THE EFFECT OF AN EXPERIENTIAL LEARNING ACTIVITY ON COUNSELOR TRAINEES' EMPATHY AND ATTITUDES TOWARDS SUBSTANCE ABUSE

by

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ABSTRACT

BAILEY PRICE MACLEOD. The effect of an experiential learning activity on counselor trainees' empathy and attitudes towards substance abuse. (Under the direction of DR. JACK CULBRETH)

Substance use disorders are becoming more prevalent in the United States. CACREP-accredited counseling programs recently added a requirement for the training of skills, knowledge, and awareness of substance use disorders to counseling training programs. The stigma associated with people who abuse substances has negative effects on counselors' perceptions of substance use disorders and their substance abusing clients. Experiential learning is a common form of teaching in counseling in general and substance abuse counseling specifically in order to change counselor trainees' views of substance abuse. This study tested the effectiveness of a common experiential learning activity in substance abuse, the abstinence project, on counselor trainees' empathy and attitudes towards clients with substance abuse disorders. This quasi-experimental pre-post control group design used two groups of graduate-level substance abuse counseling courses, one that engaged in the experiential learning activity (n = 16) and one without (n = 22). Four two-way mixed ANOVA's were used to test for interaction effects of time by group. Non-stereotyping attitudes approached significance, $F(1,34) = 4.08$, $p = .051$, partial $\eta^2 = .11$ in the hypothesized direction. Treatment intervention attitudes, $F(1,30) = 2.37$, $p = .13$, partial $\eta^2 = .07$; treatment optimism attitudes, $F(1,33) = .02$, $p = .89$, partial $\eta^2 = .001$; and empathy, $F(1,36) = .83$, $p = .37$, partial $\eta^2 = .023$, were nonsignificant for interaction effects. There was a main effect for group of treatment optimism attitudes, with the experimental group having higher overall optimistic attitudes towards substance

abuse treatment, $F(1,33) = 5.25$, $p = .03$, partial $\eta^2 = .14$. The results suggest that the experiential learning activity has a promising positive effect on empathy and non-stereotyping attitudes towards people with addiction. Implications as a result of this study, including recommendations for counselor educators and future research are also discussed.

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CHAPTER 1: INTRODUCTION

The high prevalence of substance use disorders and co-occurring mental health disorders in the U.S. (SAMHSA, 2013) has increased the need for counselors trained in substance abuse counseling. In 2007, 23.2 million people 12 years old and older needed treatment for a substance use disorder. However, only 2.4 million of them received specialty treatment (SAMHSA, 2008). This disparity between those needing treatment and those receiving it supports a continuing focus on the training of substance abuse counselors in counselor education programs (Salyers, Ritchie, Cochrane, & Roseman, 2006). Approximately 82% of counseling programs accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) surveyed offer at least one course in addiction (Whittinghill, Carroll, & Morgan, 2004) for counselors-in-training. Training in substance abuse counseling involves student development of knowledge, skills, and practice in relevant areas of substance abuse counseling (CACREP, 2009). However, the unique challenges for substance abuse counselors working with substance abuse clients (i.e., relapse, stigma, poor treatment outcomes) require counselor trainees to develop positive attitudes and empathy towards people with substance abuse disorders.

The purpose of this study was to assess the effectiveness of an experiential abstinence project on counselor trainees' attitudes and empathy towards clients with substance abuse disorders. Counselor educators often implement experiential learning

activities into addiction courses in order for students to understand the experience of clients struggling to abstain from substance use. However, the evidence of the effectiveness of these activities in increasing positive attitudes and understanding of substance abusing clients is largely anecdotal self-report statements from students post-intervention (e.g., Ballon & Skinner, 2008; Blagen, 2007; Caldwell, 2007; Lay & McGuire, 2008; Sias & Goodwin, 2007). Students often report these activities as important for their understanding of the substance abuse population, but it is unknown if these activities actually increase students' empathy and positive attitudes towards this population.

Background

Substance Abuse Training

In order to ensure proper training of counseling professionals in substance abuse treatment, Salyers et al. (2006) suggested that comprehensive standards of practice be established for training programs. The Council for Accreditation of Counseling and Related Educational Programs's (CACREP) *2009 Standards* addressed this need by including addiction counseling program standards. These standards require knowledge, skills, and practices in foundational information, prevention, treatment, advocacy, diversity, assessment, and research related to addictions counseling (CACREP, 2009). The CACREP standards were created to prepare students to work as effective counselors in the various addictions and mental health programs; however, there is little agreement about how to incorporate the addictions curriculum into counseling programs (Salyers et al., 2006).

