concerns unrealistically) cont.

	<u>N</u>	<u>N</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	1.92	.90
Comparison Group		9	1.22	.44
Sample	21		1.62	.81
<i>Session Seven</i>				
Experimental Group		12	2.42	.67
Comparison Group		9	1.22	.44
Sample	21		1.90	.83
<i>Session Eight</i>				
Experimental Group		12	2.25	.97
Comparison Group		9	1.11	.33
Sample	21		1.76	.94
<i>Session Nine</i>				
Experimental Group		12	2.25	.87
Comparison Group		9	1.00	.00
Sample	21		1.71	.90
<i>Session Ten</i>				
Experimental Group		12	1.92	.90
Comparison Group		9	1.11	.33
Sample	21		1.57	.81

For item eight on the MaSP, “SC's mannerisms matched his/her story,” the comparison group consistently reported higher scores when compared to the experimental group. The sample was normally distributed ($M = 3.29$, $SD = .72$) on the pretest (session one). During the pretest the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.08$, $SD = .67$) and the comparison group average ($M = 3.56$, $SD = .73$) being within less than a half standard deviation of the other. On the second collection point (session two), the sample was normally distributed ($M = 3.19$, $SD = .93$). During session session the groups reported the following scores on the “SC's mannerisms matched his/her story, with the

experimental group average ($M = 2.75$, $SD = .97$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the third collection point (session three), the sample was normally distributed ($M = 3.29$, $SD = .72$). During session three the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.08$, $SD = .67$) and the comparison group average ($M = 3.56$, $SD = .73$) being within a standard deviation of the other. On the fourth collection point (session four), the sample was normally distributed ($M = 3.38$, $SD = .74$). During session four the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.08$, $SD = .79$) and the comparison group average ($M = 3.78$, $SD = .44$) being within a standard deviation of the other. On the fifth collection point (session five), the sample was normally distributed ($M = 3.24$, $SD = .83$). During session five the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.25$, $SD = .75$) and the comparison group average ($M = 3.22$, $SD = .97$) being within less than a standard deviation of the other.

Table 21: Descriptive Statistics for Immersion Experience (SC's mannerisms matched his/her story).

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session One</i>				
Experimental Group		12	3.08	.67
Comparison Group		9	3.56	.73
Sample	21		3.29	.72
<i>Session Two</i>				
Experimental Group		12	2.75	.97
Comparison Group		9	3.78	.44
Sample	21		3.19	.93
<i>Session Three</i>				
Experimental Group		12	3.08	.67
Comparison Group		9	3.56	.73
Sample	21		3.29	.72
<i>Session Four</i>				
Experimental Group		12	3.08	.79
Comparison Group		9	3.78	.44
Sample	21		3.38	.74
<i>Session Five</i>				
Experimental Group		12	3.25	.75
Comparison Group		9	3.22	.97
Sample	21		3.24	.83

On the sixth collection point (session six), the sample was normally distributed ($M = 3.38$, $SD = .94$). During session six the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.17$, $SD = .94$) and the comparison group average ($M = 3.67$, $SD = .50$) being within a standard deviation of the other. On the seventh collection point (session seven), the sample was normally distributed ($M = 3.29$, $SD = .85$). During session seven the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 3.00$, $SD = .95$) and the comparison group average ($M = 3.67$, $SD = .50$) being within a standard deviation of the other. On

the eighth collection point (session eight), the sample was normally distributed ($M = 3.19$, $SD = .98$). During session eight the groups reported the following scores on the “SC's mannerisms matched his/her story”, with the experimental group average ($M = 2.83$, $SD = 1.03$) and the comparison group average ($M = 3.67$, $SD = .71$) being within a standard deviation of the other. On the ninth collection point (session nine), the sample was normally distributed ($M = 3.52$, $SD = .81$). During session nine the groups reported the following scores on the “SC's mannerisms matched his/her story” during session nine, with the experimental group average ($M = 3.17$, $SD = .94$) and the comparison group average ($M = 4.00$, $SD = .00$) being within a standard deviation of the other. On the tenth collection point (session ten), the sample was normally distributed ($M = 3.43$, $SD = .60$). During session ten the groups reported the following scores on the “SC's mannerisms matched his/her story” during session ten, with the experimental group average ($M = 3.17$, $SD = .58$) and the comparison group average ($M = 3.78$, $SD = .44$) being within less than a half standard deviation of the other.

The researcher examined the changes between the data collection points for the groups, finding that the comparison group’s ratings of “SC's mannerisms matched his/her story” were consistently similar to the experimental group’s ratings over the course of the ten sessions. Overall, the comparison group reported that the simulated client they worked with weekly were congruent in their presentation at a higher rate than the experimental group.

Table 22: Descriptive Statistics for Immersion Experience (SC's mannerisms matched his/her story) cont.

	<u>N</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<i>Session Six</i>				
Experimental Group		12	3.17	.94
Comparison Group		9	3.67	.50
Sample	21		3.38	.81
<i>Session Seven</i>				
Experimental Group		12	3.00	.95
Comparison Group		9	3.67	.50
Sample	21		3.29	.85
<i>Session Eight</i>				
Experimental Group		12	2.83	1.03
Comparison Group		9	3.67	.71
Sample	21		3.19	.98
<i>Session Nine</i>				
Experimental Group		12	3.17	.94
Comparison Group		9	4.00	.00
Sample	21		3.52	.81
<i>Session Ten</i>				
Experimental Group		12	3.17	.58
Comparison Group		9	3.78	.44
Sample	21		3.43	.60

Third Research Question. The Counselor Self-efficacy Scale (CSES: Melchert et al., 1996) was used to measure the counselors-in-training's (CITs) beliefs about their ability to provide counseling services in the future, specifically in practicum and internship. The assessment was given to the participants at two distinct points: (a) at the beginning of the semester (pretest), and (b) at the end of the semester (posttest). The sample was normally distributed ($M = 65.95$, $SD = 11.91$) on the pretest (see Figure 17 and 18). During the pretest the groups reported the following scores on the CSES, with the experimental group average ($M = 63.42$, $SD = 7.98$) being 5.91 points less than the

comparison group average ($M = 69.33$, $SD = 15.63$), which is within one standard deviation of the other.

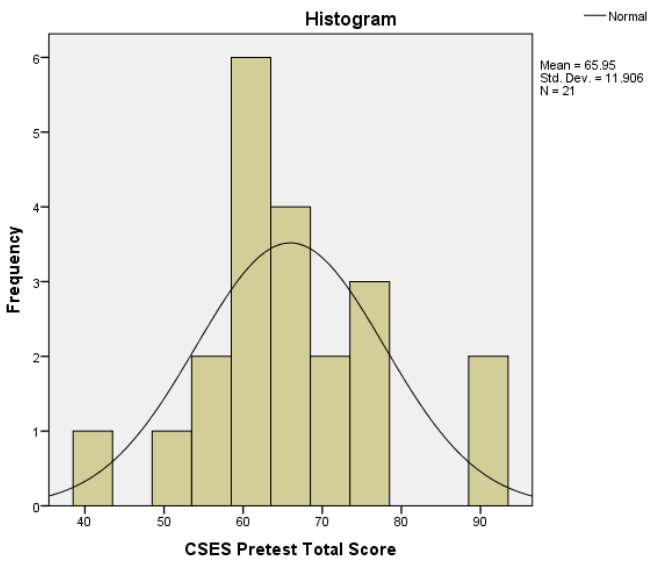


Figure 17: Distribution of CSES pretest scores (histogram).

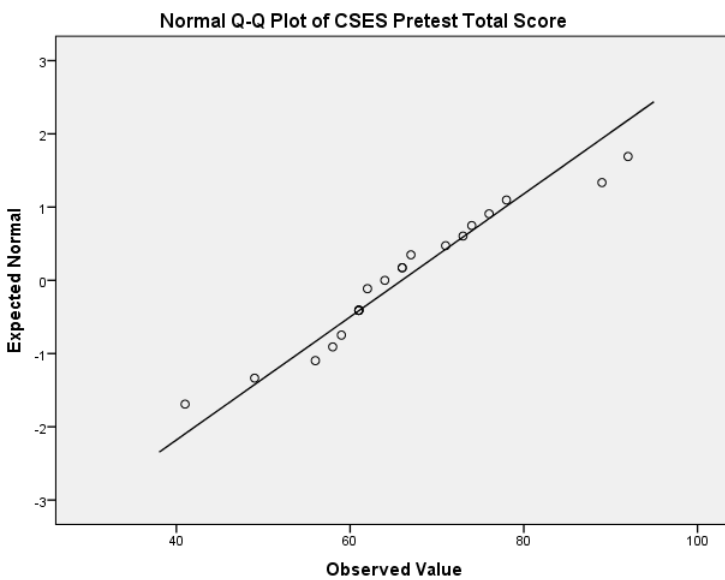


Figure 18: Distribution of CSES pretest scores (Q-Q plot).

On the second collection point (posttest), the sample was normally distributed ($M = 75.95$, $SD = 9.28$) (see Figures 19 and 20). During the posttest the groups reported the following scores on the CSES, with the experimental group average ($M = 73.58$, $SD = 7.96$) being 5.53 points less than the comparison group average ($M = 79.11$, $SD = 11.36$), which is within one standard deviation of the other.

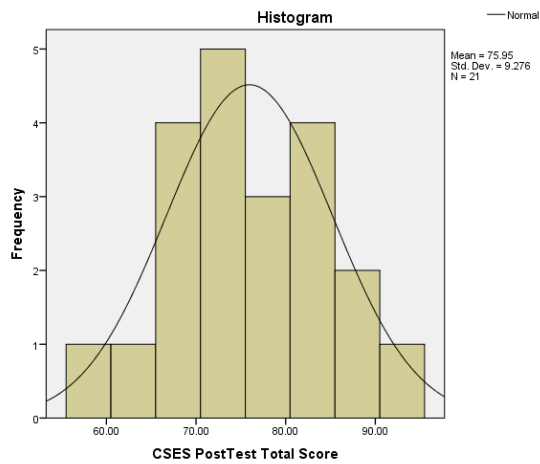


Figure 19: Distribution of CSES posttest scores (histogram).

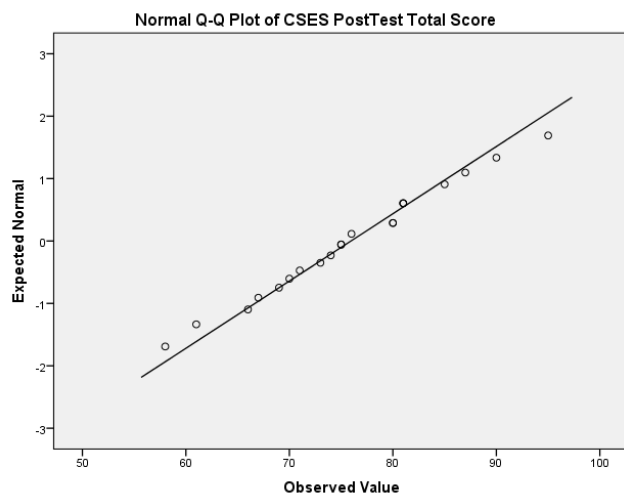


Figure 20: Distribution of CSES posttest scores (Q-Q plot).

The researcher examined the changes between the data collection points for the groups, finding that both the experimental group and comparison group experienced the same increase in counselor self-efficacy; however, the comparison group reported higher levels of CSE at both the pretest and the posttest.

Table 23: Descriptive Statistics for Counselor Self-Efficacy.

	<u>N</u>	<u>N</u>	<u>M</u>	<u>SD</u>
<i>Pretest</i>				
Experimental Group		12	63.42	7.98
Comparison Group		9	69.33	15.63
Sample	21		65.95	11.91
<i>Posttest</i>				
Experimental Group		12	73.58	7.96
Comparison Group		9	79.11	11.36
Sample	21		75.95	9.28

Fourth Research Question. The Beck Anxiety Inventory (BAI: Beck & Steer, 1990) was used to measure the CITs' general anxiety levels at the beginning and at the end of the semester. The assessment was given to the participants at two distinct points: (a) the beginning of the semester (pretest), and (b) at the end of the semester (posttest). The sample was not normally distributed ($M = 13.90$, $SD = 11.30$) on the pretest (see Figures 21 and 22). During the pretest the groups reported the following scores on the BAI, with the experimental group average ($M = 13.25$, $SD = 12.15$) being 1.53 points less than and the comparison group average ($M = 14.78$, $SD = 10.71$), which is within a half a standard deviation of the other.

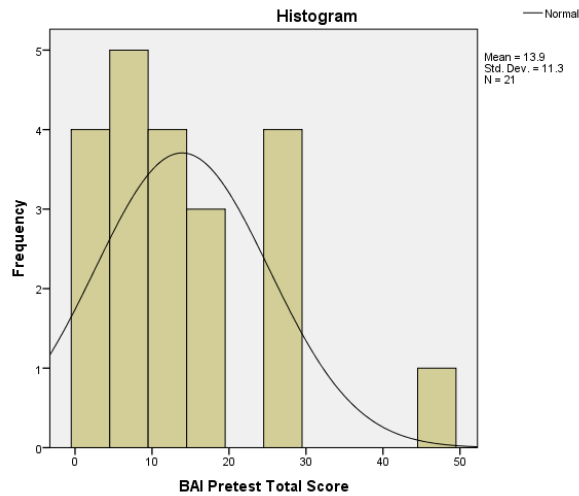


Figure 21: Distribution of BAI pretest scores (histogram).

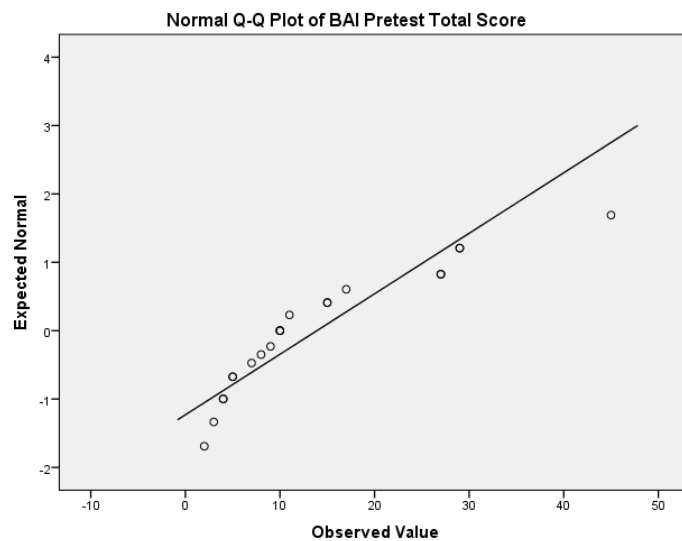


Figure 22: Distribution of BAI pretest scores (Q-Q plot).

On the second collection point (posttest), the sample was normally distributed ($M = 14.57$, $SD = 10.93$) (see Figures 23 and 24). During the posttest the groups reported the following scores on the BAI, with the experimental group average ($M = 10.67$, $SD = 9.58$) being 9.11 points less than and the comparison group average ($M = 19.78$, $SD = 10.80$).

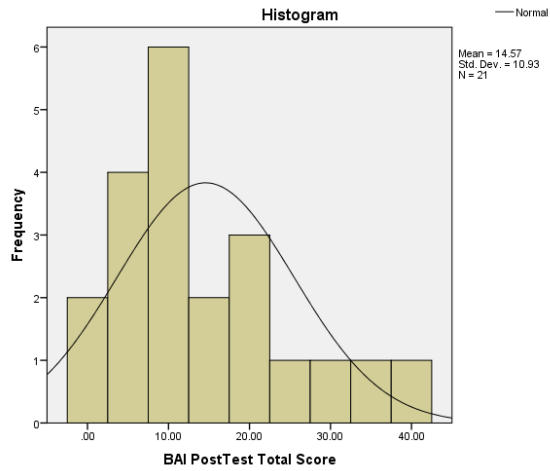


Figure 23: Distribution of BAI posttest scores (histogram).

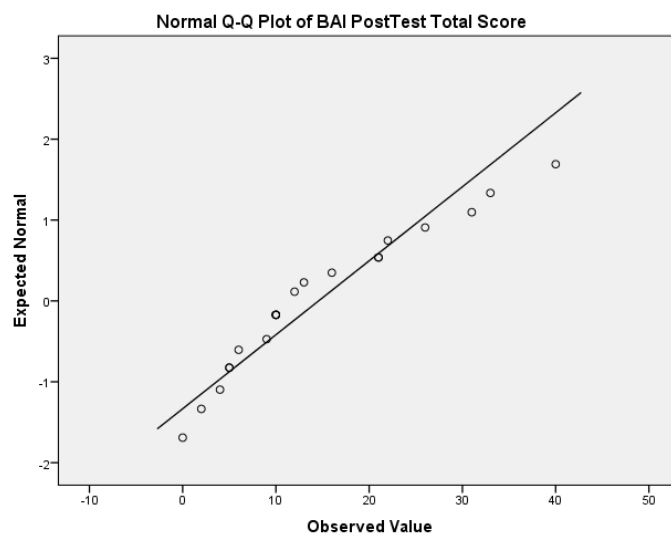


Figure 24: Distribution of BAI posttest scores (Q-Q plot).

The researcher examined the changes between the data collection points for the groups, finding the experimental group experienced a decrease in their general anxiety levels after the treatment while the comparison group experienced an increase in their *general* anxiety levels.

Table 24: Descriptive Statistics for General Anxiety.

	<u>N</u>	<u>N</u>	<u>M</u>	<u>SD</u>
<i>Pretest</i>				
Experimental Group		12	13.25	12.15
Comparison Group		9	14.78	10.71
Sample	21		13.90	11.30
<i>Posttest</i>				
Experimental Group		12	10.67	9.58
Comparison Group		9	19.78	10.80
Sample	21		14.57	10.93

Performance anxiety. The Anxiety Subjective Units of Distress Scale (Anxiety SUDS) was used to measure the CITs' performance anxiety levels prior to completing their recorded mock counseling sessions. The assessment was given to the participants at four points: (a) the beginning of the semester (pretest), (b) before the middle of the semester (midpoint one), (c) after the middle of semester (midpoint two), and (d) at the end of the semester (posttest). The sample was normally distributed ($M = 5.19$, $SD = 2.16$) on the pretest (see Figures 25 and 26). During the pretest the groups reported the following scores on the Anxiety SUDS, with the experimental group average ($M = 6.08$, $SD = 2.02$) being 2.08 points more than and the comparison group average ($M = 4.00$, $SD = 1.87$), which is within one standard deviation of the other.

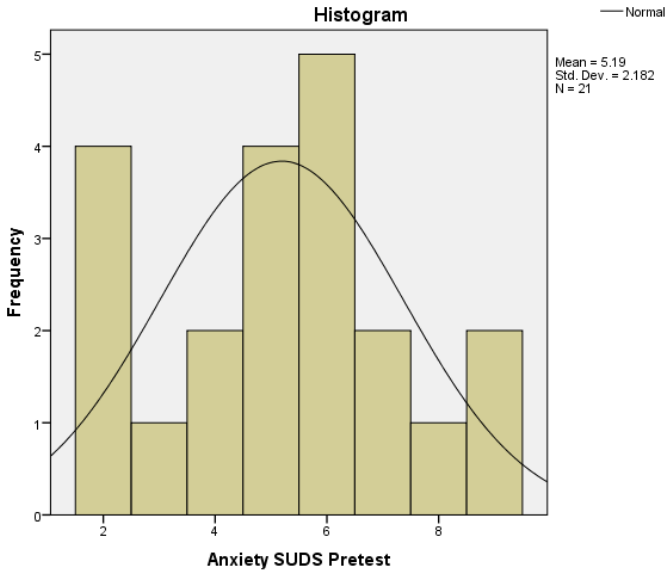


Figure 25: Distribution of Anxiety SUDS pretest scores (histogram).

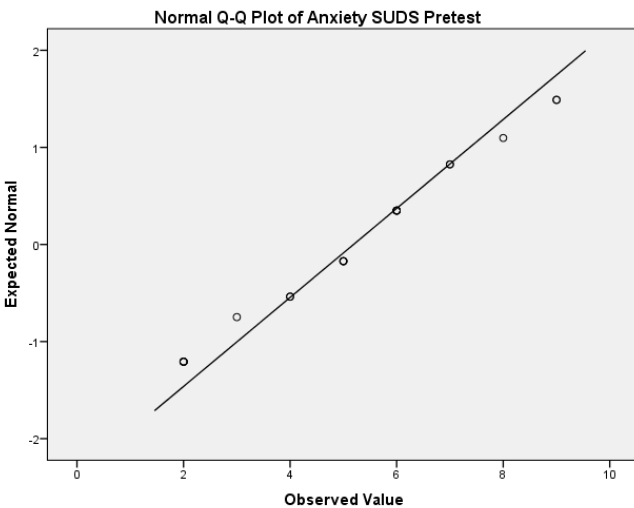


Figure 26: Distribution of Anxiety SUDS pretest scores (Q-Q plot).

On the second collection point (midpoint one), the sample was normally distributed ($M = 4.57$, $SD = 1.86$) (see Figures 27 and 28). During midpoint one the groups reported the following scores on the Anxiety SUDS, with the experimental group average ($M = 4.57$, $SD = 2.04$) being 0.13 points more

than and the comparison group average ($M = 4.44$, $SD = 1.74$), which is within less than a standard deviation of the other.

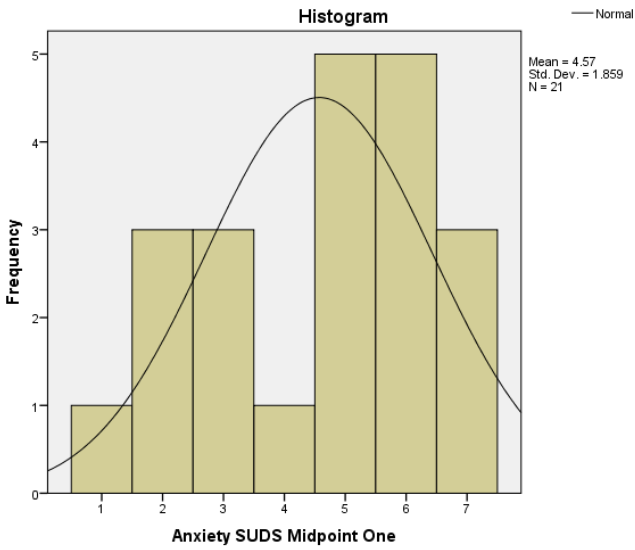


Figure 27: Distribution of Anxiety SUDS scores midpoint one (histogram).

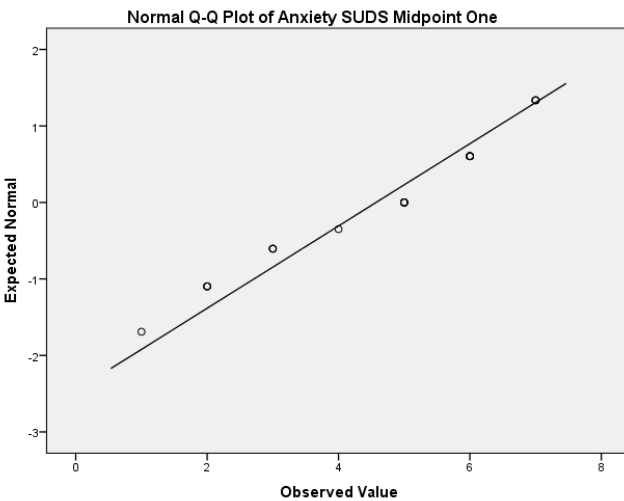


Figure 28: Distribution of Anxiety SUDS scores midpoint one (Q-Q plot).

On the third collection point (midpoint two), the sample was normally distributed ($M = 4.52$, $SD = 2.16$) (see Figures 29 and 30). During midpoint two the groups reported the following scores on the Anxiety SUDS, with the experimental group average ($M = 4.58$, $SD = 1.73$) being 0.14 points more than and the comparison group average ($M = 4.44$, $SD = 1.74$), which is within half a standard deviation of the other.

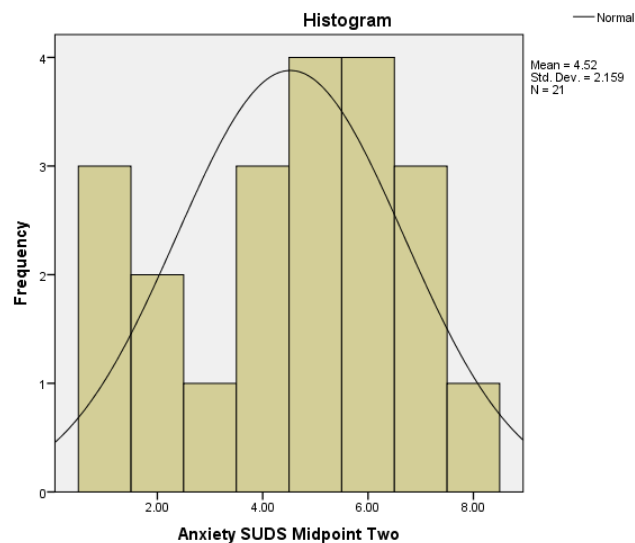


Figure 29: Distribution of Anxiety SUDS scores midpoint two (Histogram).

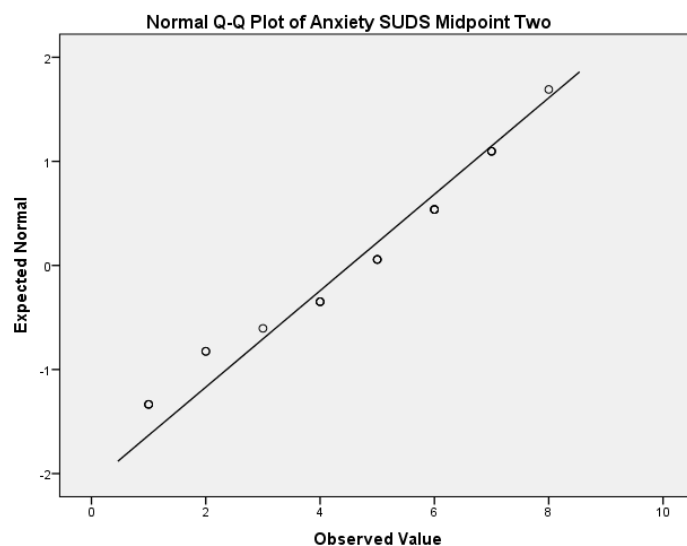


Figure 30: Distribution of Anxiety SUDS scores midpoint two (Q-Q plot).

On the fourth collection point (posttest), the sample was normally distributed ($M = 5.14$, $SD = 2.06$) (see Figures 31 and 32). During the posttest the groups reported the following scores on the Anxiety SUDS, with the experimental group average ($M = 5.33$, $SD = 2.31$) and the comparison group average ($M = 4.90$, $SD = 2.74$), which is within a standard deviation of the other.

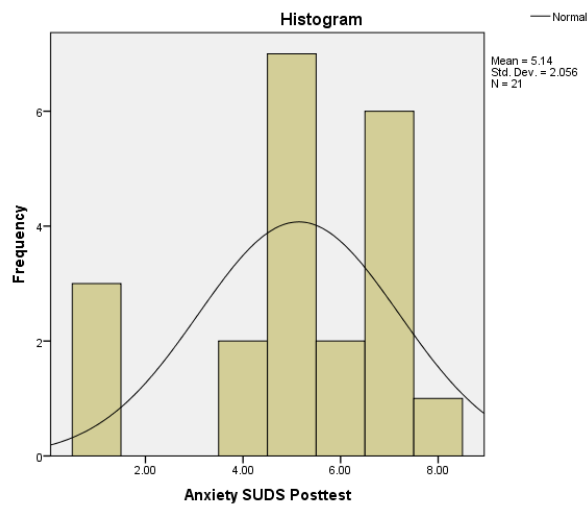


Figure 31: Distribution of Anxiety SUDS scores posttest (histogram).

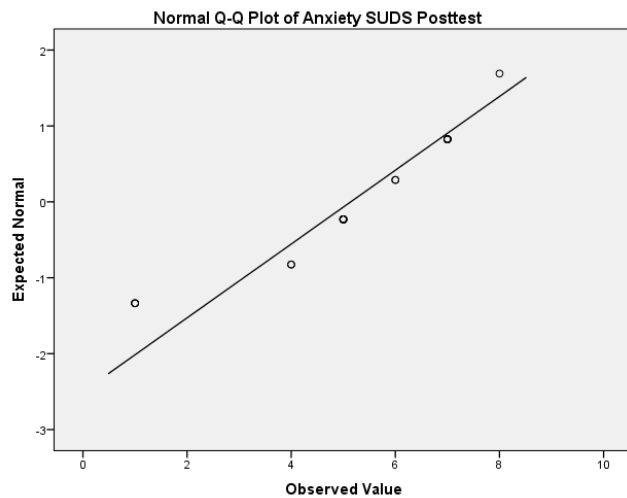


Figure 32: Distribution of Anxiety SUDS scores posttest (Q-Q plot).

The researcher examined the changes between the data collection points for the groups, finding the experimental group experienced a decrease in *performance* anxiety between pretest and midpoint one, and between midpoint one and midpoint two, and then experienced an increase in performance anxiety between midpoint two to posttest. The comparison group experienced an increase in performance anxiety between pretest and midpoint one, and between midpoint two to posttest, and experienced no change between midpoint one and midpoint two. Overall, the experimental group experienced a decrease in their performance anxiety levels while the comparison group experienced an increase in their general anxiety levels.

Table 25: Descriptive Statistics for Performance Anxiety.

	<u>N</u>	<u>N</u>	<u>M</u>	<u>SD</u>
<i>Pretest</i>				
Experimental Group		12	6.08	2.02
Comparison Group		9	4.00	1.87
Sample	21		5.19	2.16
<i>Midpoint One</i>				
Experimental Group		12	4.57	2.04
Comparison Group		9	4.44	1.74
Sample	21		4.57	1.86
<i>Midpoint Two</i>				
Experimental Group		12	4.58	1.73
Comparison Group		9	4.44	1.74
Sample	21		4.52	2.16
<i>Posttest</i>				
Experimental Group		12	5.33	2.31
Comparison Group		9	4.90	2.74
Sample	21		5.14	2.06

Data Analysis and Results for Research Questions

Basic Counseling Skills

Primary Research Question Hypothesis One. There is a difference in the external raters' evaluations of basic counseling skills between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A split plot analysis of variance (SPANOVA) was conducted between the experimental and the comparison groups across pretest, midpoint one, midpoint two, and posttest. An alpha level of .05 was utilized. Assumptions for normality were met in the posttest condition for the experimental group ($p = .49$) and the comparison group ($p = .91$) and homogeneity of variances (Box's $M = 6.62$, $p = .89$) were met. Descriptive statistics for the dependent variables across the groups are presented in Table 26.

Table 26: Descriptive Statistics for Levels of Basic Counseling Skills Development as Measured by the CCS.

	Group Membership	<i>M</i>	<i>SD</i>	<i>N</i>
CCS Pretest	Experimental	58.33	7.67	12
	Comparison	56.89	8.84	9
	Total	57.71	8.01	21
CCS Midpoint One	Experimental	64.33	4.25	12
	Comparison	66.44	5.08	9
	Total	65.24	4.63	21
CCS Midpoint Two	Experimental	67.75	6.90	12
	Comparison	68.22	6.04	9
	Total	67.95	6.39	21
CCS Posttest	Experimental	71.00	4.94	12
	Comparison	70.89	6.09	9
	Total	70.95	5.31	21

At the beginning of the study, both groups exhibited similar basic counseling skills levels ($M = 58.33$; $SD = 7.67$ and $M = 56.89$; $SD = 8.84$, respectively). At the conclusion of the study, there was no statistically significant interaction between group membership and time, Wilk's Lambda = .95, $F(3,17) = .29$, $p = .05$, $\eta_p^2 = .05$ (Figure 33). This finding suggests that the participants' group membership did not have an effect on the participants' development of basic counseling skills from pretest to midpoint one to midpoint two to posttest.

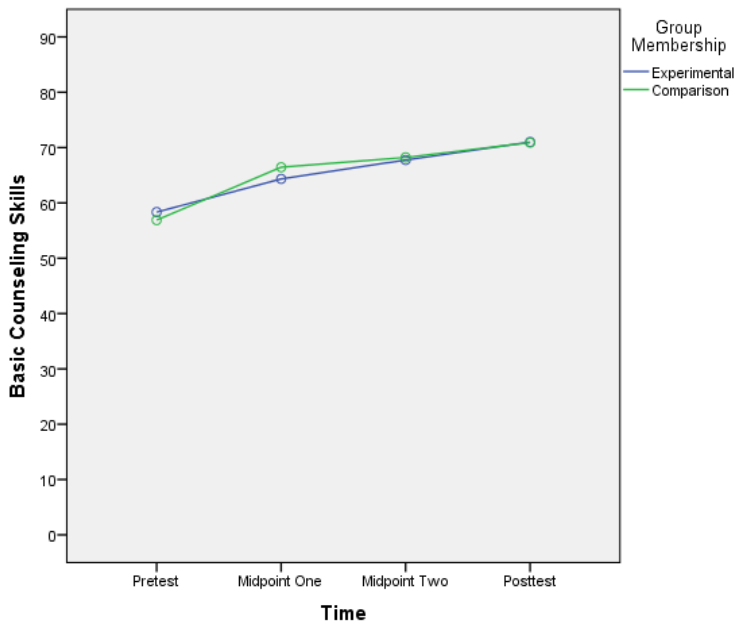


Figure 33: Interaction Effect between Group and Time for Basic Counseling Skills Development.

Further, there was no statistically significant effect observed between groups $F(1,19) = .04, p = .85, g = .02$ [CI95 = -2.31, 2.35] indicative of a small effect size (Table 27). The results represented in Figure 6 indicated that the participants in both groups had an increase in their basic counseling skills; however, the change was not statistically significant.

Table 27: Test of Between and Within Subjects Effects for Levels of Basic Counseling Skills Development as Measured by the CCS.

	<i>F</i>	Sig.	<i>g</i>
Between Subjects Effects			
Group	.04	.85	0.002
Within Subjects Effects			
Time*Group Membership	.29	.83	.05

A sensitivity analysis for a sample size of 21 indicated that a critical F value of at least 4.38 was necessary to demonstrate a moderate effect if one was present. The F value for both the between subjects and within subjects effects ($F = .04$ and $F = .29$, respectively) did not meet this criteria. The finding represents a small effect that is approximately .02 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 5.31, the participants in the experimental group could be expected to score .11 points higher on the CCS. The .11 points represents approximately 0.11% of a scale gain on the CCS. The CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations (UCF Counselor Education Faculty, 2009). In order for an individual to demonstrate competency of each item of the scale they have to earn a score of six or above (UCF Counselor Education Faculty, 2009).

Therefore, the .11 points would have an insignificant effect on CITs' CCS scores. Meaning a student can begin with a score of 72 and end with a score of 72.11 which reflects insignificant change in the student's performance anxiety level. Within counselor education a difference of .11 points across groups is considered as an insignificant difference because the amount of change represented by .11 does not represent a meaningful amount of change in that would have a practical effect on CITs' clinical skills development.

Primary Research Question Hypothesis Two. There is a difference in the basic counseling skills self-assessment between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A SPANOVA was conducted between the experimental and the comparison groups across pretest midpoint one, midpoint two, and posttest. An alpha level of .05 was utilized. Assumptions for normality were met in the posttest condition for the experimental group ($p = .43$) and the comparison group ($p = .23$) and homogeneity of variances (Box's $M = 14.98$, $p = .33$) were met. Descriptive statistics for the dependent variables across the groups are in presented Table 28.

Table 28: Descriptive Statistics for Levels of Self-Reported Basic Counseling Skills Development as Measured by the CCS.

	Group Membership	<i>M</i>	<i>SD</i>	<i>N</i>
CCS Pretest	Experimental	59.92	11.60	12
	Comparison	62.44	14.17	9
	Total	61.00	12.49	21
CCS Midpoint One	Experimental	62.17	12.83	12
	Comparison	66.67	11.75	9
	Total	64.10	12.29	21

CCS Midpoint Two	Experimental	65.33	9.39	12
	Comparison	68.67	10.20	9
	Total	66.7619	9.60	21
CCS Posttest	Experimental	72.00	8.78	12
	Comparison	72.67	7.42	9
	Total	72.29	8.03	21

At the beginning of the study, both groups exhibited similar self-reported levels of basic counseling skills ($M = 59.92$; $SD = 11.60$ and $M = 62.44$; $SD = 14.17$, respectively). At the conclusion of the study, there was no statistically significant interaction between group membership and time, Wilk's Lambda = .98, $F(3,17) = .12$, $p = .95$, $\eta_p^2 = .02$ (Figure 34). This finding suggests that the participants' group membership did not have an effect on the participants' self-reported basic counseling skills development from pretest to midpoint one to midpoint two to posttest.

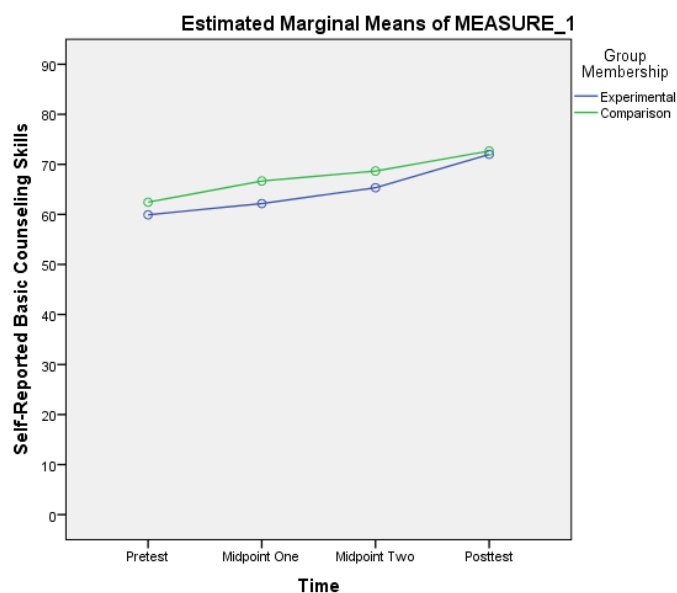


Figure 34: Interaction Effect between Group and Time for the Self-Reported Basic Counseling Skills Development.

Further, there was no statistically significant effect observed between groups $F(1,19) = .59, p = .45, g = .08$ [CI95 = -3.60, 3.44] (Table 29). The results represented in Figure 7 indicated that the participants in both groups had an increase in their self-reported basic counseling skills; however, the change was not statistically significant.

Table 29: Tests of Between and Within Subjects Effects for Level of Self-Reported Basic Counseling Skills Development as Measured by the CCS.

	<i>F</i>	Sig.	η_p^2
Between Subjects Effects			
Group	.59	.45	.03
Within Subjects Effects			
Time*Group Membership	.12	.95	.02

A sensitivity analysis for a sample size of 21 indicated that a critical F value of a least 4.38 was necessary to demonstrate a moderate effect if one was present. The F value for the both between subjects and within subjects effects ($F = .59$ and $F = .12$, respectively) did not meet this criteria. The finding represents a small effect that is approximately .08 of 1 standard deviation difference

between the groups. Given a posttest standard deviation of 8.03, the participants in the experimental group could be expected to score .64 points higher on the CCS.. The .64 points represents approximately 0.67% of a scale gain on the CCS. The CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations(UCF Counselor Education Faculty, 2009).. In order for an individual to demonstrate competency of each item of the scale they have to earn a score of six or above (UCF Counselor Education Faculty, 2009). Meaning a student can begin with a score of 72 and end with a score of 72.11 which reflects insignificant change in the student's performance anxiety level. However, within counselor education a difference of .64points across groups is considered as an insignificant difference because the amount of change represented by .64 does not represent a meaningful amount of change in that would have a practical effect on CITs' clinical skills development.

Immersion Experience

Secondary Research Question Hypothesis One. There is a difference in the immersion experience between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A trend analysis was conducted between the experimental and the comparison groups across ten distinct data collection points (week one through week ten). At the beginning of the study, both groups were similar in their ratings of "SC was clearly role playing" ($M = 1.83$; $SD = .72$ and $M = 1.78$; $SD = 1.20$, respectively). The results represented in Figure 3 show no significant difference between the two groups. However, the experimental group's rating were slightly higher when compared to the comparison group's rating. These findings indicated that the participants in both groups

knew that the simulated client they worked with weekly was role playing during the weekly mock counseling sessions.

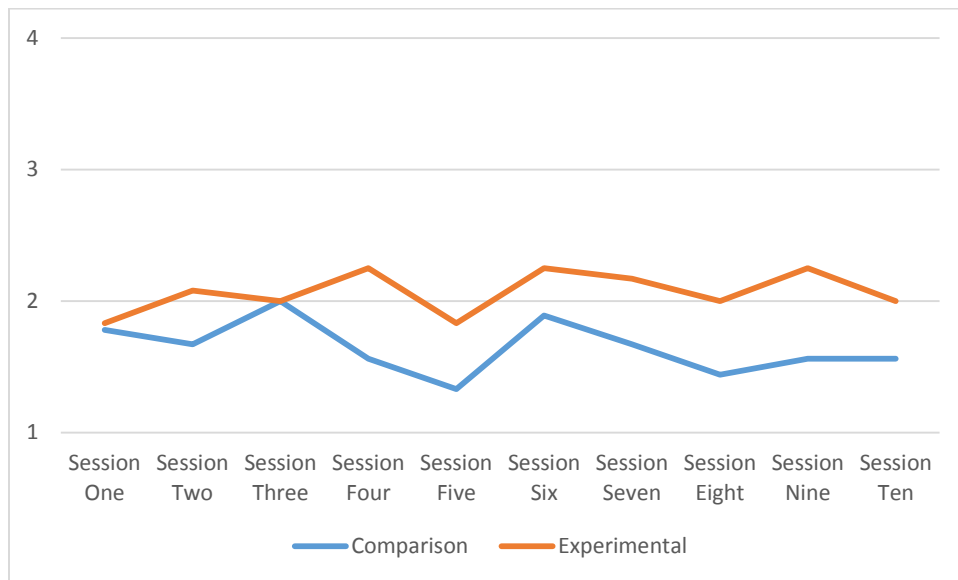


Figure 35: Rating of "SC was clearly role playing".

At the beginning of the study, both groups were very similar in their ratings of “SC stayed in his/her role the entire session” ($M = 3.83$; $SD = .39$ and $M = 3.89$; $SD = .33$, respectively). The results represented in Figure 4 show no significant difference between the two groups. However, the comparison group’s rating were slightly higher when compared to the experimental group’s rating. These findings indicated that the participants in both groups felt that the simulated client they worked with weekly was able to remain in character for the duration of the session during the weekly mock counseling sessions.

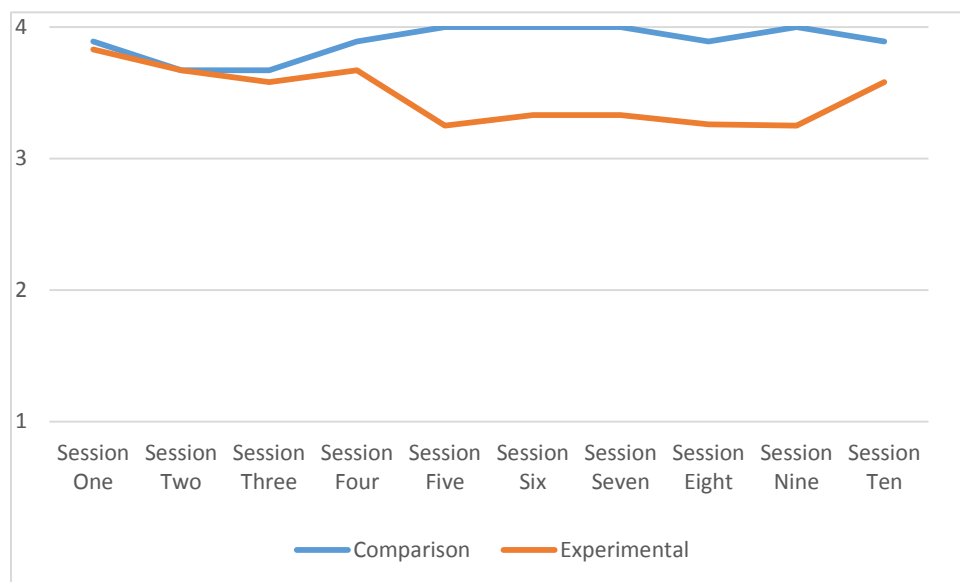


Figure 36: Rating of "SC stayed in his/her role the entire session".

At the beginning of the study, both groups were very similar in their ratings of "SC challenged/tested me" ($M = 2.75$; $SD = .74$ and $M = 2.78$; $SD = 1.04$, respectively). The results represented in Figure 5 show no significant difference between the two groups. These findings indicated that the participants in both group felt challenged or tested by the simulated client they worked with during the weekly mock counseling sessions.

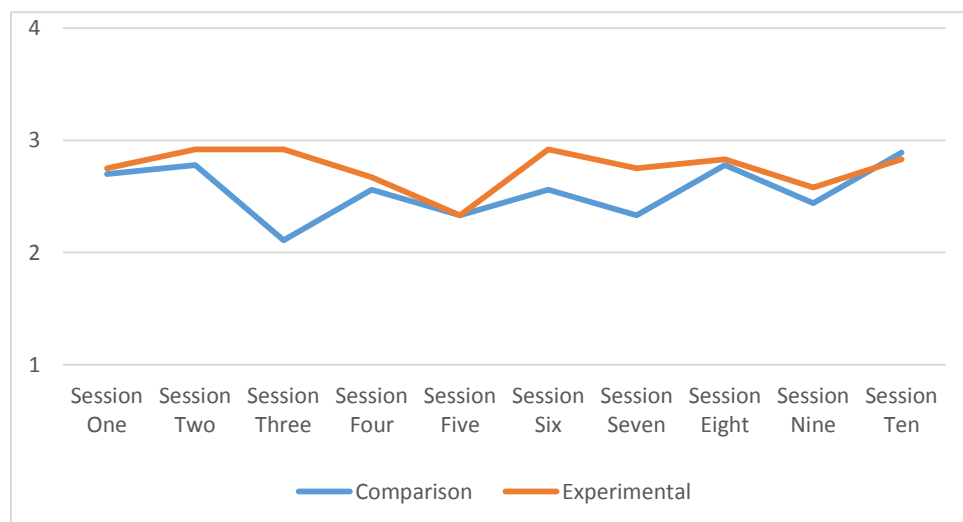


Figure 37: Ratings of "SC challenged/test me".

Secondary Research Question Hypothesis Two. There is a difference in the authenticity rating of the mock counseling sessions between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play (as indicated by the Maastricht Assessment of Simulated Patients (MaSP; Wind et al., 2004). A trend analysis was conducted between the experimental and the comparison groups across ten distinct data collection points (week one through week 10). At the beginning of the study, both groups were similar in their ratings of “SC appeared authentic” ($M = 3.0$; $SD = .85$ and $M = 3.6$; $SD = .71$, respectively). The results represented in Figure 6 show no significant difference between the two groups. However, the comparison group’s rating were slightly higher when compared to the experimental group’s rating. These findings indicated that the participants in both groups reported that the simulated client they worked with weekly appeared authentic during the weekly mock counseling sessions.

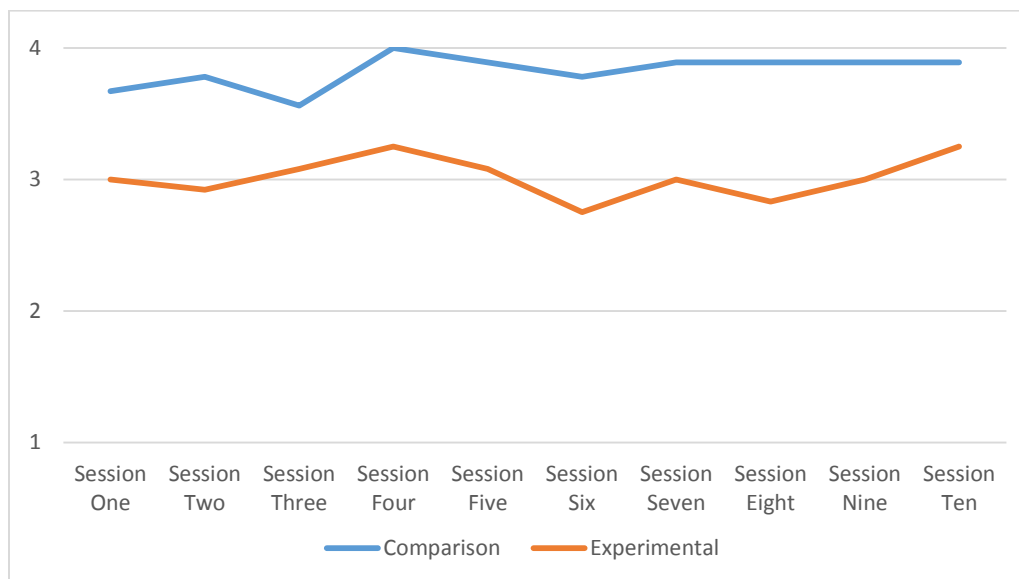


Figure 38: Ratings of "SC appeared authentic".

At the beginning of the study, both groups were similar in their ratings of “SC could be a real client” ($M = 3.42$; $SD = .71$ and $M = 4.00$; $SD = .00$, respectively). The results represented in Figure 7 show no significant difference between the two groups from session one through session six and slight difference between the two groups from session seven through session ten. However, the comparison group’s rating was slightly higher when compared to the experimental group’s rating. These findings indicated that the participants in both groups reported that the simulated client they worked with weekly presented in a way they thought was congruent to how *real* clients would present during sessions in the weekly mock counseling sessions.

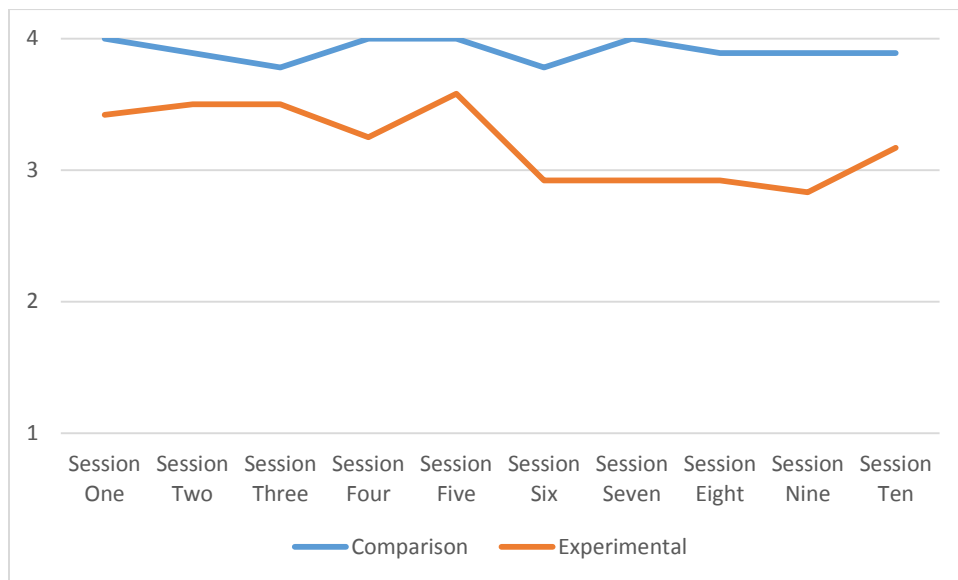


Figure 39: Ratings of "SC could be a real client".

At the beginning of the study, both groups were similar in their ratings of “SC simulated concerns unrealistically” ($M = 1.42$; $SD = .67$ and $M = 1.00$; $SD = .00$ respectively). The results represented in Figure 8 show no significant difference between the two groups. However, the experimental group’s rating was slightly higher when compared to the comparison group’s rating. These findings indicated that the participants in both groups reported that the simulated

client they worked with weekly presented their concerns in manner that was realistic during the weekly mock counseling sessions.

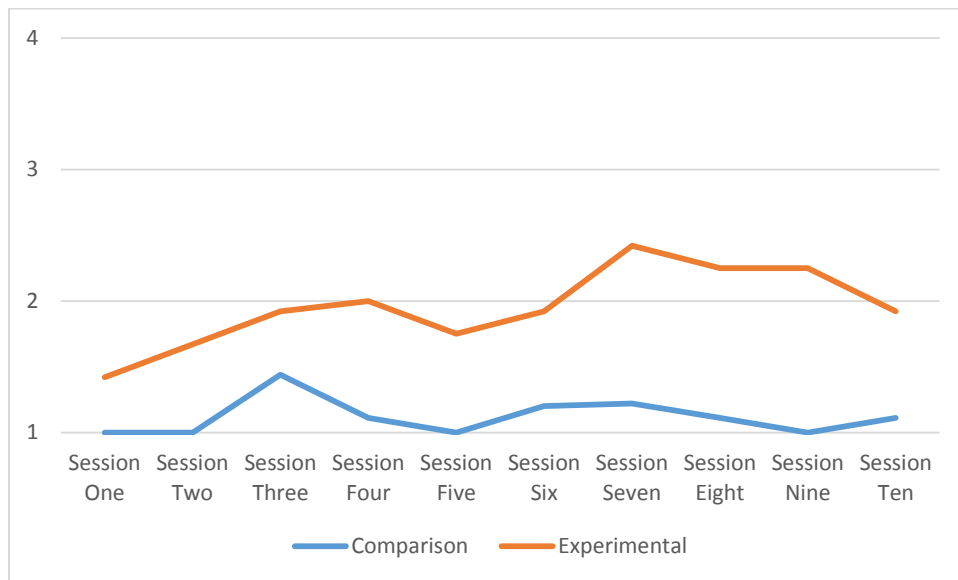


Figure 40: Rating of "SC simulated concerns unrealistically".

At the beginning of the study, both groups were similar in their ratings of “SC’s mannerisms matched his/her story” ($M = 3.08$; $SD = .67$ and $M = 3.56$; $SD = .73$, respectively). The results represented in Figure 9 show no significant difference between the two groups. However, the comparison group’s rating was slightly higher when compared to the experimental group’s rating. These findings indicated that the participants in both groups reported that the simulated client they worked with weekly were congruent in their presentation during the weekly mock counseling sessions.

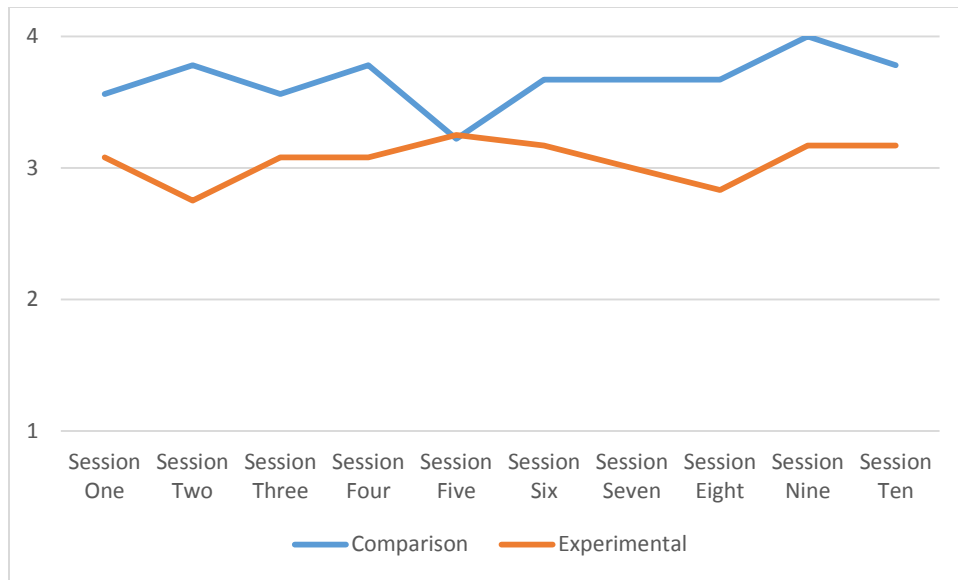


Figure 41: Rating of "SC's mannerisms matched his/her story".

Counselor Self-Efficacy

Third Research Question Hypothesis One. There is a difference in overall self-efficacy scores between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A split plot analysis of variance (SPANOVA) was conducted between the experimental and the comparison groups across pretest and posttest. An alpha level of .05 was utilized. Assumptions for normality were met in the posttest condition for the experimental group ($p = .86$) and the comparison group ($p = .83$) and homogeneity of variances (Box's $M = 9.22$, $p = .04$) were met. Descriptive statistics for the dependent variables across the groups are in presented Table 30.

Table 30: Descriptive Statistics for Levels of Counselor Self-Efficacy as Measured by the CSES.

	Group Membership	<i>M</i>	<i>SD</i>	<i>N</i>
CSES Pretest	Experimental	63.42	7.98	12
	Comparison	69.33	15.63	9
	Total	65.95	11.91	21
CSES Posttest	Experimental	73.58	6.95	12
	Comparison	79.11	11.36	9
	Total	75.95	9.27	21

At the beginning of the study, both groups exhibited similar counselor self-efficacy levels ($M = 63.42$; $SD = 7.98$ and $M = 69.33$; $SD = 15.63$, respectively). At the conclusion of the study, there was no statistically significant interaction between group membership and time, Wilk's Lambda = 1.00, $F(1,19) = .004$, $p = .05$, $\eta_p^2 = .00$ (Figure 42). This finding suggests that the participants' group membership did not have an effect on the participants' reported CSE from pretest to posttest.

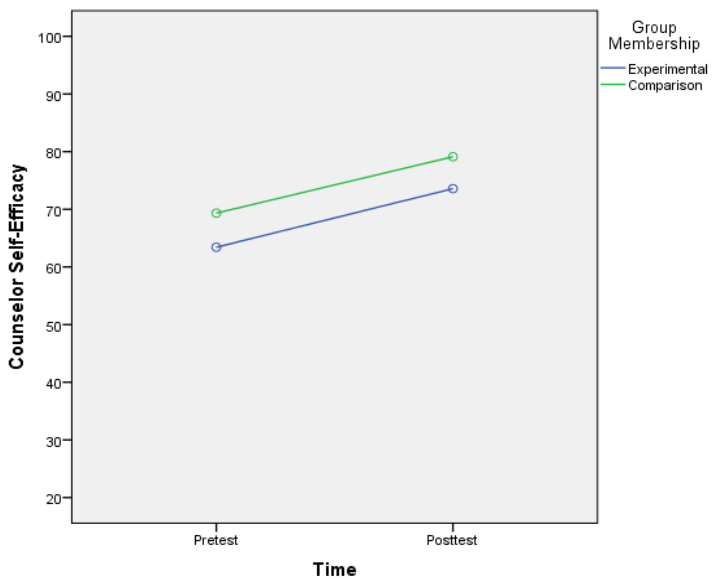


Figure 42: Interaction Effect between Group and Time for Counselor Self-Efficacy.

Further, there was no statistically significant effect observed between groups $F(1,19) = 2.90, p = .11, g = .59$ [CI95 = -4.47, 3.30] (Table 31). The results represented in Figure 42 show no statistically significant difference between the two groups. These findings indicated that the participants in both groups had an increase in their levels of counselor self-efficacy at the same rate.

Table 31: Tests of Between and Within Subjects Effects for Levels of Counselor Self-Efficacy as Measured by the CSES.

	<i>F</i>	Sig.	η_p^2
Between Subjects Effects			
Group	2.90	.11	0.13
Within Subjects Effects			
Time*Group Membership	.004	.05	.00

A sensitivity analysis for a sample size of 21 indicated that a critical *F* value of a least 4.38 was necessary to demonstrate a moderate effect if one was present. The *F* value for the both between subjects and within subjects effects ($F = 1.44$ and $F = 4.18$, respectively) did not meet this criteria. The finding represents a medium effect that is approximately .59 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 9.27, the participants in the experimental group could be expected to score 5.47 points higher on the CSES. The 5.47 points represents approximately 5.5% of a scale gain on the CSES. The CSES' total raw scores range from 20 to 100, with high scores corresponding with high levels of counselor self-efficacy (Melchert et al., 1996). Meaning a student can begin with a CSES score of 55 and end with a score of 60. Within counselor education a difference of 5.47 points across groups is considered as a significant difference because the amount of change represented by 5.47 does represent a

meaningful amount of change within perception of self-efficacy that would have a practical effect on CITs' development.

Anxiety

Fourth Research Question Hypothesis One. There is a difference in “overall” anxiety between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A split plot analysis of variance (SPANOVA) was conducted between the experimental and the comparison groups across pretest and posttest. An alpha level of .05 was utilized. Assumptions for normality were met in the posttest condition for the experimental group ($p = .03$) and the comparison group ($p = .78$) and homogeneity of variances (Box's $M = 2.44$, $p = .54$) were met. Descriptive statistics for the dependent variables across the groups are in presented Table 32.

Table 32: Descriptive Statistics for Level of General Anxiety as Measured by the BAI.

	Group Membership	<i>M</i>	<i>SD</i>	<i>N</i>
BAI Pretest	Experimental	13.25	12.15	12
	Comparison	14.78	10.71	9
	Total	13.90	11.30	21
BAI Posttest	Experimental	10.67	9.68	12
	Comparison	19.78	10.79	9
	Total	14.57	10.93	21

At the beginning of the study, both groups exhibited similar general anxiety levels ($M = 13.25$; $SD = 12.15$ and $M = 14.78$; $SD = 10.71$, respectively). At the conclusion of the study, there was no statistically significant interaction between group membership and time, Wilk's Lambda =

.82, $F(1,19) = 4.18$, $p = .06$, $\eta_p^2 = .18$ (Table 32). The findings represented in Figure 43 suggest that the participants in the experimental group reported a slight decrease in the level of their *general* anxiety from pretest to posttest while the participants in the comparison group reported a slight increase in the levels of their *general* anxiety; however, this change was not statistically significant.

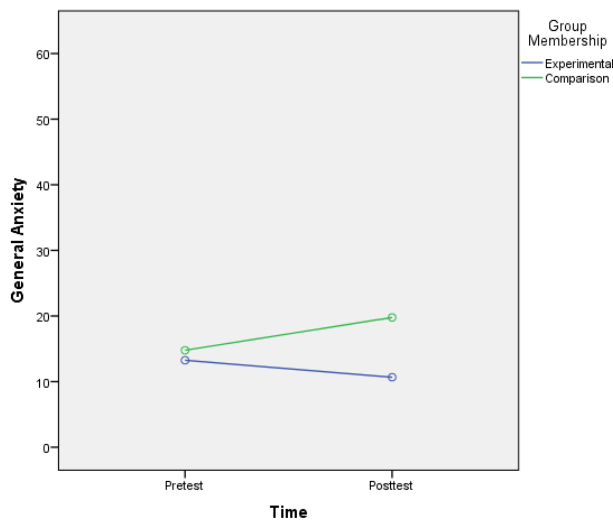


Figure 43: Interaction Effect between Group and Time for Level of General Anxiety

There was no statistically significant effect observed between groups $F(1,19) = 1.44$, $p = .24$, $g = .86$, $[CI95 = -5.21, 3.49]$ (Table 33). Although no statistical significance was found, the results represented in Figure 16 show a difference between the two groups. These findings indicated that the participants in the experimental group had a decrease in their general anxiety while the participants in the comparison group had an increase in the levels of their general anxiety.

Table 33: Tests of Between and Within Subjects Effects for Levels of General Anxiety as Measured by BAI.

	<i>F</i>	Sig.	η_p^2
Between Subjects Effects			
Group	1.44	.24	0.07
Within Subjects Effects			
Time*Group Membership	4.18	.06	1.80

A sensitivity analysis for sample size of 21 indicated that a critical F value of a least 4.38 was necessary to demonstrate a moderate effect if one was present. The F value for the both between subjects and within subjects effects ($F = 1.44$ and $F = 4.18$, respectively) did not meet this criteria. The finding represents a large effect that is approximately .89 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 10.93, the participants in the experimental group could be expected to score 9.73 points lower on the BAI. The 9.73 points represents approximately 15% of a scale gain on the BAI. On the BAI the high scores correspond with high levels of anxiety (Beck & Steer, 1990). Total scores between the ranges of 0 and 7 reflect a minimal level of anxiety, scores between 8 and 15 reflect a mild level of anxiety, scores between 16 and 25 reflect a moderate level of anxiety, and scores between 26 and 63 reflect a severe level of anxiety (Beck & Steer, 1990). Meaning a student can begin with a BAI score of

26, severe level of anxiety, and end with a score of 16, moderate level of anxiety. The student would have transitioned from presenting with anxiety at a clinical level to lower more manageable level. Within counselor education a difference of 9.73 points across groups is considered as a significant difference because the amount of change represented by 9.73 does represent a meaningful amount of change within perception of general anxiety that would have a practical effect on CITs' development.

Fourth Research Question Hypothesis Two. There is a difference in “performance or current” anxiety between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. A split plot analysis of variance (SPANOVA) was conducted between the experimental and the comparison groups across pretest midpoint one, midpoint two, and posttest. An alpha level of .05 was utilized. Assumptions for normality were met in the posttest condition for the experimental group ($p = .03$) and the comparison group ($p = .03$) and homogeneity of variances (Box's $M = 11.60$, $p = .55$) were met. Descriptive statistics for the dependent variables across the groups are in presented Table 34.

Table 34: Descriptive Statistics for Levels of Performance Anxiety as Measured by Anxiety SUDS.

	Group Membership	<i>M</i>	<i>SD</i>	<i>N</i>
Anxiety SUDS Pretest	Experimental	6.08	2.02	12
	Comparison	4.00	1.87	9
	Total	5.19	2.18	21
Anxiety SUDS Midpoint One	Experimental	4.67	2.02	12
	Comparison	4.44	1.74	9
	Total	4.57	1.86	21
Anxiety SUDS Midpoint Two	Experimental	4.58	1.729	12
	Comparison	4.44	2.74	9
	Total	4.52	2.16	21
Anxiety SUDS Posttest	Experimental	5.33	2.31	12
	Comparison	4.89	1.76	9
	Total	5.14	2.06	21

At the beginning of the study, both groups exhibited similar performance anxiety levels ($M = 6.08$; $SD = 2.02$ and $M = 4.00$; $SD = 1.87$, respectively). At the conclusion of the study, the SPANOVA did not detect a statistically significant interaction between group membership and time, Wilk's Lambda = .80, $F(3,17) = 1.40$, $p = .28$, $\eta_p^2 = .20$ (Figure 44).

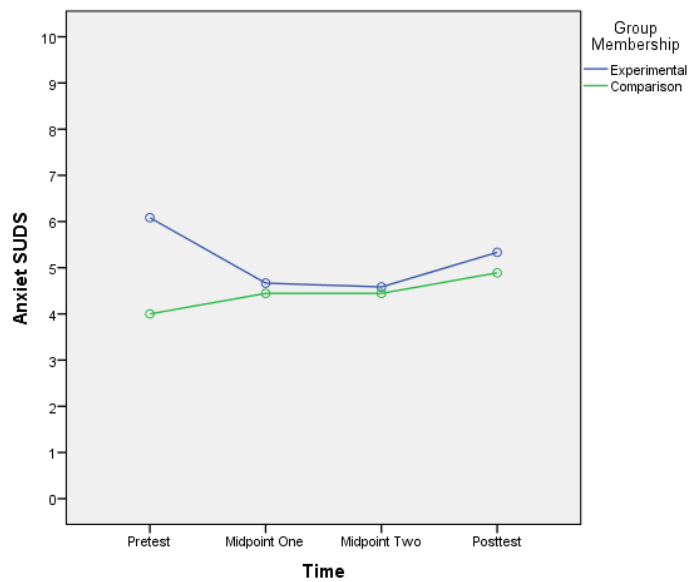


Figure 44: Interaction Effect between Group and Time for Performance Anxiety.

There was no statistically significant effect observed between groups $F(1,19) = 1.12, p = .30, g = .20$ [CI95 = -0.70, 1.10] (Table 35). Although no statistical significance was found, the results represented in Figure 44 show a difference between the two groups. These findings indicated that participants in the experimental group had a slight decrease in their performance anxiety while the participants in the comparison group had a slight increase in their performance anxiety.

Table 35: Tests of Between and Within Subjects Effects for Levels of Performance Anxiety as Measured by Anxiety SUDS.

	<i>F</i>	Sig.	η_p^2
Between Subjects Effects			
Group	1.12	.30	.06
Within Subjects Effects			
Time*Group Membership	1.40	.28	.20

A sensitivity analysis for sample size of 21 indicated that a critical *F* value of a least 4.38 was necessary to demonstrate a moderate effect if one was present. The *F* value for the both between subjects and within subjects effects ($F = 1.12$ and $F = 1.40$, respectively) did not meet this criteria. The finding represents a medium effect that is approximately .20 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 2.06, the participants in the experimental group could be expected to score .41 points higher on the Anxiety SUDS. The .20 points represents approximately 2% of a scale gain on the Anxiety SUDS. On the Anxiety SUDS the higher scores corresponds to higher levels for anxiety consists of a 10 point scale ranging from “completely calm and focused on performance” (0 points) to “extremely anxious and cannot continue with performance” (10 points). Meaning a student can begin with a score of 8, which indicates “very anxious and cannot fully concentrate on

performance”, and end with a score of 7.89 which reflects insignificant change in the student’s performance anxiety level. Within counselor education a difference of .41 points across groups is considered as a significant difference because the amount of change represented by .41 does represent a meaningful amount of change of performance that would have a practical effect on CITs’ development.

Clinical Significance

Clinical significance was evaluated for counselor skills development and levels of anxiety. According to Thompson (2002), clinical significance explores whether an intervention makes a genuine difference in the lives of the participants. The CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations (UCF Counselor Education Faculty, 2009).. In order for an individual to demonstrate competency of each item of the scale they have to earn a score of six or above (UCF Counselor Education Faculty, 2009).

On the BAI the high scores correspond with high levels of anxiety (Beck & Steer, 1990). Total scores between the ranges of 0 and 7 reflect a minimal level of anxiety, scores between 8 and 15 reflect a mild level of anxiety, scores between 16 and 25 reflect a moderate level of anxiety, and scores between 26 and 63 reflect a severe level of anxiety (Beck & Steer, 1990).

CCS Self-report. This section consists of the clinical significance for the CCS completed by the participants. On the pretest for item one “nonverbal skill”, eight of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas seven of the nine participants in the comparison group earned a score of six or above on the pretest and eight of nine participants earned a score of six or above on the posttest. On the pretest for item two “encouragers”, six of

the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and eight of nine participants earned a score of six or above on the posttest.

On the pretest for item three “open-ended and closed-ended questions”, six of the twelve participants in the experimental group earned a score of six or above and on the posttest eight of the twelve participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and six of nine participants earned a score of six or above on the posttest. On the pretest for item four “reflection of content or paraphrasing”, six of the twelve participants in the experimental group earned a score of six or above and on the posttest ten of the twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest. On the pretest for item five “reflection of feeling”, five of the twelve participants in the experimental group earned a score of six or above and on the posttest nine of the twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and eight of the nine participants earned a score of six or above on the posttest.

On the pretest for item six “advanced reflection-reflection of meaning”, three of the twelve participants in the experimental group earned a score of six or above and on the posttest three of the twelve participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and three of nine participants earned a score of six or above on the posttest. On the pretest for item seven

“advanced reflection-summarization”, six of the twelve participants in the experimental group earned a score of six or above and on the posttest nine of the twelve participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest. On the pretest for item eight “confrontation”, four of the twelve participants in the experimental group earned a score of six or above and on the posttest seven of the twelve participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and eight of nine participants earned a score of six or above on the posttest.

On the pretest for item nine “goal setting”, four of the twelve participants in the experimental group earned a score of six or above and on the posttest eight of the twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and six of nine participants earned a score of six or above on the posttest. On the pretest for item ten “focus of counseling”, five of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and seven of nine participants earned a score of six or above on the posttest. On the pretest for item eleven “facilitate therapeutic environment-empathy/care”, eight of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest. On the pretest for item twelve “facilitate therapeutic environment-

respective/positive regard”, ten of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas eight of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest.

CCS Evaluated by External Raters. This section consists of the clinical significance for the CCS completed by the external raters. On the pretest for item one “nonverbal skill”, eleven of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and eight of nine participants earned a score of six or above on the posttest. On the pretest for item two “encouragers”, eight of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas six of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest.

On the pretest for item three “open-ended and closed-ended questions”, five of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve of the participants earned a score of six or above. Whereas two of the nine participants in the comparison group earned a score of six or above on the pretest and eight of the nine participants earned a score of six or above on the posttest. On the pretest for item four “reflection of content or paraphrasing”, nine of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve of the participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest.

On the pretest for item five “reflection of feeling”, three of the twelve participants in the experimental group earned a score of six or above and on the posttest eleven of the twelve participants earned a score of six or above. Whereas two of the nine participants in the comparison group earned a score of six or above on the pretest and six of the nine participants earned a score of six or above on the posttest.

On the pretest for item six “advanced reflection-reflection of meaning”, none of the participants in the experimental group earned a score of six or above and on the posttest eight of the twelve participants earned a score of six or above. Whereas one of the nine participants in the comparison group earned a score of six or above on the pretest and six of nine participants earned a score of six or above on the posttest. On the pretest for item seven “advanced reflection-summarization”, none of the participants in the experimental group earned a score of six or above and on the posttest ten of the twelve participants earned a score of six or above. Whereas four of the nine participants in the comparison group earned a score of six or above on the pretest and seven of the nine participants earned a score of six or above on the posttest. On the pretest for item eight “confrontation”, two of the twelve participants in the experimental group earned a score of six or above and on the posttest nine of the twelve participants earned a score of six or above. Whereas one of the nine participants in the comparison group earned a score of six or above on the pretest and seven of nine participants earned a score of six or above on the posttest. On the pretest for item nine “goal setting”, one of the twelve participants in the experimental group earned a score of six or above and on the posttest eleven of the twelve participants earned a score of six or above. Whereas one of the nine participants in the comparison group earned a score of six or above on the pretest and six of nine participants earned a score of six or above on the posttest.

On the pretest for item ten “focus of counseling”, five of the twelve participants in the experimental group earned a score of six or above and on the posttest eleven of the twelve participants earned a score of six or above. Whereas three of the nine participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest. On the pretest for item eleven “facilitate therapeutic environment-empathy/care”, eleven of the twelve participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas all nine of the participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest. On the pretest for item twelve “facilitate therapeutic environment-respective/positive regard”, all twelve of the participants in the experimental group earned a score of six or above and on the posttest all twelve participants earned a score of six or above. Whereas all nine of the participants in the comparison group earned a score of six or above on the pretest and all nine of the participants earned a score of six or above on the posttest.

BAI. This section consists of the clinical significance for the BAI. On the pretest, 3 of the 12 participants in the experimental group reported scores of 7 or less which is the minimal level of anxiety, 5 of the 12 participants reported scores between 8 and 15 which is the mild level of anxiety, 1 of the 12 participants reported a score between 16 and 25 which is the moderate level of anxiety, and 1 of the 12 participants reported a score between 26 and 63 which is the severe level of anxiety. On the posttest, 5 of the 12 participants in the experimental group reported scores of 7 or less which is the minimal level of anxiety, 5 of the 12 participants reported scores between 8 and 15 which is the mild level of anxiety, and 1 of the 12 participants reported a score between 26 and 63 which is the severe level of anxiety.

Whereas 3 of the 9 participants in the comparison group reported scores of 7 or less which is the minimal level of anxiety, 3 of the 9 participants reported scores between 8 and 15 which is the mild level of anxiety, and 3 of the 9 participants reported a score between 26 and 63 which is the severe level of anxiety on the pretest. Further, on the posttest 1 of the 9 participants reported scores of 7 or less which is the minimal level of anxiety, 2 of the 12 participants reported scores between 8 and 15 which is the mild level of anxiety, 4 of the 12 participants reported a score between 16 and 25 which is the moderate level of anxiety, and 2 of the 12 participants reported a score between 26 and 63 which is the severe level of anxiety.

Chapter Summary

The results of this study provide several conclusions regarding the effectiveness of virtual simulation training on basic counseling skills development, immersion experience, counselor self-efficacy, and anxiety. First, the results of a SPANOVA indicated no significant interaction between participants based on the external raters' evaluations of the basic counseling skills development from pretest, to midpoint one, to midpoint two, to posttest. These findings support the retention of the null hypothesis that there is no difference in the external raters' evaluations of basic counseling skills between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. Second, the results of a SPANOVA indicated no significant interaction between participants' self-assessment of basic counseling skills development from pretest, to midpoint one, to midpoint two, to posttest. This findings support the retention of the null hypothesis that there is no difference in the self-assessment of basic counseling skills between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. It is

important to note that the scores of the raters were higher than the scores of the self-assessment for all the data collection points except for the pretest.

Third, the results of a trend analysis indicated no difference between the groups' immersion experience from week one through week ten. This finding supports the retention of the null hypothesis that there is no difference in the immersion experience between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. Fourth, the results of a trend analysis indicated no difference between the groups' authenticity rating from week one through week ten. This finding supports the retention of the null hypothesis that there is no difference in the authenticity rating between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Fifth, the results of a SPANOVA indicated no significant interaction between participants' overall self-efficacy scores from pretest to posttest. This finding supports the retention of the null hypothesis that there is no difference in the overall self-efficacy scores between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

Sixth, the results of a SPANOVA indicated no significant interaction between participants' overall anxiety from pretest to posttest. This finding supports the retention of the null hypothesis that there is no difference in the overall anxiety between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. Finally, the results of a SPANOVA indicated no significant interaction between participants' performance anxiety from pretest to posttest. This finding supports the retention of the null hypothesis that there is no difference in the performance anxiety between

counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play.

CHAPTER FIVE: DISCUSSION

Introduction

This chapter discusses the contents of the first four chapters and includes an overview of the study and a discussion of the results and their relationship to previous research. The chapter will conclude by discussing the limitations of this study, the implications, and recommendations for future research.

Summary of the Study

This study explored the impact of virtual simulation program on the development of counselors-in-training (CITs) basic counseling skills. The study examined if there was a difference in the basic counseling skills development, immersion experience, levels of counselor self-efficacy and levels of anxiety between counselors-in-training who participated in student-to-avatar role play and those counselors-in-training who participate in student-to-student role play. The study used a pretest-posttest quasi-experimental research design and used purposive sampling. Data was collected at different data collection points, using the following instruments: (a) the Beck Anxiety Inventory (BAI) (pretest and posttest), (b) Counselor Self-Efficacy Scale (CSES) (pretest and posttest), (c) Counselor Competency Scale (CCS) (pretest, midpoint one, midpoint two, and posttest), (d) Maastricht Assessment of Simulated Patients modified (MaSP) (weekly for ten weeks), (e) Anxiety Subjective Units of Distress (Anxiety SUDS) (pretest, midpoint one, midpoint two, and posttest), and demographic questionnaire for participants and raters (pretest).

Participants

The study was conducted at a large Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredited university in the southeastern United States. The participants were counselors-in-training enrolled in a counseling techniques course. The sample

($N = 21$) consisted of students from three sections who were assigned into an experimental group ($n = 12$) and a comparison group ($n = 9$).

The comparison group included one marriage, couples, and family student (11.1%), three clinical mental health students (33.3%), four school students (44.4%), and one participant who did not respond to this question (11.1%). The experimental group included four marriage, couples, and family students (33.3%), four clinical mental health students (33.3%), and four school students (33.3%). The comparison group included one African American participant (11.1%), one Hispanic participant (11.1%), and seven Caucasians participants (77.8%). The experimental group included one Asian American participant (8.3%), one Hispanic participant (8.3%), eight Caucasians participants (66.7%) and two participants who identified as “other” (16.7%). The comparison group included six female participants (66.7%) and three male participants (33.3%). The experimental group included 12 female participants (100%) and no male participants.

Limitations

Sample

One of the main limitations of this study was the sample size ($N = 21$), which was divided into two groups ($n = 12$ and $n = 9$, respectively). With a small sample, the results are easily influenced by a single extreme score. The results of the study were found to be not statistically significant. Even though no statistically significant differences were found between the groups, the results are inconclusive due to the small sample. Future research should be facilitated with a larger sample size to investigate the consistency of the findings.

Novelty Effect

The fact that the TeachLive™ program is a new and an innovative program could have influenced the results of the study. At the beginning of the study, some of the participants in the experimental group were very dissatisfied with having to use the TeachLive™ program. The participants went as far as to write a letter expressing their concerns to the faculty supervisor of the course. The researcher met with the participants to discuss their concerns. The participants reported that their main concern was that the TeachLive™ component to their class was taking up too much of their instructional time. To address this concern, the participants agreed to transition to the TeachLive™ lab in groups of four, instead of pairs. The change in the transition format enabled for the sessions to be facilitated more smoothly and with less down time in between groups. In addition, there were participants in the experimental group who were very excited about using such innovative technology. Therefore, it is crucial to be mindful of the influence the novelty effect might have had on the results of this study. The experimental group participants who had a negative perception on the TeachLive™ program may have under reported.

Instrumentation

Another limitation of this study is instrumentation, more specifically, the use of the MaSP and the Anxiety SUDS. The MaSP was used to measure the CITs' immersion experience and authenticity ratings of the mock counseling sessions. The MaSP was originally developed for medical students and educators to evaluate the authenticity of role playing and the quality of feedback during a simulated session. Only one study (Fussell et al., 2009), in counselor education, was found that used the MaSP to evaluate the authenticity of simulated clients; however, the simulated clients were actors. Additionally, this study did not use the MaSP in its

entirety. Only the Authenticity subscale was used and it was modified. Two minor changes were made to the assessment. The term “simulated patient (SP)” was changed to “simulated client (SC)” and the tenth item, which states “SP starts conversation with the student(s) during time out,” was eliminated because it was not relevant to this study.

The Anxiety SUDS was used for measuring the CITs’ performance anxiety levels immediately prior to completing their four recorded mock counseling sessions. The Anxiety SUDS was created by the researcher. The only validation of the assessment completed was content validity, which was established by having four experts in the field (counselor educators) review the assessment.

Research Design

Another limitation of the current study was that a quasi-experimental research design was used to investigate the effect of the intervention on the constructs. The research design was the most appropriate design because it allows the researcher to manipulate the independent variable and use a non-randomized sample. The quasi-experimental design limited the ability to generalize the findings to a greater population.

An additional limitation to the research design was the distribution of the participants in the experimental group. Two sessions, Monday evening and Wednesday afternoon, made up the experimental group. The Monday session consisted of four participants and Wednesday afternoon consisted of eight participants. The number of participants had an influence on the flow of the weekly mock sessions in the TeachLive™ lab. The Monday session, which had half the number of participants as the Wednesday session, was scheduled for 60 minutes in the simulation lab while the Wednesday was scheduled for 90 minutes. Because of the size of the

Wednesday session, this session ended up having to spend more time facilitating the weekly mock counseling sessions.

Threats to Internal Validity

This study addressed threats to internal validity during its implementation. The following threats to internal validity were addressed: (a) selection bias, (b) history, and (c) design contamination. The first threat to internal validity was selection bias, which occurs when there is a lack of random assignment of participants to groups (Shadish et al., 2002). Therefore, the threat of selection bias was of great concern when using participants in intact groups. The pretest scores from the experimental group and comparison group were examined for similarity in scores and the demographic data, which assisted in controlling for the threat of selection bias.

The second threat to internal validity is history, which Shadish et al. (2002) define as events which occur over the course of the study which might affect the dependent variable(s). The participants in the study were enrolled in the same course; however, the different sections were held on different days of the week and different times during the day. Therefore, the participants may have experienced different events that might have influenced their participation in the study. Events such as holidays and campus closure for football games are events that had potential effects on this study. In addition, the experimental group experienced minor technological issues during two sessions, which may have interfered with the participants' learning. Furthermore, one section missed one class meeting while another section missed two class meetings due to different events (i.e. holidays, campus closure for football games). Additionally, one section had a substitute instructor due to the main instructor being out of town for a conference. The implementation of a pretest was the best way for the researcher to control for the threat of history.

The last threat to internal validity is design contamination, which refers to (1) the comparison group finding out about the intervention being implemented in the experimental group, or (2) the participants, in either group, having a reason to want to make the research succeed or fail (Shadish et al., 2002). The researcher took the following steps to decrease the likelihood of design contamination: (a) the title of the study was omitted from the informed consent form provided to each participant, and (b) the researcher instructed all participants not to discuss any details of the study outside of their section. However, there is no guarantee that the participants followed all the rules and guidelines outlined by the researcher.

Threats to External Validity

This study addressed threats to external validity during its implementation. The following threats to external validity were addressed: (a) interaction effect of testing, (b) interaction effect of selection biases, and (c) reactive effects of experimental arrangement. The first threat to external validity was interaction effect of testing, which is when the use of a pretest leads to participants gaining insight into the true nature of the experimental study which can cause the participants to react in a manner that is unnatural and different from how they would have reacted had a pretest not been administered (Shadish et al., 2002). In this study, the external threat to validity of the interaction effect of testing was minimal, given that the participants were informed of the constructs being examined by the researcher during the explanation of the study. The goal of the counseling techniques course is to teach the counseling students the basic counseling skills necessary to facilitate a productive counseling session, and for that reason the threat to external validity of interaction effect of testing was minimized. Furthermore, the university where the study was conducted is a research institution; therefore, the participants are accustomed to participating in research studies. The participants being exposed to prior research

can result in a positive or negative influence on the results of the study. The positive influence may consist of the participants understanding the value of research and importance of contributing to one's field. The negative influence may consist of the participants being overwhelmed by requests to participate in research studies and not seeing the value in their contribution.

Participation in this study was volunteer; therefore, the students enrolled in the counseling course had the option to opt-out. One student, who would have been part of the comparison group, opted-out of participating in the study. Due to the reasons listed above, the external threat to validity of the interaction of testing was minimized.

The second threat to external validity was interaction effect of selection biases, which occurs when the findings of the study have limited generalizability due to the nonrandomized selection of the participants (Shadish et al., 2002). The interaction effect of selection biases is unavoidable when working with intact groups or naturally occurring groups (Creswell, 2008). In this study, this threat was partially controlled for by the use of a quasi-experimental research design and the use of a pretest to help identify the homogeneity of the group (Gall et al., 2006).

The final threat to external validity was reactive effects of experimental arrangement, which is the concept that the participants may act differently because they are aware of their participation in a research study (Shadish et al., 2002). The threat is also known as the Hawthorne effect. As previously stated, the institution where the study was facilitated is a research institution; therefore, there is a high possibility that the students have already participated in previous research studies. Even if the students did not have previous research experience, they were aware that the faculty and doctoral students in their department were continuously conducting research. Furthermore, the researcher sought to limit external threats to validity by obtaining a diverse sample of participants. Moreover, additional external factors such

as time of the classes, participants' previous clinical training, or influence of the instructor, could not be controlled but may have influenced the study results.

Discussion

Basic Counseling Skills

The first hypothesis of the primary research question stated that there would be a difference in the external raters' evaluations of basic counseling skills between counseling students who participated in student-to-avatar role play and counseling students who participated in student-to-student role play. In analyzing the data in this study, a SPANOVA did not find a statistically significant difference in the external raters' evaluations of the development of basic counseling skills between the experimental group and the comparison group. To examine the effect size Hedge's g (.02) was calculated and the finding represents a small effect that is approximately .02 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 5.31, the participants in the experimental group could be expected to score .11 points higher on the CCS. The .11 points represents approximately 0.11% of a scale gain on the CCS. The CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations (UCF Counselor Education Faculty, 2009). In order for an individual to demonstrate competency of each item of the scale they have to earn a score of six or above (UCF Counselor Education Faculty, 2009). Therefore, the .11 points would have an insignificant effect on CITs' CCS scores. Meaning a student can begin with a score of 72 and end with a score of 72.11 which reflects insignificant change in the student's performance anxiety level. Within counselor education a difference of .11 points across groups is considered as an insignificant difference

because the amount of change represented by .11 does not represent a meaningful amount of change in that would have a practical effect on CITs' clinical skills development.

The second hypothesis of the primary research question stated that is a difference in the basic counseling skills self-assessment between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. In analyzing the data in this study, a SPANOVA did not find a significant difference in the self-assessment of the development of basic counseling skills between the experimental group and the comparison group. To examine the effect size Hedge's g (.08) was calculated and the finding represents a small effect that is approximately .08 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 8.03, the participants in the experimental group could be expected to score .64 points higher on the CCS.. The .64 points represents approximately 0.67% of a scale gain on the CCS. The CCS consists of five rater evaluation response categories that include: (a) 0 = harmful, (b) 2 = below expectations, (c) 4 = near expectations, (d) 6 = meets expectations, and (e) 8 = exceeds expectations (UCF Counselor Education Faculty, 2009).. In order for an individual to demonstrate competency of each item of the scale they have to earn a score of six or above (UCF Counselor Education Faculty, 2009). Meaning a student can begin with a score of 72 and end with a score of 72.11 which reflects insignificant change in the student's performance anxiety level. However, within counselor education a difference of .64points across groups is considered as an insignificant difference because the amount of change represented by .64 does not represent a meaningful amount of change in that would have a practical effect on CITs' clinical skills development.

The small sample size may have influenced the results. Scholars recommend a minimum of 15 participants per group when conducting an experimental or quasi-experimental research

design (Tabachnick & Fidell, 2007). Therefore, it is possible that the sample size of the current study may not have been large enough to detect a significant difference in the CCS scores. Furthermore, due to the small sample size, the results of from this study are inconclusive. In other words, because of the size of the sample it is not possible to conclude which condition was the most effective. Another factor that could have influenced the results of this study is the novelty of the instructional intervention. As previously noted, some of the participants in the experimental group had a negative perception of the virtual simulation program. The participants' negative perception may have led to some participants having a negative learning experience.

Although no statistical significance was found, for either the external raters' evaluation or the self-assessment, it is important to note that the participants in both groups had an increase in their counseling skills development from pretest to midpoint one to midpoint two to posttest. These results are similar to Hayes et al. (2003) findings, which identified no relationship between multimedia delivered instruction and the rate of counseling skills development for pre-practicum CITs. In addition, the findings from this study are similar to Gutierrez et al. (2007) findings, which identified no relationship between exposure to virtual simulation training and knowledge acquisition.

This study is unique because it used a quasi-experimental research design to explore the effect virtual simulation had on the development of basic counseling skills. Previous studies in counselor education that have explored the use of virtual simulation lacked a control/comparison group (Gonzalez, 2011; Walker, 2009), and the researchers did not measure the change in their participants' skills, they only reported the participants' perceptions.

Immersion Experience

The first hypothesis of the secondary research question stated that there is a difference in the immersion experience between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. The following three items on the MaSP (Wind et al., 2004) were examined collectively to determine the participants' immersion experience: (a) SC was clearly role playing, (b) SC stayed in his/her role the entire session, and (c) SC challenged/test me. In analyzing the data in this study, a Trend Analysis did not find a significant difference in the reported immersion experience between the experimental group and the comparison group.

The second hypothesis of the secondary research question stated that there is a difference in the authenticity rating of the mock counseling sessions between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. The following four items on the MaSP (Wind et al., 2004) were examined collectively in order to determine the participants' immersion experience: (a) SC appeared authentic, (b) SC could be a real client, (c) SC simulated concerns unrealistically and (d) SC's mannerisms matched his/her story. In analyzing the data in this study, a Trend Analysis did not find a significant difference in the authenticity rating of the counseling sessions between the experimental group and the comparison group.

There are some factors that might have influenced these results. As previously stated, some of the participants in the experimental group were very dissatisfied with the incorporation of the TeachLive™ program into the course. In addition, the participants in the experimental group experienced some technological issues during their mock counseling sessions. During one session, the avatar stopped moving. The participants had to stop their sessions and step outside of

the TeachLive™ lab while the program was rebooted. Another time the avatar's neck stretched into an usual position which led the participants to stop their session. Further, the amount of times the MaSP was administered might have influenced the results. Unlike the other assessments used in this study, the MaSP was administered to the participants once a week for a total of ten administration periods. The multiple administrations might have led to participant fatigue and inaccurate completion of the assessment. Further, the MaSP was initially developed to be used by medical school; therefore, counseling students were not part of the norming group.

Although no significant difference was found for hypothesis one and hypothesis two of research question two, it is important to note the following. For hypothesis one, the experimental group rated the "SC was clearly role playing" and "SC challenged/test me" slightly higher than the comparison group and the comparison group rated the "SC stayed in his/her role the entire session" slightly higher than the experimental group. For hypothesis two, the comparison group rated "SC appeared authentic," "SC could be a real client," and "SC's mannerisms matched his/her story" slightly higher than the experimental group and the experimental group rated "SC simulated concerns unrealistically" slightly higher than the comparison group. The findings from this study are different from Fussell et al. (2009) findings, which identified that the participants found simulated patients, who were actors, to be highly authentic and the participants also reported positive learning experiences. This study is unique in that it used a comparison group, which allowed for comparison of the two groups, while Fussell et al. (2009) only exposed their participants to the simulated patients and then had the participants evaluate them.

Counselor Self-Efficacy

The first hypothesis of the third research question stated that there would be an overall difference in self-efficacy scores between counseling students who participate in student-to-avatar role play

and counseling students who participate in student-to-student role play. In analyzing the data in this study, a SPANOVA did not find a statistically significant difference in overall difference in self-efficacy scores between the experimental group and the comparison group. To examine the effect size Hedge's g (.59) was calculated and finding represents a medium effect that is approximately .59 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 9.27, the participants in the experimental group could be expected to score 5.47 points higher on the CSES. The 5.47 points represents approximately 5.5% of a scale gain on the CSES. The CSES' total raw scores range from 20 to 100, with high scores corresponding with high levels of counselor self-efficacy (Melchert et al., 1996). Meaning a student can begin with a CSES score of 55 and end with a score of 60. Within counselor education a difference of 5.47 points across groups is considered as a significant difference because the amount of change represented by 5.47 does represent a meaningful amount of change within perception of self-efficacy that would have a practical effect on CITs' development.

As previously stated, the small sample size may have influenced the results of this study. It is possible that the sample size of the current study may not have been large enough to detect a significant difference in the CSES scores. Another factor that could have influenced the results of this study is the novelty of the instructional intervention. As previously noted, some of the participants in the experimental group had a negative perception of the virtual simulation program, which may have led to a negative learning experience. The negative learning experience could have then negatively influenced the participants' CSES scores.

Although no statistically significant difference was found for hypothesis one of research question three, it is important to note that the scores of both groups increased by ten points between the pretest and the posttest and this is supported by the medium effect size. The results

show that regardless of the condition the participants were exposed to, they presented with higher levels of counselor self-efficacy at the end of the study. The findings from this study are similar to Gonzalez's (2011) findings, which identified that the participants reported that the main benefit to being exposed to TeachLive was an increase in their confidence. The findings from this study are also similar to Urbani et al. (2002) findings, which found a relationship between skills training and counselor self-efficacy. This sample's CSES mean posttest score ($M = 75.95$) were slightly lower ($M = 76.6$) than the norming sample of the CSES (Melchert et al., 1996). This study is unique in that it examined the influence of the use of virtual simulation on the CSE of CITs, which differs from previous studies conducted on CSE.

Anxiety

The first hypothesis of the fourth research question stated that there would be a difference in overall anxiety between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. In analyzing the data in this study, a SPANOVA did not find a statistically significant difference in the overall anxiety levels between the experimental group and the comparison group. To examine the effect size Hedge's g (.86) was calculated and the finding represents a large effect that is approximately .89 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 10.93, the participants in the experimental group could be expected to score 9.73 points lower on the BAI. The 9.73 points represents approximately 15% of a scale gain on the BAI. On the BAI the high scores correspond with high levels of anxiety (Beck & Steer, 1990). Total scores between the ranges of 0 and 7 reflect a minimal level of anxiety, scores between 8 and 15 reflect a mild level of anxiety, scores between 16 and 25 reflect a moderate level of anxiety, and scores between 26 and 63 reflect a severe level of anxiety (Beck & Steer, 1990). Meaning a student can

begin with a BAI score of 26, severe level of anxiety, and end with a score of 16, moderate level of anxiety. The student would have transitioned from presenting with anxiety at a clinical level to lower more manageable level. Within counselor education a difference of 9.73 points across groups is considered as a significant difference because the amount of change represented by 9.73 does represent a meaningful amount of change within perception of general anxiety that would have a practical effect on CITs' development.

The second hypothesis of the fourth research question stated that there would be a difference in performance or current anxiety between counseling students who participate in student-to-avatar role play and counseling students who participate in student-to-student role play. In analyzing the data in this study, a SPANOVA did not find a statistically significant difference in the performance anxiety levels between the experimental group and the comparison group Hedge's g (.20) was used to calculate the effect size and the finding represents a medium effect that is approximately .20 of 1 standard deviation difference between the groups. Given a posttest standard deviation of 2.06, the participants in the experimental group could be expected to score .41 points higher on the Anxiety SUDS. The .20 points represents approximately 2% of a scale gain on the Anxiety SUDS. On the Anxiety SUDS the higher scores corresponds to higher levels for anxiety consists of a 10 point scale ranging from "completely calm and focused on performance" (0 points) to "extremely anxious and cannot continue with performance" (10 points). Meaning a student can begin with a score of 8, which indicates "very anxious and cannot fully concentrate on performance", and end with a score of 7.89 which reflects insignificant change in the student's performance anxiety level. Within counselor education a difference of .41 points across groups is considered as a significant difference because the

amount of change represented by .41 does represent a meaningful amount of change of performance that would have a practical effect on CITs' development.

A factor that may have influenced the results of this study is the fact that the techniques course is used as a gatekeeping course at the university where this study was conducted. The students are expected not only to pass the course, but also to earn a passing evaluation on their final CCS. A passing evaluation consists of a student earning a minimum score of six on each item of the CCS. Therefore, the participants in this study may have been experiencing additional anxiety that CITs at different institutions, enrolled in the same course, might not experience.

Although no statistically significant difference was found for hypothesis one and hypothesis two of research question four it is important to note the following difference between the two groups. The experimental group had a decrease in overall anxiety from pretest to posttest, by three points, while the comparison group had an increase in overall anxiety from pretest to posttest, by five points. Further, the experimental group had a decrease in performance anxiety from pretest to midpoint to midpoint two and an increase from midpoint to two to posttest while the comparison group had an increase from pretest to midpoint one to midpoint two to posttest. Even though the experimental group was exposed to a novice instructional approach, the participants in the group did not experience an increase in anxiety.

The findings from this study are different from Hierbert and colleagues' (1998) findings, which identified a relationship between education and counseling skills training and decrease in performance anxiety. The finding from this study are similar to Larson and Daniels' (1998), which found that pre-practicum students with lowered anxiety levels were those who had an opportunity to practice their counseling skills in role plays. This study is unique in that it assessed the participants' general anxiety and performance anxiety.

Implications and Recommendations

Implications for Teaching

There are several implications for teaching in counselor education based on the results of this study. First, both groups presented with mild anxiety levels prior to the beginning of instruction. These results are congruent with previous studies that found that pre-practicum, practicum, and internship counseling students tend to present with increased levels of anxiety. It is essential that counselor educators monitor their students' levels of anxiety, as it can negatively impact their knowledge acquisition and counseling skills development (Hierbert et al., 1998; Larson & Daniels., 1998).

In addition, both groups reported an increase in their levels of CSE. Skills training has been found to tribute to an increase in CITs' levels of CSE (Urbani et al., 2002). Counselor educators are expected to monitor CITs' progress and development (Bernard & Goodyear, 2013) and self-efficacy is an established measure of development within counseling (Larson & Daniels, 1998). Therefore, counselor education program should consider using CSE as an outcome measure.

Furthermore, both groups reported similar immersion experiences and similar authenticity ratings of the mock counseling session. Fussell et al. (2009) stated that it was important for counselor educator to provide counseling students with an authentic experience when learning and practicing advanced counseling skills because it contributes to their knowledge and skills acquisition. Therefore, it is important for counselor educators to consider the level of immersion and the authenticity of the role play their students are participating in during their courses.

Finally, both groups experienced similar levels of basic counseling skills development. Counselor educators are responsible for training competent and ethical clinician (ACA, 2005; CACREP, 2009). Therefore, counselor educators should strive to develop a warm, supportive, and challenging learning environment for their students. Incorporating technology into counselor education programs may contribute to creating such a learning environment and might help contribute to decreased anxiety and increased CSE in CITs.

Implications for Clinical Supervision

There are several implications for clinical supervision in counselor education based on the results of this study. As previously stated, both groups presented with mild anxiety levels prior to the beginning of instruction. These results are congruent with previous studies that found that pre-practicum, practicum, and internship counseling students tend to present with increased levels of anxiety. There is empirical evidence to support that increased levels of anxiety can negatively impact CITs' knowledge acquisition and counseling skills development (Hierbert et al., 1998; Larson & Daniels., 1998). Therefore, it is essential for counselor educators, and other clinical supervisors, to assess and address their students' anxiety levels prior to them working with clients in practicum and internship.

Furthermore, counselor educators should consider incorporating virtual simulation in their instruction of practicum and internship students to provide a safe place to challenge the CITs. Walker (2009) found that the use of a virtual environment, Second Life, was significantly more beneficial to CITs enrolled in a mental health diagnosis course when compared to literature review and discussion, and video and discussion. Counselor educators and other clinical supervisors should consider incorporating virtual simulation programs in their work with CITs in

practicum and internship to provide them with a safe and challenging space to practice advanced counseling skills, such as diagnosis.

Implications for Practice

There are several implications for practice in counseling and counselor education. First, virtual simulation can be used in ongoing skills development of professional counselors. Gonzalez (2011) used TeachLive with professional school counseling students and found that the practice they received using TeachLive was beneficial and increased their confidence in their ability to be effective school counselors. Counselor professionals are required to continue seeking training and continued education opportunities to help ensure they remain competent and ethical practitioners. Virtual simulation programs, like TeachLive, can be used in trainings to enhance the participants' learning experience.

In addition, virtual simulation can be used for training and assessment of advanced counseling skills. Hodegson et al. (2007) found that using simulated clients while training Marriage and Family Therapy (MFT) students to address domestic violence, child maltreatment, homicidal ideations, and suicidal ideations very effective. Therefore, virtual simulation can be used in the continued training and assessment of counseling professionals in the areas previously mentioned. Finally, virtual simulation can be used as a means of granting licenses within the counseling field. A program like TeachLive should be considered as a standardized method of assessing counseling professionals for licensure. Currently, counseling professionals are required to take national examinations, as such the National Counseling Exam (NCE), as part of their licensure requirement. Counseling professionals are not required to demonstrate mastery of counseling through a live demonstration, only through the completion of case studies. A virtual simulation program like TeachLive would enable counseling professionals to physically

demonstrate their counseling skills through an experiential activity. Counseling professionals are expected to be competent and ethical clinicians (ACA, 2005; CACREP, 2009); therefore, incorporating such practice would help in the gatekeeping process of the profession.

Recommendations for Future Research

There are several recommendations for future research. First, future researchers should replicate the study with a larger sample size. With a larger sample, the results will not be easily influenced by a single extreme score. In addition, having a larger sample size will enable for differences between the groups to be easily dictated and for a conclusion to be drawn from the data. Second, future researchers should be less involved in the implementation of the intervention. The course instructors, for both the comparison group and experimental group, should be the ones facilitating the weekly mock session. This would enable the participants in the experimental group to receive live supervision for their instruction, like their counterparts. The researchers should be present to take field notes and assist as needed.

Third, given that the use of virtual simulation training is still a new instruction approach within counselor education, future researchers should conduct a qualitative or a mixed method investigation to gather more rich descriptions of the counseling students' experiences with using virtual simulation and counselor educators' experience with incorporating virtual simulation in their courses. Finally, future researchers should conduct a longitudinal investigation to examine skills transference and retention when using virtual simulation. The use of virtual simulation is a novice approach within counseling, and therefore it is essential to examine whether the skills gained through the use of virtual simulation can be transferred to working with real live clients.

Conclusion

This study used a quasi-experimental research design to investigate the effect of virtual simulation training on the development of basic counseling skills, the immersion experience, levels of anxiety, and levels of counselor self-efficacy (CSE) among CITs using student-to-avatar and student-to-student role play. The results of the study indicated that exposure to virtual simulation training did not affect the development of basic counseling skills, immersion experience, counselor self-efficacy, and anxiety. The results also showed that virtual simulation did not hinder the development of basic counseling skills, or negatively influence immersion experience, counselor self-efficacy or anxiety.

APPENDIX A: INSTRUMENTS AND FORMS USED IN THIS STUDY

Counselor Competencies Scale (CCS; UCF Counselor Education Faculty, 2009)

CCS 1

Counselor Competencies Scale (CCS) ©

Student's ID _____

The *Counselor Competencies Scale* (CCS) assesses counseling students' skills development and professional competencies. Additionally, the CCS provides counseling students with direct feedback regarding their counseling skills, professional dispositions (dominant qualities), and professional behaviors, offering the students practical areas for improvement to support their development as effective and ethical professional counselors.

Scales Evaluation Guidelines

Exceeds Expectations / Demonstrates Competencies (8) = the counseling student demonstrates **strong** (i.e., *exceeding* the expectations of a beginning professional counselor) knowledge, skills, and dispositions in the specified counseling skill(s), professional disposition(s), and professional behavior(s).

Meets Expectations / Demonstrates Competencies (6) = the counseling student demonstrates **consistent** and **proficient** knowledge, skills, and dispositions in the specified counseling skill(s), professional disposition(s), and professional behavior(s). A beginning professional counselor should be at this level at the conclusion of his or her practicum and/or internship.

Near Expectations / Developing towards Competencies (4) = the counseling student demonstrates **inconsistent** and **limited** knowledge, skills, and dispositions in the specified counseling skill(s), professional disposition(s), and professional behavior(s).

Below Expectations / Insufficient / Unacceptable (2) = the counseling student demonstrates **limited** or **no evidence** of the knowledge, skills, and dispositions in the specified counseling skill(s), professional disposition(s), and professional behavior(s).

Harmful (0) = the counseling student demonstrates harmful use of knowledge, skills, and dispositions in the specified counseling skill(s), professional disposition(s), and professional behavior(s).

***Note. Students must earn a score of 6 (Meets Expectations / Demonstrates Competencies) in all domains (skills, dispositions, & behaviors) prior to their completion of MHS 6803: Practicum in Counselor Education & beginning their Internship experience.**

CACREP (2009) Standards relating to the Counselor Competencies Scale (CCS)

- Counselor characteristics and behaviors that influence helping processes (Section II, *Standard 5.b.*)
- Essential interviewing and counseling skills (Section II, *Standard 5.c.*)
- Self-care strategies appropriate to the counselor role (Section II, *Standard 1.d.*)
- The program faculty conducts a systematic developmental assessment of each student's progress throughout the program, including consideration of the student's academic performance, professional development, and personal development. Consistent with established institutional due process policy and the *ACA Code of Ethics* and other relevant codes of ethics and standards of practice, if evaluation indicate that a student is not appropriate for the program, faculty members help facilitate the student's transition out of the program and, if possible, into a more appropriate area of study (Section I, *Standard P.*)
- Professional practice, which includes practicum & internship, provides for the application of theory & the development of counseling skills under supervision. These experiences provide opportunities for students to counsel clients who represent the ethnic & demographic diversity of their community (Section III, *Professional Practice*).
- Students must complete supervised practicum experiences that total a minimum of 100 clock hours over a minimum 10-week academic term. Each student's practicum includes all of the following (Section III, *Standard F. 1-5*)
 1. At least 40 clock hours of direct service with actual clients that contributes to the development of counseling skills.
 2. Weekly interaction that averages of one hour per week of individual and/or triadic supervision throughout the practicum by a program faculty member, a student supervisor, or a site supervisor who is working in biweekly consultation with a program faculty member in accordance with the supervision contract.
 3. An average of 1 ½ hours per week of group supervision that is provided on a regular schedule throughout the practicum by faculty member or a student supervisor.
 4. The development of program-appropriate audio/video recordings for use in supervision or live supervision of the student's interactions with clients.
 5. Evaluation of the student's counseling performance throughout the practicum, including documentation of a formal evaluation after the student completes the practicum.

Directions: Evaluate practicum student's counseling skills, professional dispositions, & professional behaviors per rubric evaluation descriptions & record rating in the "score" column on the left.

Part I (Primary Counseling Skills – CACREP Standards [2009] #2 [Social & Cultural Diversity], #5 [Helping Relationships] & #7 [Assessment])

Counselor Competencies Scale (CCS; UCF Counselor Education Faculty, 2009)

CCS								
#	Score	Primary Counseling Skill(s)	Specific Counseling Descriptors	Exceeds Expectations / Demonstrates Competencies (8)	Meets Expectations / Demonstrates Competencies (6)	Near Expectations / Developing towards Competencies (4)	Below Expectations / Insufficient / Unacceptable (2)	Harmful (0)
1.A		Nonverbal Skills	Includes Body Position, Eye Contact, Posture, Distance from Client, Voice Tone, Rate of Speech, Use of silence, etc. (matches client)	Demonstrates effective nonverbal communication skills, conveying connectiveness & empathy (85%).	Demonstrates effective nonverbal communication skills for the majority of counseling sessions (70%).	Demonstrates inconsistency in his/her nonverbal communication skills.	Demonstrates limited nonverbal communication skills.	Ignores client &/or gives judgmental looks.
1.B		Encouragers	Includes Minimal Encouragers & Door Openers such as "Tell me more about...", "Hmm"	Demonstrates appropriate use of encouragers, which supports development of a therapeutic relationship (85%).	Demonstrates appropriate use of encouragers for the majority of counseling sessions (70%).	Demonstrates inconsistency in his/her use of appropriate encouragers.	Demonstrates limited ability to use appropriate encouragers.	Uses skills in a judgmental manner.
1.C		Questions	Use of Appropriate Open & Closed Questioning (e.g., avoidance of double questions)	Demonstrates appropriate use of open & close-ended questions, with an emphasis on open-ended question (85%).	Demonstrates appropriate use of open & close-ended questions for the majority of counseling sessions (70%).	Demonstrates inconsistency in using open-ended questions & may use closed questions for prolonged periods.	Uses open-ended questions sparingly & with limited effectiveness.	Multiple questions at one time
1.D		Reflecting _a	Basic Reflection of Content – Paraphrasing	Demonstrates appropriate use of paraphrasing as the primary therapeutic approach (85%).	Demonstrates appropriate use of paraphrasing appropriately & consistently (70%).	Demonstrates paraphrasing inconsistently & inaccurately or mechanical or parroted responses.	Demonstrates limited proficiency in paraphrasing or is often inaccurate.	Judgmental, dismissing, &/or overshoots
1.E		Reflecting _b	Reflection of Feelings	Demonstrates appropriate use of reflection of feelings as the primary approach (85%).	Student demonstrates appropriate use of reflection of feelings appropriately (70%).	Demonstrates reflection of feelings inconsistently and is not matching the client.	Demonstrates limited proficiency in reflecting feelings or often inaccurate.	Judgmental, dismissing, overshoots
1.F		Advanced Reflection (Meaning)	Advanced Reflection of Meaning including Values, and Core Beliefs (takes counseling to a deeper level)	Demonstrates consistent use of advanced reflection & promotes discussions of greater depth in sessions (85%).	Demonstrates ability to appropriately use advanced reflection, supporting increased exploration in session (70%).	Demonstrates inconsistent & inaccurate ability to use advanced reflection. Sessions appear superficial.	Demonstrates limited ability to use advanced or switches topics.	Judgmental, dismissing, &/or overshoots
1.G		Advanced Reflection (Summarizing)	Summarizing content, feelings, behaviors, and future plans	Demonstrates consistent ability to use summarization to include content, feelings, behaviors, and future plans.	Demonstrates ability to appropriately use summarization.	Demonstrates inconsistent & inaccurate ability to use summarization.	Demonstrates limited ability to use summarization.	Judgmental, dismissing, &/or overshoots
1.H		Confrontation	Counselor challenges client to recognize & evaluate inconsistencies.	Demonstrates the ability to challenge clients through verbalizing inconsistencies & discrepancies in the client's words or actions in a supportive fashion. Balance of challenge & support (85%).	Demonstrates the ability to challenge clients through verbalizing inconsistencies & discrepancies in the client's words or actions in a supportive fashion (can confront, but hesitant) (70%) or was not needed and therefore appropriately not used.	Demonstrates inconsistent ability to challenge clients through verbalizing inconsistencies & discrepancies in client's words or actions in a supportive fashion. Used minimally/missed opportunity.	Demonstrates limited ability to challenge clients through verbalizing discrepancies in the client's words or actions in a supportive & caring fashion, or skill is lacking.	Degrading client, harsh, judgmental, being aggressive
1.I		Goal Setting	Counselor collaborates with client to establish realistic, appropriate, & attainable therapeutic goals	Demonstrates consistent ability to establish collaborative & appropriate therapeutic goals with client (85%).	Demonstrates ability to establish collaborative & appropriate therapeutic goals with client (70%) or not appropriate and therefore appropriately not used.	Demonstrates inconsistent ability to establish collaborative & appropriate therapeutic goals with client.	Demonstrates limited ability to establish collaborative, appropriate therapeutic goals with client.	Not therapeutic goals
1.J		Focus of Counseling	Counselor focuses (or refocuses) client on his/her therapeutic goals – i.e., purposeful counseling	Demonstrates consistent ability to primarily focus/refocus counseling on client's goal attainment (85%).	Demonstrates ability to primarily focus/refocus counseling on client's goal attainment (70%) or not appropriate and therefore not used.	Demonstrates inconsistent ability to primarily focus/ refocus counseling on client's therapeutic goal attainment.	Demonstrates limited ability to primarily focus/refocus counseling on client's therapeutic goal attainment.	Superficial, &/or moves focus away from client
1.K		Facilitate Therapeutic Environment _a	Expresses accurate empathy & care. Counselor is "present" and open to client. (includes immediacy and concreteness)	Demonstrates consistent ability to be empathic & uses appropriate responses (85%).	Demonstrates ability to be empathic & uses appropriate responses (70%).	Demonstrates inconsistent ability to be empathic & use appropriate responses.	Demonstrates limited ability to be empathic & uses appropriate responses.	Creates unsafe space for client
1.L		Facilitate Therapeutic Environment _b	Counselor expresses appropriate respect & unconditional positive regard	Demonstrates consistent ability to be respectful, accepting, & caring with clients (85%).	Demonstrates ability to be respectful, accepting, & caring with clients (70%).	Demonstrates inconsistent ability to be respectful, accepting, & caring.	Demonstrates limited ability to be respectful, accepting, & caring.	Conditional or negative

____: Total Score (out of a possible 96 points)

Participant ID: _____

Date: _____

The MaSP: Maastricht Assessment of Simulated Patients (Modified)

Instructions: Place an “x” in the box that best describes your experience in the mock counseling session you facilitated today. For the purpose of this assessment “SC” stands for “*simulated client*”, who is the individual you are providing counseling to in the mock counseling session.

Authenticity during Role Play	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
1. SC appeared authentic				
2. SC could be a real client				
3. SC was clearly role-playing				
4. SC appeared to withhold information unnecessarily				
5. SC stayed in his/her role the entire session				
6. SC challenged/tested me				
7. SC simulated concerns unrealistically				
8. SC's mannerisms matched his/her story (content, emotions, etc.)				
9. SC responded to questions in a natural manner				

Counselor Self-Efficacy Scale (Melchert et al., 1996)

Counselor Self-Efficacy Scale (CSES)

Melchert, Hays, Wiljanen & Kolocek, 1996

Participant ID: _____

For each item please check the one response which is most true for you.

	Never	Rarely	Sometimes	Frequently	Almost Always
1. My knowledge of personality development is adequate for counseling effectively	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2. My knowledge of ethical issues related to counseling is adequate for me to perform professionally	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3. My knowledge of behavior change principles is not adequate.	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
4. I am not able to perform psychological assessment to professional standards	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
5. I am able to recognize the major psychiatric conditions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6. My knowledge regarding crisis intervention is not adequate	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
7. I am able to effectively develop therapeutic relationships with clients ...	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8. I can effectively facilitate client self-exploration	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9. I am not able to accurately identify client affect	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
10. I cannot discriminate between meaningful and irrelevant client data	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
11. I am not able to accurately identify my own emotional reactions to clients	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
12. I am not able to conceptualize client cases to form clinical hypotheses ..	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
13. I can effectively facilitate appropriate goal development with clients	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
14. I am not able to apply behavior change skills effectively	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
15. I am able to keep my personal issues from negatively affecting my counseling skills	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
16. I am familiar with the advantages and disadvantages of group counseling as a form of intervention	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
17. My knowledge of the principles of group dynamics is not adequate	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
18. I am able to recognize the facilitative and debilitative behaviors of group members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
19. I am not familiar with the ethical and professional issues specific to group work	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
20. I can function effectively as a group leader/facilitator	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

TOTAL SCORE:

This instrument display only the first few questions to meet the copyright requirements.

Beck Anxiety Inventory (Beck et al., 1988)

Participant ID: _____

Beck Anxiety Inventory 1

Beck Anxiety Inventory

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by circling the number in the corresponding space in the column next to each symptom.

	Not At All	Mildly but it didn't bother me much.	Moderately - it wasn't pleasant at times	Severely – it bothered me a lot
Numbness or tingling	0	1	2	3
Feeling hot	0	1	2	3
Wobbliness in legs	0	1	2	3
Unable to relax	0	1	2	3
Fear of worst happening	0	1	2	3

Anxiety Subject of Units Scale (Anxiety SUDS)

Participant ID: _____

Anxiety Subjective Units of Distress Scale

Instructions: Circle the appropriate Rating that best describes your current anxiety level in facilitating today's recorded mock session

SUDS Rating	Description of SUDS Rating
10	Extremely Anxious and cannot continue with performance
9	Overly anxious and it is interfering with performance
8	Greatly anxious and cannot fully concentrate on performance
7	Very anxious but can continue with performance
6	Moderately anxious but it is not interfering with performance
5	Mildly anxious but it is not interfering with performance
4	Minimal anxiety but it is not interfering with performance
3	Moderate tension but can still concentrate on performance
2	Mild tension but can still concentrate on performance
1	Relaxed and focused on performance
0	Completely calm and focused on performance

Participant Demographics Questionnaire

Participant Demographic Form

Uwamahoro, 2014

Participant ID: _____

Please answer the following questions to the best of your ability.

1. Biological Gender (*Mark "X" in the appropriate box*):

☐

Female

☐

Male

Other: (please specify) _____

2. Age:

3. Ethnicity (*Mark "X" in the appropriate box*):

☐

African-American

☐

Asian-American

☐

Hispanic

☐

Native-American

☐

Pacific/Islander

☐

Caucasian (Non-Hispanic)

☐

Other: (please specify) _____

Please continue on the other side.



Participant Demographics Questionnaire

Participant Demographic Form Continued...
Uwamahoro, 2014

Continue Here:

4. Program Track (*Mark "X" in the appropriate box*):

☐

Marriage, Couples, and Family

☐

Mental Health

☐

School

5. Experience (*Years of experience in the counseling field*):

6. List all counseling courses you have taken before Fall 2014:

7. List all counseling courses you are currently taking:

Thank you for completing the Participant Demographic Form!!!

External Rater Demographics Questionnaire

External Rater Demographic Form

Uwamahoro, 2014

Name: _____

Please Print

Permanent Address: _____

Phone Number: _____

E-mail Address: _____

Please answer the following questions to the best of your ability.

1. Biological Gender (*Mark "X" in the appropriate box*):

☐

Female

☐

Male

☐

Other: (please specify) _____

2. Age:

3. Ethnicity (*Mark "X" in the appropriate box*):

☐

African-American

☐

Asian-American

☐

Hispanic

☐

Native-American

☐

Pacific/Islander

☐

Caucasian (Non-Hispanic)

☐

Other: (please specify) _____

Please continue on the other side.



External Rater Demographics Questionnaire

External Rater Demographic Form Continued...
Uwamahoro, 2014

Continue Here:

4. Please identify years of experience in the following areas: *(Enter number of years in the appropriate box):*

Clinical (experience in the counseling field)

Teaching (experience teaching graduate level course in counselor education)

Supervision (experience providing clinical supervision to counseling students or professional counselors)

Thank you for completing the External Rater Demographic Form!!!

Initial Meeting Instructions

Please read the following instructions before completing the attached documents.

- **Participant ID**

- *Instruction for assigning participant identification number:*
 - The number on your assessments will be your “Participant ID”.
 - Please make sure to write this number on every assessment you complete during this study.

- **Assessments**

- *Instructions for completing the Demographic Questionnaire:*
 - Please respond to the questions on the Demographic Form to the best of your ability.
- *Instructions for completing the Beck Anxiety Inventory (BAI):*
 - Please complete the Beck Anxiety Inventory in relation to your anxiety with working with real clients in practicum and internship.
- *Instruction for completing the Counseling Self-Efficacy Inventory (CSES):*
 - Please complete the Counseling Self-Efficacy Inventory in relation to your self-efficacy with working with real clients in practicum and internship.

Weekly Mock Counseling Session Instructions

The following instructions will be provided to the participants by the principal investigator in an envelope, along with the *immersion assessment* and the *Weekly Mock Counseling Session Form*.

- *Instructions for administrating the immersion assessment:*
 - IMMEDIATELY AFTER the session, please complete the *immersion assessment* in relation to your experience during this week's mock counseling session.
- *Instruction for administrating the Weekly Mock Counseling Session Form:*
 - IMMEDIATELY AFTER the session, please complete the *Weekly Mock Counseling Session Form* in relation to your experience during this week's mock counseling session..

Recorded Mock Counseling Session Instructions

The following instructions will be provided to the participants by the principal investigator in an envelope, along with the Anxiety SUDS Scale and the Counselor Competencies Scale.

- *Instructions for administering the Anxiety SUDS Scale:*
 - IMMEDIATELY BEFORE the session, please complete the Anxiety SUDS Scale in relation to your anxiety in facilitating the recorded mock counseling session.
- *Instruction for administering the Counselor Competencies Scale (CCS):*
 - IMMEDIATELY AFTER the session, please complete the Counselor Competencies Scale in relation to your performance during recorded mock counseling session.

Instructions for External Raters

- Please read and follow the directions below as you evaluate the recorded mock counseling sessions.
 - Review the sessions in a safe and secure location. You should be the only individual able to see and hear the sessions.
 - Watch the entire session prior to evaluating the participants' performance, using the CCS.
 - Evaluate the participants from a developmentally appropriate lens (e.g. pre-practicum counselor-in-training).

- Please read and follow the directions below for storing the recorded mock counseling sessions.
 - The researcher will provide you with a USB drive containing all the recorded mock counseling sessions you will evaluate.
 - The USB drive will be password protected.
 - While the USB drive is in your possession, it is to be stored behind two locks (e.g. in a locked cabinet, in a locked room) which only you have access.

Instructions provided to participants during the final meeting

Final Meeting Instructions

The following instructions will be read to the participants by the principal investigator.

- *Instructions for administering the Beck Anxiety Inventory (BAI):*
 - Please complete the Beck Anxiety Inventory in relation to your anxiety with working with real clients in practicum and internship.
- *Instruction for administering the Counseling Self-Efficacy Inventory (CSES):*
 - Please complete the Counseling Self-Efficacy Inventory in relation to your self-efficacy with working with real clients in practicum and internship.

APPENDIX B: IRB APPROVAL AND FORMS

IRB Outcome Letter



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Olivia Uwamahoro:**

Date: **August 21, 2014**

Dear Researcher:

On 8/21/2014 the IRB approved the following human participant research until 8/20/2015 inclusive:

Type of Review:	Submission Correction for UCF Initial Review Submission Form Expedited Review
Project Title:	The Effect of Virtual Simulation on the Development of Basic Counseling skills, Self-Reported Immersion Experience, Self-Reported Counselor Self-Efficacy, and Self-Reported Anxiety of Counselors-in-Training.
Investigator:	Olivia Uwamahoro
IRB Number:	SBE-14-10487
Funding Agency:	
Grant Title:	
Research ID:	N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30 days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form cannot be used to extend the approval period of a study. All forms may be completed and submitted online at <https://iris.research.ucf.edu>.

If continuing review approval is not granted before the expiration date of 8/20/2015, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Informed Consent Form



Principal Investigator(s): Olivia Uwamahoro, MS

Faculty Supervisor: W. Bryce Hagedorn, PhD

Investigational Site(s): University of Central Florida, Department of Child, Family, and Community Sciences

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study. Whether or not you participate is up to you. The purpose of this study is to further the knowledge base in counselor education in regards to the impact of instructional approaches on the development of basic counseling skills of pre-practicum counselors-in-training. You have been asked to take part in this research study because you are a student enrolled in a section of the counseling techniques course, MHS 6401, for the fall 2014 semester. You must be 18 years of age or older to be included in the research study.

The person doing this research is **Olivia Uwamahoro** of the University of Central Florida, Department of Child, Family, and Community Sciences. Because the researcher is a doctoral candidate she is being guided by **Dr. Bryce Hagedorn**, a UCF faculty supervisor in the Department of Child, Family, and Community Sciences.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this study is to further the knowledge base in counselor education in regards to the impact of instructional approaches on the development of microcounseling skills of pre-practicum counselors-in-training.

What you will be asked to do in the study: In addition to the usual classroom activities and assignments typically required of students enrolled in MHS 6401, as a participant in this study you will be asked to complete the following assessments:

- The Counselor Self-Efficacy Scale, and Beck Anxiety Inventory will be administered at the beginning, and at the end of the semester. We expect that completing all of these assessments will take 15-20 minutes. In addition, a demographic form will be administered at the beginning of the semester and we expect that it will take 5-8 minutes to complete. The assessments will be administered during class.
- An additional recorded mock counseling session will take place at the beginning of the semester. The purpose of this additional session is to establish a baseline of your basic counseling skills.

Informed Consent Form

- An anxiety scale developed by the researcher and the Counselor Competencies Scales will be administered four times. We expect that completing the two scales will take 10-15 minutes. The assessments will be administered outside of counseling, at the time the recorded mock counseling sessions are completed.
- The Weekly Mock Counseling Session Form and an immersion assessment developed by the researcher will be administered weekly. We expect that completing both these assessments will take 5-10 minutes to complete. The assessments will be administered during class.
- The individual interviews will be conducted at the end of the ten week intervention. The one hour interview will be conducted in person and will be completed outside of class time.

In addition to the information collected through the above assessments, the researcher will also need a copy of the four recorded mock counseling sessions. By agreeing to participate, you are agreeing to complete all these assessments over the course of the semester, the individual interview, and allow the researcher to use your four recorded mock counseling sessions. You do not have to answer every question or complete every task. You will not lose any benefits if you skip questions or tasks.

Time required: We expect that to complete all activities specific to this study will take around four hours over the course of the fall 2014 semester.

Audio or video taping:

You will be asked to complete an additional recorded mock counseling session. The MHS 6401 course typically requires students to complete only three recorded sessions however the participants in this study will be asked to complete four recorded sessions. In addition, you are invited to share your experience as a participant in the study in a hour individual interview.

Risks:

There are no reasonably foreseeable risks or discomforts involved in taking part in this study. We cannot promise complete secrecy. This may include the unlikely breach of confidentiality.

Compensation or payment:

There is no compensation, payment or extra credit for taking part in this study.

Confidentiality: We will limit your personal data collected in this study to people who have a need to review this information. We cannot promise complete secrecy. This may include the unlikely breach of confidentiality.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, feel free to contact Olivia Uwamahoro, M.S., Principal Investigator, College of Education and Human Performance, University of Central Florida at 901-827-2746 or Olivia.Uwamahoro@knights.ucf.edu or Dr. Bryce Hagedorn, Faculty Supervisor, College of Education and Human Performance, University of Central Florida at 407-823-2999 or Bryce.Hagedorn@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.





Debriefing Statement

For the study entitled:

The Effect of Virtual Simulation on the Development of Basic Counseling skills, Self-Reported Immersion Experience, Self-Reported Counselor Self-Efficacy, and Self-Reported Anxiety of Counselors-in-Training.

Dear Participant;

During this study, you were asked to complete several assessments over the course of the semester: (a) the Beck Anxiety Inventory and Counselor Self-Efficacy Scale at the beginning of the semester, (b) the Counselor Competencies Scales and Anxiety SUDS Scale four times, and (c) the Weekly Mock Counseling Session Form and Immersion Experience Assessment weekly. You were told that the purpose of the study was to further the knowledge base in counselor education in regards to the impact of instructional approaches on the development of basic counseling skills of pre-practicum counselors-in-training. The actual purpose of the study was to explore if there is a difference in the development of basic counseling skills, immersion experience, levels of counselor self-efficacy, and levels of anxiety between counselors-in-training who participate in student-to-avatar role plays and counselors-in-training who participate in student-to-student role plays.

We did not tell you everything about the purpose of the study because we wanted to decrease the likelihood of participants, especially those in the experimental group, responding in a manner that was bias. The experimental group used an avatar during their weekly mock counseling sessions while the comparison group role played with a peer during the weekly mock counseling sessions. By informing the participants that the study's focus was on instructional approaches within counselor education, it took the focus off the mock counseling sessions and hopefully captured the participants' true experiences and minimized response biases.

You are reminded that your original consent document included the following information:

- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.

If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

Now that you know the true nature of the study, you have the option of having your data removed from the study. Please contact the PI if you do not want your data to be used in this research and it will be withdrawn.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, feel free to contact Olivia Uwamahoro, M.S., Principal Investigator, College of Education and Human Performance, University of Central Florida at 901-827-2746 or Olivia.Uwamahoro@knights.ucf.edu or Dr. Bryce Hagedorn, Faculty Supervisor, College of Education and Human Performance, University of Central Florida at 407-823-2999 or Bryce.Hagedorn@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

If you have experienced distress as a result of your participation in this study, a referral list of mental health providers is attached to this document for your use. (Please remember that any cost in seeking medical assistance is at your own expense.)

Please again accept our appreciation for your participation in this study.

APPENDIX C: LETTER TO THE FACULTY

This proposal is the request access to the UCF Counselor Education Program Counseling Technique Course (MHS 6401) for the fall 2014 semester.

Researcher:
Olivia Uwamahoro

Faculty Advisor:
Dr. Hagedorn

Proposal Title:
An Empirical Investigation of the Development of Micro Counseling Skills Using Simulation Training in Counselors-in-Training During Their Techniques Course.

Proposal Abstract:

The purpose of this study is to examine the effects of virtual simulation training on counseling students' micro counseling skills development. Over the last century the integration of technology into traditional classrooms has become a common practice. Counselor education has followed this trade and started incorporating technology such as multimedia presentations and social media into counseling courses (Hayes, 2008). Early literature on technology and counselor education has focused on the use of technology such as quick videos (Hayes, Taub, Robinson, & Sivo, 2003), counseling students' attitudes towards the use of technology (Hayes & Robinson, 2000), and using gaming technology in counselor training (Greenidge & Daire, 2005). However, limited research has focused on the use of virtual simulation training or virtual training in counselor education. Thus far, only two empirical research studies have focused on the use of virtual simulation or virtual environment in counselor education. Walker (2009) explored counseling students' perception of their learning while using Second Life, a 3D virtual environment, for practicing counseling interviewing skills and diagnosis skills they had previously learned, while Gonzalez (2011) looked at the use of simulation training as a tool in training professional school counseling students in classroom guidance lesson. Simulation training has been widely used in the training of medical professionals. Sturn and colleagues (2008) conducted a systemic review of eleven studies (ten randomized controlled trials and one nonrandomized comparative study) and concluded that participants who received simulation based training before working with real clients performed better than their counterparts. In other words, the finding of the eleven studies demonstrated that virtual simulation based training resulted in skills transference from the virtual environment to the real world. In addition, Sturn et al (2008) concluded that simulation based training provides a safe, effective, and ethical way for medical students to acquire surgical skills prior to working in the operation room with real patients.

Primary Research Question:

Do counseling students who are exposed to simulation training and traditional instruction during their counseling techniques course develop micro counseling skills at a higher rate than counseling students who are only exposed to traditional instruction (as indicated by the Global Scale of Helper Responses [GSRR: Gazeda, Asbury, Balzer, Childers, & Walters, 1977])?

Primary Hypothesis to be Tested:

The combined effect of simulation training and traditional instruction on micro counseling skills development exceeds the effect of traditional instruction alone (as indicated by the Global Scale of Helper Responses [GSRR: Gazeda, Asbury, Balzer, Childers, & Walters, 1977]).

Secondary Research Question:

Is there a difference in self-efficacy scores between counseling students who receive a combination of simulation training and traditional instruction and counseling students who solely receive traditional instruction (as indicated by the Counselor Self-Efficacy Scale [CSES: Melchert, Hayes, Wijanen, & Kolocek, 1996])?

Secondary Hypothesis to be Tested:

There is a difference in self-efficacy scores between the counseling students who receive simulation training and traditional instruction and the counseling students who are only receive traditional instruction (as indicated by the Counselor Self-Efficacy Scale[CSES: Melchert, Hayes, Wijanen, & Kolocek, 1996]).

Third Research Question:

Is there a difference in anxiety scores between counseling students who receive a combination of simulation training and traditional instruction and counseling students who solely receive traditional instruction (as indicated by the Beck Anxiety Inventory [BAI: (Beck, 1988)])?

Third Hypothesis to be Tested:

There is a difference in anxiety scores between the counseling students who receive simulation training and traditional instruction and the counseling students who are only receive traditional instruction (as indicated by the Beck Anxiety Inventory [BAI: (Beck, 1988)])?

Methodology:

This study will involve the Masters level counseling students enrolled in the counseling techniques course during the Fall 2014 semester at UCF. One section of the course will be assigned as the TeachLive group (experimental group) and the other sections will be assigned as the traditional group (comparison group). The TeachLive group will differ from the traditional group in that the TeachLive group will be exposed to both the tradition instructional and the TeachLive intervention. In other words, for the experiential activities the TeachLive group will use student-to-avatar role plays, while the traditional will only peer-to-peer roles. This study will be implemented using a pretest-posttest quasi-experimental design (Creswell, 2008) over the course of 15 week. There will be four data collection points (week 1, week 4, week 8, and week 14). A Repeated Measures Multivariate Analysis of Variance (Repeated Measures MANOVA) will be used (Tabachnick & Fidell, 2013) will be used to analysis the data.

APPENDIX D: PERMISSION

RE: Permission to use the Counselor Self-Efficacy Scale

Melchert, Timothy <timothy.melchert@marquette.edu>

Wed 6/11/2014 12:00 PM

Inbox

To:

Dear Olivia,

You have our permission to use the Counselor Self-Efficacy Scale in your research. I wish you the best with your dissertation research.

Tim Melchert

Tim Melchert, Ph.D.
Department of Counselor Education and Counseling Psychology
Marquette University

From: Olivia Uwamahoro [mailto:olivia.uwamahoro@knights.ucf.edu]

Sent: Wednesday, June 11, 2014 10:19 AM

To: Melchert, Timothy

Subject: Permission to use the Counselor Self-Efficacy Scale

Good morning Dr. Melchert,

My name is Olivia Uwamahoro and I am a Counselor Education doctoral candidate in the College of Education and Human Performance at the University of Central Florida. I am writing to request permission to use the Counselor Self-Efficacy Scale as one of the instruments in my dissertation. Please let me know what steps I need to take to move forward with my request. Thank you in advance for your assistance.

Best regards,
Olivia

Olivia Uwamahoro, M.S.

Doctoral Candidate
PhD in Education, Counseling Education Track
College of Education and Human Performance
Holmes Scholar

APPENDIX E: RESEARCH EVENT LOG

Prior to the beginning of treatment

- **Experimental group:** The researcher attended section one and section two class meeting. At the beginning of the class the instructor introduced the researcher. The researcher informed the students about the study by reading the information outlined in the Informed Consent Form. The researcher played a video demonstrating how the TeachLive™ sessions would be facilitated and answered questions the participants had in regards to the study. The students who were interested in participating in the study were provided with a packet which contained the following items: (a) a copy of the Informed Consent Form, (b) Initial Meeting Instructions, (c) the Participant Demographic Form, (d) the BAI, (e) the CSES, (f) a new USB, and (g) an envelope with participant identification number. The students completed the initial assessments, placed the assessments in the envelope, and the envelopes were collected by the researcher. The instructor proceeded to facilitate the reminder of the class meeting.
- **Comparison group:** The researcher attended the section three class meeting. At the beginning of the course the instructor introduced the researcher. The researcher informed the students about the study by reading the information outlined in the Informed Consent Form. The students who were interested in participating in the study were provided with a packet which contained the following items: (a) a copy of the Informed Consent Form, (b) Initial Meeting Instructions, (c) the Participant Demographic Form, (d) the BAI, (e) the CSES, (f) a new USB, and (g) an envelope with participant identification number. The students completed the initial assessments, placed the assessments in the envelope, and the envelopes were collected by the researcher. The instructor processed to facilitate the reminder of the class meeting.

Week one

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants, in both sections, were paired with a peer in their section. The participants were providing with the following documents at the beginning of their class meeting: (a) the Weekly Mock Counseling Session Instructions, (b) the MaSP, and (c) the Weekly Mock Counseling Form Session One.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Upon arriving in the TeachLive™ lab the researcher briefly oriented the participants to the space and reminded the participants of how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly

oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The researcher distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had. questions/concerns the participants had.

- **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Upon arriving in the TeachLive™ lab the researcher briefly oriented the participants to the space and reminded the participants of how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out

of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session One). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The researcher distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were placed in two groups of three and one group of four. The participants were providing with the following documents at the beginning of their class meeting: (a) the Weekly Mock Counseling Session Instructions, (b) the MaSP, and (c) the Weekly Mock Counseling Form Session One.
 - **Section three:** The participants divided into their groups and were reminded of how the mock sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session One). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The researcher also distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructor proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week two

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Two.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Two. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had. questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five

minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Two. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock

Counseling Session Form Session two. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week three

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Three.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Three). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Three). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Two. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had. questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Three). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher

did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Three). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Three). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Three). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Three. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom

and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session three. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week Four

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Four.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Four). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Four). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Four. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Four). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with

participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Four. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form Session Four.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the

participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Four. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week five

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Five.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Five). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Five). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Five. The researcher distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction

provided on the Weekly Mock Counseling Session Form (Session Five). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Five. The researcher distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form Session Five.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling

Session Form (Session Five). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The researcher distributed the following documents to the participants; (a) the Recorded Mock Counseling Session Instructions, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week six

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Six.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Six). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Six). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Six. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction

provided on the Weekly Mock Counseling Session Form (Session Six). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Six). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Six). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Six). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Six. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Six.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Six). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the

remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Six. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week seven

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Two. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitated the mock counseling session their

partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session One. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Seven). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or

two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Seven. The researcher collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week eight

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Eight.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Eight. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Eight). While

one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Six. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form Session Eight.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Eight). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the

participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Eight. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week nine

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Nine.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Nine. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once

both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Six). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Nine. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the the MaSP, and (b) the Weekly Mock Counseling Form Session Nine.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Nine). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock

Counseling Session Form Session Nine. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.

Week ten

- **Experimental group:** Both section one and section two met in their respected class meeting locations. The instructors facilitated the class for the first hour and during the second hour the participants completed their first session using TeachLive™. The participants were providing with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form Session Ten.
 - **Section one:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Upon arriving in the TeachLive™ lab the researcher briefly oriented the second pair of participants to the space and how the sessions would be conducted weekly. Each participant facilitated a mock counseling session for five minutes, following the direction provided one the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Ten. The researcher distributed the following assessments for the participants to complete; (a) the BAI, and (b) CSES. The researcher also collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had.
 - **Section two:** The first pair of participants transitioned to the TeachLive™ lab while the second pair stayed in the classroom with the instructor. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Ten). While one participant facilitated the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alert each participant when they had one minutes left in their session. Once

both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the first pair of participants returned to the classroom the second pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Ten). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. Once the second pair of participants returned to the classroom the third pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once the third pair of participants returned to the classroom the fourth pair transitioned to the TeachLive™ lab. Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Ten). While one participant facilitates the mock counseling session their partner observed the session. The researcher sat out of the participant's view and did not interact with participants while they facilitated their mock counseling session. The researcher did alarm each participant when they had one minutes left in their session. Once both participants had completed their sessions the researcher conducted a brief debriefing session with each pair. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Ten. The researcher distributed the following assessments for the participants to complete; (a) the BAI, and (b) CSES. The researcher also collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had questions/concerns the participants had.

- **Comparison group:** Section three met in its regular class meeting location. The instructor facilitated the class for the first hour and during the second hour the participants completed their weekly mock counseling sessions. The participants were providing with the following documents at the beginning of their class meeting: (a) the MaSP, and (b) the Weekly Mock Counseling Form Session Ten.
 - **Section three:** Each participant facilitated a mock counseling session for five minutes, following the direction provided on the Weekly Mock Counseling Session Form (Session Two). While one participant facilitated the mock counseling session one of their partner played the role of the client, and one or two of the remainder partners were the observers. The researcher sat out of the

participants' view and did not interact with participants while they facilitated their mock counseling sessions. The participants were alerted when they had one minutes left in their session. The participants transitioned back to the classroom and were given time to reflect and complete the MaSP and the Weekly Mock Counseling Session Form Session Ten. The researcher distributed the following assessments for the participants to complete; (a) the BAI, and (b) CSES. The researcher also collected the following documents from the participants; (a) a USB with the record session one, (b) the Anxiety SUDS, and (c) the CCS. The instructors proceeded to process the mock counseling sessions by reviewing the peer observations and discussing/clarifying any questions/concerns the participants had questions/concerns the participants had.

APPENDIX F: WEEKLY MOCK COUNSELING SESSIONS

Session 1

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 1	
Goal:	<ul style="list-style-type: none"> Student will practice active listening, invitational skills (encouragers, door openers), questions, and building rapport with client.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consist of the "client" talking about themselves and what led him/her to seek counseling services.
Measures of Goal:	<ul style="list-style-type: none"> While client talks, the counselor should be actively listening and using verbal and non-verbal invitational skills. The counselor needs to ask open questions and closed questions, as necessary. The therapeutic environment should be warm, comfortable, and welcoming.

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4
				5

In the space below, please provide a description of your experience as the **COUNSELOR** during today's mock counseling session:

In the space below, please provide a description of your experience of the **CLIENT** during today's mock counseling session:

Session 2

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 2
Goal: <ul style="list-style-type: none">• Student will practice using <u>invitational skills</u>, opening skills, and paraphrasing
Description of Mock Counseling Session: <ul style="list-style-type: none">• The session will consists of the “client” talking about his/her career goals from childhood to the present.
Measures of Goal: <ul style="list-style-type: none">• While the client talks, the counselor will first demonstrate all of the opening and invitational skills and then paraphrase at least once during the session.

Please provide a brief description of your client’s presenting concern(s) during today’s mock counseling session:

--

Please select, by circling the appropriate number below, the intensity of your client’s presenting concern(s) during today’s mock counseling session:

Mild	Moderate			Severe	
0	1	2	3	4	5

In the space below, please provide a description of your experience as the COUNSELOR during today’s mock counseling session:

--

In the space below, please provide a description of your experience of the CLIENT during today’s mock counseling session:

--

Session 3

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 3	
Goal:	<ul style="list-style-type: none"> Student will practice using <u>invitational skills</u>, <u>opening skills</u>, and <u>paraphrasing</u>
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consist of the "client" talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening, invitational skills, paraphrase, and reflect feelings, and then reflect meaning at least once during the session.

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe	
0	1	2	3	4	5

In the space below, please provide a description of your experience as the COUNSELOR during today's mock counseling session:

In the space below, please provide a description of your experience of the CLIENT during today's mock counseling session:

Session 4

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 4	
Goal:	<ul style="list-style-type: none"> Student will practice using <u>invitational skills</u>, <u>opening skills</u>, and <u>paraphrasing</u>
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consists of the "client" talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate <u>opening</u>, <u>invitational skills</u>, <u>paraphrasing</u>, <u>reflecting feelings</u>, and <u>reflecting meaning</u>

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4
				5

In the space below, please provide a description of your experience as the COUNSELOR during today's mock counseling session:

In the space below, please provide a description of your experience of the CLIENT during today's mock counseling session:

Session 5

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 5	
Goal:	<ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, and summarizing.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consists of the "client" talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrasing, reflecting feelings, reflecting meaning, and summarizing.

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4
				5

In the space below, please provide a description of your experience as the COUNSELOR during today's mock counseling session:

In the space below, please provide a description of your experience of the CLIENT during today's mock counseling session:

Session 6

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 6
Goal: <ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, and summarizing.
Description of Mock Counseling Session: <ul style="list-style-type: none"> The session will consists of the "client" talking about a topic that is likely to evoke some deeper meaning.
Measures of Goal: <ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing and challenging skills when appropriate

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe	
0	1	2	3	4	5

In the space below, please provide a description of your experience as the **COUNSELOR** during today's mock counseling session:

In the space below, please provide a description of your experience of the **CLIENT** during today's mock counseling session:

Session 7

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 7	
Goal:	<ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, summarizing, challenging skills, and goal setting.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consists of the "client" talking about a problem that is causing an internal conflict or moral dilemma (i.e. conflict about a job or whether to relocate, conflict about whether or not to be honest in a relationship, or conflict about something you have done that you do not feel good about, that you regret or that you wish you could change.
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe	
0	1	2	3	4	5

In the space below, please provide a description of your experience as the **COUNSELOR** during today's mock counseling session:

In the space below, please provide a description of your experience of the **CLIENT** during today's mock counseling session:

Session 8

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 8	
Goal:	<ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, summarizing, challenging skills, and goal setting.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consist of the "client" talking about a problem that is causing an internal conflict or moral dilemma (i.e. conflict about a job or whether to relocate, conflict about whether or not to be honest in a relationship, or conflict about something you have done that you do not feel good about, that you regret or that you wish you could change).
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4
				5

In the space below, please provide a description of your experience as the COUNSELOR during today's mock counseling session:

In the space below, please provide a description of your experience of the CLIENT during today's mock counseling session:

Session 9

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 9	
Goal:	<ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, summarizing, challenging skills, and goal setting.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consists of the "client" talking about a dilemma in which the client is forced to make a difficult choice between two alternatives.
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4

In the space below, please provide a description of your experience as the COUNSELOR during today's mock counseling session:

In the space below, please provide a description of your experience of the CLIENT during today's mock counseling session:

Session 10

Weekly Mock Counseling Session Form

Participant ID: _____ Date: _____

Session 10	
Goal:	<ul style="list-style-type: none"> Student will practice using paraphrasing, reflecting feelings, reflecting meaning, summarizing, challenging skills, and goal setting.
Description of Mock Counseling Session:	<ul style="list-style-type: none"> The session will consists of the "client" and the "counselor" discussing termination.
Measures of Goal:	<ul style="list-style-type: none"> While the client talks, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Please provide a brief description of your client's presenting concern(s) during today's mock counseling session:

Please select, by circling the appropriate number below, the intensity of your client's presenting concern(s) during today's mock counseling session:

Mild	Moderate			Severe
0	1	2	3	4
				5

In the space below, please provide a description of your experience as the **COUNSELOR** during today's mock counseling session:

In the space below, please provide a description of your experience of the **CLIENT** during today's mock counseling session:

APPENDIX G: TEACHLIVE SESSION OBJECTIVES FORMS

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/08/2014	Duration Period in EST :	7:00PM to 8:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	_N/A_		

DESCRIPTION OF THE SESSION				
Highlight One:	Generation 3	Generation 4	ELL	Adult Avatar
Is this session a demonstration?	YES	NO		
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO			
Session will focus on:	CONTENT	or	PEDAGOGY	or BOTH
Session Details:				
Number of Participants: <u>4</u>				
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will use skills such as questions, encouragers, and invitational skills to engage the avatar during the session.				

*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT **ONE WEEK** BEFORE THE SCHEDULED SESSION***

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>0</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency

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5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including personal attacks towards teacher and students

1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consists of the avatar talking about herself and what led her to seeking counseling services.

Measurement:

While the student conducts the session, he/she will be actively listening when the avatar is talking, about using verbal and non-verbal invitational skills. The student will primarily ask open questions and closed questions, as necessary. In addition, the student will work on developing a therapeutic environment that is warm, comfortable, and welcoming.

Importance:

☐ Essential

☒ Important

☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance:

☐ Essential

☐ Important

☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance:

☐ Essential

☐ Important

☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/10/2014	Duration Period in EST:	2:30PM to 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION			
Highlight One:	Generation 3	Generation 4	ELL Adult Avatar
Is this session a demonstration?	YES	NO	
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO		
Session will focus on:	CONTENT	or	PEDAGOGY or BOTH
Session Details:			
Number of Participants: <u>8</u>			
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will be practicing the following skills: opening skills, invitational skills, and paraphrasing.			

*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT **ONE WEEK** BEFORE THE SCHEDULED SESSION***

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>0</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency
5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including

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personal attacks towards teacher and students

1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consists of the avatar talking about career goals from childhood to the present. The avatar's responses should be limited to just answering the counselor's inquiries.

Measurement:

During the session, the counselor will first demonstrate opening and invitational skills and then paraphrase at least once during the session.

Importance: ☐ Essential ☒ Important ☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/15/2014	Duration Period in EST:	7:00PM to 8:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION				
Highlight One:	Generation 3	Generation 4	ELL	Adult Avatar
Is this session a demonstration?	YES	NO		
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO			
Session will focus on:	CONTENT	or	PEDAGOGY	or BOTH
Session Details:				
Number of Participants: 4				
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will be practicing the following skills: opening skills, invitational skills, and paraphrasing.				
*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT ONE WEEK BEFORE THE SCHEDULED SESSION***				

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>0</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency
5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including
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personal attacks towards teacher and students

1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consist of the avatar talking about career goals from childhood to the present. The avatar's responses should be limited to just answering the counselor's inquiries.

Measurement:

During the session, the counselor will first demonstrate opening and invitational skills and then paraphrase at least once during the session.

Importance:

☐ Essential

☒ Important

☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance:

☐ Essential

☐ Important

☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance:

☐ Essential

☐ Important

☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/17/2014	Duration Period in EST :	2:30PM to 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION				
Highlight One:	Generation 3	Generation 4	ELL	Adult Avatar
Is this session a demonstration?	YES	NO		
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO			
Session will focus on:	CONTENT	or	PEDAGOGY	or BOTH
Session Details:				
Number of Participants: <u>8</u>				
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will be practicing the following skills: opening skills, invitational skills, and paraphrasing.				
*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT ONE WEEK BEFORE THE SCHEDULED SESSION***				

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>1</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency

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5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including personal attacks towards teacher and students

1st GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consists of the avatar talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity

Measurement:

During the session, the counselor will first demonstrate opening, invitational skills, paraphrase, and reflect feelings, and then reflect meaning at least once during the session.

Importance: ☐ Essential ☒ Important ☐ Desirable

2nd GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3rd GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/24/2014	Duration Period in EST :	2:30PM to 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION				
Highlight One:	Generation 3	Generation 4	ELL	Adult Avatar
Is this session a demonstration?	YES	NO		
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO			
Session will focus on:	CONTENT	or	PEDAGOGY	or BOTH
Session Details:				
Number of Participants: <u>8</u>				
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will be practicing the following skills: opening skills, invitational skills, paraphrasing, reflecting feelings, and reflecting meaning.				

*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT **ONE WEEK** BEFORE THE SCHEDULED SESSION***

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>1</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency

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5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including personal attacks towards teacher and students

1st GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consists of the avatar talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity

Measurement:

During the session, the counselor will first demonstrate opening, invitational skills, paraphrase, and reflect feelings, and reflect meaning.

Importance: ☐ Essential ☒ Important ☐ Desirable

2nd GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3rd GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	09/29/2014	Duration Period in EST:	7:00PM to 8:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address: N/A			

DESCRIPTION OF THE SESSION				
Highlight One:	Generation 3	Generation 4	ELL	Adult Avatar
Is this session a demonstration?	YES	NO		
Will session be recorded?	YES, for research (See form below) YES, for media (Please contact TeachLive for approval) YES, for student feedback (See form below) NO			
Session will focus on:	CONTENT	or	PEDAGOGY	or BOTH
Session Details:				
Number of Participants: 5				
Scheduled activities or participants in session: The students will be conducting a mocking counseling session with the avatar. The students will be practicing the following skills: opening skills, invitational skills, paraphrasing, reflecting feelings and reflecting meaning.				
*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT ONE WEEK BEFORE THE SCHEDULED SESSION***				

BEHAVIOR LEVEL
Choose the Preferred Behavior Escalation Level <u>1</u>
Behavior Level: 0-----1-----2-----3-----4-----5
0 = no classroom misbehavior
1 = mild misbehavior -> distraction, fidgeting, inattention at low frequency
2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at low frequency
3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at medium frequency
4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at medium frequency

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5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at high frequency including personal attacks towards teacher and students

1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

The session will consist of the avatar talking about an experience with either positive or negative ramifications, such as good or bad vacation, a relationship that ended abruptly, or a missed opportunity

Measurement:

During the session, the counselor will first demonstrate opening, invitational skills, paraphrase, and reflect feelings, and then reflect meaning.

Importance: ☐ Essential ☒ Important ☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least a week prior to your session

If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Partner Site:		
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	10-08-14, 10-13-14	Duration Period in EST :	2:30PM 7:00PM to 8:00PM, 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION	
<u>Highlight Your Chosen Focus-</u>	
Avatars to be utilized in session:	
Middle School	High School
Adult Avatar (Stacey Adkins/Lewis)	
<i>The following avatars require a ONE month notice prior to scheduling:</i>	
ELL	TeachLive Espanol
Middle School Class with Austin (Child with Autism)	
Is this session a demonstration? YES NO	
Will session be recorded? YES, for research (See form below)	
YES, for media (Please contact TeachLive for approval)	
YES, for student feedback (See form below)	
NO	
Session will focus on: CONTENT or PEDAGOGY or BOTH	
Participant lesson plans/materials will be forwarded: YES NO	
<u>Session Details:</u>	
The students will be conducting a mocking counseling session with the avatar.	
Number of Participants: 8 (Wednesday) and 4(Monday)	
<u>Scheduled activities for participants in session :</u>	
The students will be practicing the following skills: opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing and challenging skills when appropriate.	
*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT TWO WEEKS BEFORE THE SCHEDULED SESSION***	

BEHAVIOR LEVEL	
Choose the Preferred Behavior Escalation Level	0-
Behavior Level: 0-----1-----2-----3-----4-----5	
0 = no student misbehavior	

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Adult = No resistance - agrees with teacher perspective and strategies to help in the scenario

1 = mild misbehavior -> distraction, fidgeting, inattention at **low** frequency

Adult = Needs clarification of terms/education vernacular/the situation - once clarified, a willing participant to teacher strategies- may push back and immediately drop it if highly offended

2 = mild/moderate misbehavior -> distraction, fidgeting, inattention, mild resistance at **low** frequency

Adult = Gentle resistance, validity of teacher statements needs to be addressed, if offended will push back enough to hopefully encourage a redirecting or rephrasing by the participant

3 = moderate misbehavior -> distraction, fidgeting, inattention, resistance at **medium** frequency

Adult = Fully resistant to teacher/administrator - May put blame on others- It will take a sense of teamwork and respect of child and parent to win her over

4 = moderate / intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at **medium** frequency

Adult = resistant and noncompliant, blames the school for the problem and the school should solve it- may request child transferred out of class

5 = intense misbehavior -> distraction, fidgeting, inattention, resistance, bullying behavior at **high** frequency including personal attacks towards teacher and students

Adult =Personally attacks teacher or administrator. Accuses and blames the teacher for the problem, wants child transferred out of class/school

1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description: The session will consist of the avatar talking about a topic that is likely to evoke some deeper meaning.

Measurement: During the session, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing and challenging skills when appropriate.

Importance: ☒ Essential ☐ Important ☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least **two weeks** prior to your session

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TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Partner Site:		
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	10-15-14, 10-20-14	Duration Period in EST:	2:30PM 7:00PM to 8:00PM, 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION	
<u>Highlight Your Chosen Focus-</u>	
Avatars to be utilized in session:	
Middle School	High School
Adult Avatar (Stacey Adkins/Lewis)	
<i>The following avatars require a ONE month notice prior to scheduling:</i>	
ELL	TeachLive Espanol
Middle School Class with Austin (Child with Autism)	
<u>Is this session a demonstration?</u> YES NO	
<u>Will session be recorded?</u> YES, for research (See form below)	
YES, for media (Please contact TeachLive for approval)	
YES, for student feedback (See form below)	
NO	
<u>Session will focus on:</u> CONTENT or PEDAGOGY or BOTH	
<u>Participant lesson plans/materials will be forwarded:</u> YES NO	
<u>Session Details:</u>	
The students will be conducting a mocking counseling session with the avatar.	
Number of Participants: 8 (Wednesday) and 4(Monday)	
<u>Scheduled activities for participants in session :</u>	
The students will be practicing the following skills: opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate	
*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT TWO WEEKS BEFORE THE SCHEDULED SESSION***	

BEHAVIOR LEVEL	
Choose the Preferred Behavior Escalation Level	0-
Behavior Level: 0-----1-----2-----3-----4-----5	
0 = no student misbehavior	

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1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description: The session will consist of the avatar talking about a problem that is causing an internal conflict or moral dilemma (i.e. conflict about a job or whether to relocate, conflict about whether or not to be honest in a relationship, or conflict about something you have done that you do not feel good about, that you regret or that you wish you could change).

Measurement: During the session, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Importance: ☒ Essential ☐ Important ☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least **two weeks** prior to your session

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TLE TeachLive™ Session Objectives

SESSION PLANNING TEMPLATE

REQUESTER INFORMATION			
Name:	Partner Site:		
Name:	Olivia Uwamahoro	University:	University of Central Florida
Department:	Child, Family, and Community Sciences	Class:	N/A
Date of Session:	10-22-14, 10-27-14	Duration Period in EST :	2:30PM 7:00PM to 8:00PM, 4:00PM
Facilitator Name:	Olivia Uwamahoro	Phone Number:	901-827-2746
Skype Address:	N/A		

DESCRIPTION OF THE SESSION	
<u>Highlight Your Chosen Focus-</u>	
Avatars to be utilized in session:	
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Is this session a demonstration? YES NO	
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YES, for media (Please contact TeachLive for approval)	
YES, for student feedback (See form below)	
NO	
Session will focus on: CONTENT or PEDAGOGY or BOTH	
Participant lesson plans/materials will be forwarded: YES NO	
<u>Session Details:</u>	
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*** LESSON PLANS AND RUNNING ORDER (IF APPLICABLE) MUST BE SENT TWO WEEKS BEFORE THE SCHEDULED SESSION***	

BEHAVIOR LEVEL	
Choose the Preferred Behavior Escalation Level	0-
Behavior Level: 0-----1-----2-----3-----4-----5	
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Adult = resistant and noncompliant, blames the school for the problem and the school should solve it- may request child transferred out of class

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1ST GOAL/OBJECTIVE FOR PARTICIPANTS

Description: The session will consist of the avatar talking about a problem that is causing an internal conflict or moral dilemma (i.e. conflict about a job or whether to relocate, conflict about whether or not to be honest in a relationship, or conflict about something you have done that you do not feel good about, that you regret or that you wish you could change).

Measurement: During the session, the counselor will demonstrate opening skills, invitational skills, paraphrase, reflect feelings, and reflect meaning. In addition, the counselor will demonstrate summarizing, challenging skills, and goal setting when appropriate

Importance: ☒ Essential ☐ Important ☐ Desirable

2ND GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

3RD GOAL/OBJECTIVE FOR PARTICIPANTS

Description:

Measurement:

Importance: ☐ Essential ☐ Important ☐ Desirable

Please send this form and attach any additional required materials -at least **two weeks** prior to your session

*If you plan on recording the session(s) email this form with the next section completely filled out to obtain the needed signatures a minimum of one week prior to your scheduled time. Send to: TeachLive@ucf.edu

APPENDIX H: COURSE SYLLABUS



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE of EDUCATION
Department of Child, Family and Community Sciences
Counselor Education Program
MHS 6401: Techniques of Counseling
Fall 2014

Instructor:
Telephone:
Email:
Office Hours:
Dates:
Meeting times:
Location:

Required Text:

Young, M. E. (2013). *Learning the art of helping: Building blocks and techniques*. (5th ed.). Upper Saddle River, NJ: Pearson. (ISBN-10: 0-13-262750-7)

Other required selections (journal articles) will be assigned in class.

✓ *Students are expected to read assigned chapters/articles prior to each class meeting.*

Catalog Description

The nature of counseling and its relationships to theoretical concepts.

Prerequisites:

Successful completion of MHS 5005 (*Introduction to the Counseling Profession*) and MHS 6400 (*Theories of Counseling & Personality*), or Consent of the Instructor (C.I.).

Purpose of the Course:

MHS 6401: *Techniques of Counseling* teaches fundamental counseling skills such as relationship building, basic assessment, goal setting, selection of interventions, and evaluation of client outcomes.

For whom is the course intended?

MHS 6401: *Techniques of Counseling* is for graduate students who have a working knowledge of counseling theory and want to gain fundamental counseling skills. The course may also be beneficial for practicing counselors interested in enhancing their current skills.

How is this class related to other courses?

MHS 6401: *Techniques of Counseling* should follow MHS 5005: *Introduction to the Counseling Profession* and MHS 6400: *Theories of Counseling & Personality*. These courses should provide the practical and theoretical content, which will serve as a knowledge base for the application of techniques learned and used in this course.

Counselor Competency Scale (CCS)

Beginning Fall 2010, all students are responsible for submitting a *copy* of the final CCS evaluation form used in their previous coursework to their current instructor. These instruments provide evidence of students' growth and development in counseling skills, behaviors, and dispositions. Therefore, all MHS 6401: *Techniques of Counseling* students must submit their Final CCS from MHS 5005: *Introduction to the Counseling Profession* to their MHS 6401: *Techniques in Counseling* instructor. The CCS provides evidence of students' growth and development in counseling skills, professional behaviors, and dispositions.

Course Structure:

MHS 6401: *Techniques of Counseling* is taught in a seminar format that is both interactional and experiential. A variety of instructional strategies will be used including: (a) lectures, discussion, and demonstrations by the professor and class members; (b) presentation and critique of videotapes demonstrating counseling skills; (c) small group work for the purpose of practicing skills, critiquing other students' performance, and sharing reactions to the counseling process; and (d) simulation of client statements.

Course Objectives:

At the conclusion of MHS 6401: *Techniques of Counseling*, students should have learned and/or be able to demonstrate the following dispositions, knowledge, skills, and attitudes as stipulated by CACREP (2009), FEAP (2003), FSAC (Section 18):

1. Create an atmosphere of trust in a counseling relationship.
 - a. Demonstrate an understanding of the counselor and consultant characteristics and behaviors that affect the helping process including verbal and nonverbal behaviors, personal characteristics, orientations, and skills. (CACREP [2009] Section II 5, Section II 5b, Section II 5c, School Counseling Standards, M.4; FEAP #2, #8; FSAC [1999]: Competency #1, #5).
 - b. Use invitational and reflecting skills to conduct a nonjudgmental interview with a client (CACREP [2009] Section II 5b, Section II 5c; FEAP #2; FSAC [1999]: Competency #1).
 - c. Utilize self-awareness to facilitate a therapeutic counselor-client relationship and for the counselor to maintain appropriate professional boundaries. (CACREP [2009] Section II 5b, Section II 5c; FEAP #2, #3; FSAC [1999]: Competency #1).
 - d. Utilize ethical and legal considerations in the counseling relationship (CACREP [2009] Section II 5b, Section II 5c; FEAP #2, #11; FSAC [1999]: Competency #1).
2. Collect assessment data.
 - e. Utilize beginning assessment skills to understand a client's background and problem (CACREP [2009] Section II 5b, Section II 5c, Section II 5e; FEAP #2, #4; FSAC [1999]: Competency #1, #10).
3. Move clients to deeper levels of self-disclosure.
 - f. Employ advanced reflecting skills to understand a client's unique worldview (CACREP [2009] Section II 5b, Section II 5c; FEAP #2; FSAC [1999]: Competency #1).
4. Maintain a therapeutic relationship while identifying discrepancies in a client's story.
 - g. Use challenging skills in a sensitive manner (CACREP [2009] Section II 5b, Section II 5c; FEAP #2; FSAC [1999]: Competency #1).
5. Devise an elementary treatment plan for a client.
 - h. Use goal-setting skills to plan treatment. (CACREP [2009] Section II 5b, Section II 5c, Section II 5d; FEAP #2; FSAC [1999]: Competency #1).
6. Help clients select solutions.

- i. Use solution skills to help clients achieve their goals (CACREP [2009] Section II 5b, Section II 5c, Section II. 5d; FEAP #2; FSAC [1999]: Competency #1)
- 7. Utilize more advanced counseling skills in appropriate situations.
 - j. Combine the five building blocks above into more complex techniques such as role-playing, assertiveness training, and reframing (CACREP [2009] Section II 5b, Section II 5c; FEAP #2, #8; FSAC [1999]: Competency #1, #10).
- 8. Learn to evaluate the outcomes of counseling as a reflective practitioner.
 - a. Be able to evaluate client outcomes and utilize reflective procedures to consider alternative treatment strategies (CACREP [2009] Section II 5b, Section II 5c; FEAP #2; FSAC [1999]: Competency #1).
- 9. Learn to use successful termination strategies for the counselor-client relationship (CACREP [2009] Section II 5b, Section II 5c; FEAP #2; FSAC [1999]: Competency #1.)
- 10. Learn to establish and maintain the counseling relationship across cultures (CACREP [2009] Section II 5, Section II 5b, Section II 5c, Section II 5e; FEAP #2, #4; FSAC [1999]: Competency #1, #10).
- 11. Learn to utilize the counseling skills for consultation (CACREP [2009] Section II 5b, Section II 5c, Section II 5f, School Counseling Standards, M.4; FEAP #2; FSAC [1999]: Competency #1, #5)

Florida Educator Accomplished Practices (FEAP, 2010)

(a) Quality of Instruction.

1. **Instructional Design and Lesson Planning.** Applying concepts from human development and learning theories, the effective educator consistently:
 - i. Aligns instruction with state-adopted standards at the appropriate level of rigor;
 - ii. Sequences lessons and concepts to ensure coherence and required prior knowledge;
 - iii. Designs instruction for students to achieve mastery;
 - iv. Selects appropriate formative assessments to monitor learning;
 - v. Uses diagnostic student data to plan lessons; and
 - vi. Develops learning experiences that require students to demonstrate a variety of applicable skills and competencies.
2. **The Learning Environment.** To maintain a student-centered learning environment that is safe, organized, equitable, flexible, inclusive, and collaborative, the effective educator consistently:
 - i. Organizes, allocates, and manages the resources of time, space, and attention;
 - ii. Manages individual and class behaviors through a well-planned management system;
 - iii. Conveys high expectations to all students;
 - iv. Respects students' cultural linguistic and family background;
 - v. Models clear, acceptable oral and written communication skills;
 - vi. Maintains a climate of openness, inquiry, fairness and support;
 - vii. Integrates current information and communication technologies;
 - viii. Adapts the learning environment to accommodate the differing needs and diversity of students; and
 - ix. Utilizes current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals.
3. **Instructional Delivery and Facilitation.** The effective educator consistently utilizes a deep and comprehensive knowledge of the subject taught to:
 - i. Deliver engaging and challenging lessons;
 - ii. Deepen and enrich students' understanding through content area literacy strategies, verbalization of thought, and application of the subject matter;

- iii. Identify gaps in students' subject matter knowledge;
 - iv. Modify instruction to respond to preconceptions or misconceptions;
 - v. Relate and integrate the subject matter with other disciplines and life experiences;
 - vi. Employ higher-order questioning techniques;
 - vii. Apply varied instructional strategies and resources, including appropriate technology, to provide comprehensible instruction, and to teach for student understanding;
 - viii. Differentiate instruction based on an assessment of student learning needs and recognition of individual differences in students;
 - ix. Support, encourage, and provide immediate and specific feedback to students to promote student achievement; and
 - x. Utilize student feedback to monitor instructional needs and to adjust instruction.
4. **Assessment.** The effective educator consistently:
- i. Analyzes and applies data from multiple assessments and measures to diagnose students' learning needs, informs instruction based on those needs, and drives the learning process;
 - ii. Designs and aligns formative and summative assessments that match learning objectives and lead to mastery;
 - iii. Uses a variety of assessment tools to monitor student progress, achievement and learning gains;
 - iv. Modifies assessments and testing conditions to accommodate learning styles and varying levels of knowledge;
 - v. Shares the importance and outcomes of student assessment data with the student and the student's parent/caregiver(s); and
 - vi. Applies technology to organize and integrate assessment information.

(b) Continuous Improvement, Responsibility and Ethics.

1. Continuous Professional Improvement. The effective educator consistently:

- i. Designs purposeful professional goals to strengthen the effectiveness of instruction based on students' needs;
- ii. Examines and uses data-informed research to improve instruction and student achievement;
- iii. Uses a variety of data, independently, and in collaboration with colleagues, to evaluate learning outcomes, adjust planning and continuously improve the effectiveness of the lessons;
- iv. Collaborates with the home, school and larger communities to foster communication and to support student learning and continuous improvement;
- v. Engages in targeted professional growth opportunities and reflective practices; and
- vi. Implements knowledge and skills learned in professional development in the teaching and learning process.

- 2. Professional Responsibility and Ethical Conduct.** Understanding that educators are held to a high moral standard in a community, the effective educator adheres to the Code of Ethics and the Principles of Professional Conduct of the Education Profession of Florida, pursuant to Rules 6B-1.001 and 6B-1.006, F.A.C., and fulfills the expected obligations to students, the public and the education profession.

FDOE Florida Subject Area Competency (FSAC): Guidance and Counseling PK-12 (Section 18) standards

Knowledge of Counseling (Competence #1)

- Apply counseling theories and techniques appropriate to specific situations and populations.
- Demonstrate knowledge of appropriate listening and responding skills.

- Identify major counseling approaches appropriate for specific developmental levels
- Demonstrate knowledge of behavior change strategies

Knowledge of consultation, collaboration, and coordination (*Competence #5*)

- Identify components essential to a consultation model.
- Identify effective communication techniques that inform the community about services rendered through the guidance program.

Knowledge of social and cultural diversity (*Competence #10*)

- Demonstrate knowledge of counselor responsibility to address biases in self and in others relative to diversity within the school and surrounding community.

Course Connection to Program Portfolio:

Students in MHS 6401: *Techniques of Counseling students* should choose one or more of their assignments as artifacts for their program portfolios (Students should focus on the “Clinical, Consultation, and Communication Skills” domain of the program portfolio for MHS 6401). Artifacts can take many forms but should assist students to support the assertion that they are competent in the domain or area of their respective program portfolios.

Course Requirements:	Percentage	Points
Transcription and Recording #1	5%	30
Transcription and Recording #2	5%	30
Transcription and Recording #3	15%	90
Transcription and Recording #4	25%	150
Consultation Assignment	10%	60
Weekly Quizzes (12, lowest dropped, 10 pts. each)	20%	120
In Class Presentation	10%	60
Attendance & Participation	10%	60
Total	100%	600

Grading Scale:

A	564-600
A-	540-563
B+	522-539
B	498-521
B-	480-497
C+	462-479
C	438-461
C-	420-437
D	360-419
F	Below 360

NOTE: You are required to earn a B or better to continue in the program. As is outlined in your *Counselor Education Student Handbook*, the counselor education program maintains a continuous evaluation policy of students. When students demonstrate personal limitations that might impede future performance, or consciously violate ethical standards and/or are ineffective and/or harmful to clients, they will not receive instructor endorsement to continue in clinical courses.

1. Webcourse Discussion Post

As of Fall 2014, all faculty members are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete the following academic activity by the end of the first week of classes, or as soon as possible after adding the course, but **no later than August 27**. Failure to do so will result in a delay in the disbursement of your financial aid. The required assignment:

Students will introduce themselves through a discussion post via Webcourses, and write about what they hope to gain through this course. The entry may be brief (i.e. 3-5 sentences).

2. **Transcripts & Recordings** (Transcription & Recording #1 [5%]; Transcription & Recording #2 [5%]; Transcription & Recording #3 [15%]; and Transcription & Recording #4 [25%] = 50%: Students will complete four recordings throughout the semester to help assess development of learning. Students will submit three verbatim transcripts for the second, third, and fourth recordings to the instructor. The transcript is a verbatim record of a counseling interview. You will find the instructions for this transcript at the end of Chapter 7 in *Learning the Art of Helping* (5th ed., pages 161-162). Please do not deviate from this format. The transcript should be typed on a word processor and in tables at least size-12 font. Leave room in the margin for comments (*minimum of 1 inch margins*). The reason for the tables is that they make it easier to see how your response affects the client's response. The typewritten transcripts, recordings, and self-assessments should be submitted in an envelope with the tape, which is to be set at the beginning of the portion that you transcribed. The length of the section for transcription will be as follows; however your total time for taping should exceed this amount:

Transcription & Recording #1 (5%, see rubric): 15 minutes
 Transcription & Recording #2 (5%, see rubric): 4-5 minutes
 Transcription & Recording #3 (15%, see rubric): 7-9 minutes
 Transcription & Recording #4 (25%, see rubric): 15 minutes

A session self-assessment for each of the sessions should also be submitted for review by the instructor. Included in the self-assessment, 2 pages, should be (a) an identification of the client's presenting concern, and (b) the student's self-assessment of the recorded counseling session.

- a. **Guide for Writing the Self-Assessment Portion of Your Counseling Session:** The following questions may help you analyze your work that is included in your transcript:
- What were you thinking or feeling when the client said that?
 - Were you able to respond to the client's content and/or feelings?
 - What alternative response could you have given your client?
 - What were the nonverbal behaviors of your client?
 - How did you demonstrate that you were open to your client?
 - What, if any, verbals or nonverbals demonstrated your emotions (such as approval, disapproval, relief, anxiety, etc.) at what your client said or did?
 - Overall, what did you do well? What would you like to improve on and how will you do so?

Course Objectives Assessed: 1.a., 1.b., 1.c., 1.d.; 2.a.; 3.a.; 4.a.; 5.a.; 6.a.; 10.

The Final Transcript & Videotape (i.e., Transcript and Recording #4) & **Demonstration of Counseling Skills, Dispositions, & Behaviors (CCS)** [25%] The final 15-minute videotape demonstrating your grasp and appropriate use of the skills learned during the semester will be completed

with analysis. One advanced technique will be required in addition to the basic nonjudgmental listening sequence. This tape and self-assessment will be turned in to the instructor for evaluation by the due date on your syllabus. Please answer the following questions (2-4 pages, double spaced):

- What issue(s) did the client present in session?
- What is your hypothesis about the client?
- What were your strengths and challenging points in the session?
- What responses would you change if you had it to do all over again (focus on the key responses)?
- What client issues do you think should be addressed in future sessions?
- What techniques/interventions would you use to work on these issues?
- Identify 2 counseling interventions you used in the session and explain your rationale for each one.
- What questions would you have for your supervisor in working with this client?
- What have you improved on from your first tape? What are your growth areas?
- Overall, how has viewing video and transcribing sessions helped in your growth as a future counselor?

MHS 6401: *Techniques of Counseling* is where students gain knowledge and develop their counseling skills to be effective and ethical counseling practitioners. As such, MHS 6401: *Techniques of Counseling* is the time for students to practice and build on their counseling skills, as well as to demonstrate professional dispositions (dominant qualities) and professional behaviors. As a means to assess student progress, the *Counselor Competencies Scale* (CCS) will be used to measure counseling students' skill development and professional competencies. Additionally, the course instructor will use the CCS to provide counseling students with direct feedback regarding their counseling skills, professional dispositions, and professional behaviors (each of which is summarized below), offering students practical areas for improvement to support their development as effective and ethical professional counselors. You will need to turn in a self evaluation using the CCS, with your final tape.

Counseling Skills (CACREP Standards II.G.2, II.G.5, & II.G.7)

Nonverbal skills, encouragers, questions, reflections (content, feelings, meaning, summarizing), confrontation, goal setting, focus of counseling, facilitating a therapeutic environment

Professional Dispositions (CACREP Standards II.G.1, II.G.2, II.G.3, & II.G.5)

Ethics, professionalism, self-awareness/self-understanding, emotional stability & self-control, motivation, multicultural competency, openness to feedback, boundaries, flexibility & adaptability, congruence & genuineness

Professional Behaviors (CACREP Standards II.G.1, II.G.3, II.G.5, II.G.7, & II.G.8)

Attendance & participation, knowledge & adherence to clinic policies, record keeping, knowledge of professional literature, application of theory to practice, case conceptualization, consultation, psychosocial & treatment planning, appraisal, referral

Course Objectives Assessed: 1.a., 1.b., 1.c., 1.d.; 2.a.; 3.a.; 4.a.; 5.a.; 6.a.; 7.a.; 8.a.; 9.; 10.

3. Weekly Quizzes (20%): The development of your professional identity and your understanding and knowledge of counseling skills and techniques is paramount to your continued professional development. The quizzes will cover material from assigned readings. A quiz consisting of ten multiple choice and True/False questions will be given (two extra credit questions per quiz). Although extra credit questions will be included in each quiz, students will be unable to score above 100% on each quiz. The quizzes are

to prepare students to take and successfully pass the Professional Orientation component of the NCE/Praxis/CPCE upon graduation and to assess students' understanding of the reading. The quizzes will be given at the beginning of each class. At the end of the semester students may replace their lowest quiz grade with their highest quiz grade so that the highest grade will then be counted twice. *If a student is tardy or absent from class, he or she will be unable to make-up the quiz.* (12 quizzes, 10 pts. Each).

Course Objective Assessed: 8.a.

4. **Consultation Assignment (10%):** The purpose of this project is to begin to reflect upon and identify those skills and competencies you will need to function effectively in the role of a consultant in different settings.

Course Objective Assessed: 11

Instructions:

- a. Identify *two* different settings in which you may be employed as a professional counselor, e.g., school, college, community mental health agency, substance abuse treatment center, hospital, organization, private practice, etc.
 - b. For each setting, identify the client population you would be counseling, e.g., children, adolescents, college students, adults, couples, families, etc.
 - c. For each setting, identify the particular problems/diagnoses you might find among the population, (e.g., ADHD, behavior problems, academic problems, substance abuse, severe mental illness, etc.)
 - d. Identify and read at least two journal articles and/or textbooks for each area that discusses the role and function of the consultant in that setting/situation. Attach the first page/abstract to your report.
 - e. Write a 3-4 page report that addresses the following:
 - Describe the two settings and their respective client population and problems/diagnoses.
 - Describe the model of consultation (e.g., mental health, behavioral, organizational) that you would use in your settings.
 - Describe the role and function of the consultant in the setting/situation.
 - Who are the consultees? Who are the clients?
 - Describe the process of consultation.
 - Describe the competencies that you would need to work as a consultant in the setting/situation.
 - Don't forget to list references!
5. **In-Class Presentation (10%):** Each student will construct a presentation describing a counseling technique; the theory it originates from; its effectiveness through a literature review; the populations for whom or settings in which the technique may be most effective or least effective; the rationale for further research; and a live demonstration of the technique. The presentation will be approximately 15-20 minutes and should include a **typed handout** to be distributed to each class member. This assignment should be in compliance with the APA (2010) *Publication Manual*.
6. **Attendance & Participation (10%):** Given the interactive nature of this course, attendance and participation is necessary in order to develop knowledge and skills to be ethical and effective counseling and psychology professionals. Additionally, please be advised that due to the experiential

nature of this course, missing any classes may be detrimental, as this could affect your performance in future courses, such as practicum, that are integral to your success in this program.

- a. **Attendance:** Due to the interactive and experiential nature of the course and in-class activities, discussions, readings lectures, it is *required* that students regularly attended class. If for any reason you find that you are unable to attend a class session, it will be your responsibility to personally contact the instructor prior to the scheduled class meeting. Each class meeting is worth 5 points for attendance and participation. A *minimum* of 60 points is required to successfully pass the course requirements. You may contact the instructor through a meeting, e-mail, or telephone message.
- b. **Participation:** Participation in MHS 6401: *Techniques of Counseling* includes (a) having completed reading prior to class, (b) having completed all assigned work prior to class, and (c) participation in role-plays and giving/receiving respectful feedback to/from class members concerning the development of their counseling skills and self-awareness.

** Being present in class & doing other activities (e.g., drawing, playing on computer, talking, using your phone) is not considered being actively involved or professional behavior.*

ALL ASSIGNMENTS MUST BE TYPED & IN APA FORMAT. A HARD COPY MUST BE TURNED IN- IF YOU HAVE ANY PROBLEMS WITH ASSIGNMENTS &/OR DUE DATES, PLEASE CONTACT THE INSTRUCTOR PRIOR TO THE DUE DATE SO POSSIBLE ACCOMMODATIONS MAY BE MADE IF NECESSARY.

Please note: Any assignment not turned in at the designated classroom due date & time will result in ONE letter grade reduction for each day late (excluding homework). Assignments not turned in within three days after the designated classroom due date & time will NOT BE ACCEPTED and result in a failing grade for the assignment. Emailed assignments will not be accepted.

Professionalism (Confidentiality & Ethics):

In this course, you are entering an experience that involves a fair amount of role-playing and practice interviewing. Naturally, in the course of discussion, it is possible for a student colleague to say something personally important and confidential. It is your duty and ethical responsibility to maintain confidentiality. Homework assignments should also disguise the nature of any individual whom you may have interviewed. When videotaping a session with a role-playing or real client, be sure you have permission on tape for that interview to proceed. You are expected to abide by the American Counseling Association (2005) *Code of Ethics*, the American School Counselor Association (2010) *Ethical Standards*, International Association of Marriage and Family Counselors (2005) *Ethical Standards & Guidelines*, and National Association of School Psychologists (2000) *Professional Conduct Manual*. Also refer to the College of Education (2005) Code of Professional Conduct: http://education.ucf.edu/docs/accreditation/COE_Code_of_Professional_Conduct.doc

When You Play the Role of Client in Practice Sessions:

You have the right and personal responsibility to share only as deeply as you want. All experiential exercises in this course are optional and you may stop participating in any exercise you wish without penalty. At the same time, if you find yourself not wishing to engage in these exercises, you may prefer to drop the course.

Practice:

This is a class in which you will be learning many new skills. The more you can practice, the faster you will improve. While it is important to understand the material in the textbooks, it is crucial that you be able to demonstrate the required skills.

Student Conduct & Academic Integrity:

By enrolling in this UCF course, you have accepted the responsibility to abide by the policies and procedures set forth in the University of Central Florida Golden Rules (2011-2012). If you have questions concerning student conduct and academic integrity, please use the following online address:

www.goldenrule.sdes.ucf.edu

Cheating or plagiarism will result in a grade of 0 for the assignment. Breach of confidentiality is considered cheating and will result in a grade of F for the class. ACA Ethical Conduct violations will vary based on the seriousness of the offense but may include expulsion from the counseling program. Please consult UCF's Golden Rule. Disclosing another student's information as a counseling subject will result in a grade of F for this course.

Accommodating Students with Special Learning Needs:

The Individuals with Disabilities Education Act of 1992 (IDEA; 20 U.S.C. Section 1400 et seq.), the American with Disability Act of 1990 (ADA; 42 U.S.C., Section 12101 et seq.), and Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Section 794 et seq.) requires the University of Central Florida provide "reasonable accommodations to any individual who advises us of a physical or mental disability." Students wishing to receive some instructional accommodation because of a documented disability should meet with the instructor to discuss accommodations. Please arrange a meeting with me at your earliest convenience.

Inclement Weather Policy:

In the event of inclement weather, class will be cancelled **ONLY** if UCF closes. Keep in mind that students are allowed **ONE** absence without incurring a reduction in points (*if student contacts instructor prior to the scheduled class meeting*). Thus, use your own discretion when deciding not to attend classes throughout the semester when inclement weather is not an issue. Classes cancelled due to UCF closing for inclement weather will be made-up at the end of the semester on designated days, which are stated in the course syllabi.

Other Considerations:

- As part of this profession, you are **STRONGLY** encouraged to join both the American Counseling Association (ACA) and the Florida Counseling Association (FCA). Furthermore, it is suggested that you additionally join your specialty divisions (e.g., ASCA, IAMFC, or NASP).

Please *do not allow cell-phones to interrupt class time*. The instructor respectfully asks that you silence these prior to class. Thank you in advance for your cooperation.

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