There has been some discussion within the counselor education field about the

inclusion of addiction counseling requirements. Some researchers believe that training in knowledge and skills in the area of substance abuse counseling is not sufficient for competently working with substance abusing clients (Chasek, Jorgensen, & Maxson, 2012). People with substance use disorders are highly stigmatized in society (Lloyd, 2013), which has shown to have negative consequences to their mental health, social functioning, and treatment (Keyes et al., 2010; Link, Struening, Rahav, Phelan, & Nuttbrock, 1997; Luoma et al., 2007). Counselors and other treatment providers may hold negative attitudes and stereotypes towards clients with substance use disorders due to myths that circulate in the dominant discourse of society (Lay & McGuire, 2008). People who endorse a high level of stigma towards substance abusers report more negative opinions about them, are more likely to blame others for their addiction, endorse that addiction is a choice, and are more likely to distance themselves socially from substance abusers (Janulis, Ferrari, & Fowler, 2013; Palamar, 2013). Research findings indicate that counselor trainees' optimistic view of substance abuse treatment is related to positive attitudes towards treatment interventions and non-stereotypical attitudes towards substance abusers (Chasek et al., 2012). Other extraneous variables, such as close contact with people with substance abuse problems, have also been linked to lower levels of stigma towards addicts (Janulis et al., 2013; Keyes et al., 2010). Therefore, training in substance abuse counseling needs to address counselor trainees' attitudes towards substance abusers in order to avoid further stigmatizing clients with substance use disorders and to provide better treatment (Moyers & Miller, 2012).

Counselor educators frequently implement experiential activities in their addictions counseling curriculum in order to increase counselor trainees' understanding

of, and empathy towards, clients in recovery for substance abuse (Harrawood, McClure, & Nelson, 2011; Morgan & Toloczko, 1997; Sias & Goodwin, 2007; Warren, Hof, McGriff, & Morris, 2012). The abstinence project is one such learning activity that requires students to abstain from a substance or behavior for a period of time in order to facilitate students' understanding of the recovery and change process often experienced by clients abstaining from substance abuse (Hagedorn, 2011; Harrawood et al., 2011; Warren, Hoff, et al., 2012). The literature on this approach mostly focuses on the process and rationale for the subject and cites qualitative and anecdotal evidence to its effectiveness in changing students' attitudes and empathy for substance abusing clients (Caldwell, 2007; Harrawood et al., 2011; Warren, Hoff, et al., 2012). Therefore, there is a need for outcome studies that utilize quantitative data to assess the impact of the experiential abstinence project on counselor trainees' empathy and attitudes toward substance abusers (Warren, Hoff, et al., 2012).

Empathy

Since the introduction of empathy by Carl Rogers (1957) in his person-centered theory of counseling, empathy has been integrated and promoted in almost all counseling theories to varying degrees (Bohart & Greenberg, 1997; Clark, 2007). Rogers' definition of empathy included a process of conducting therapy and a way of being with a client. Empathy is used relationally and experientially with a client to enhance the therapeutic relationship and communicate a counselor's understanding of the client's internal world (Clark, 2007). Over time, empathy has also evolved as a skill that is taught to counselor trainees, which has lead to an increase in research on the use of empathy and training (Hartley, 1995; Lam, Kolomitro, & Alamparambil, 2011). However, there are differences

in how researchers operationally define and measure empathy (Bohart & Greenberg, 1997; Lam et al., 2011). Despite the mixed research outcomes and differences in research methodology, empathy is generally a trainable skill and has been associated with positive progress and outcomes in therapy (Lam et al., 2011; Rogers, 1975). The theory of empathy and positive outcome holds that empathy can allow a client to recognize unconscious emotions, which changes a person's self-concept. When the self-concept is changed, the client engages in behavioral changes to meet the new self-concept.

Because empathy is used in so many theories and has become an important skill taught in counseling programs, it is important to promote its use in all aspects of counseling in order to improve treatment outcomes, including addiction and substance abuse counseling training. Substance abuse counseling historically involved confrontational methods (Miller, 2010); however, substance abuse counseling now is less confrontational and research has found empathy to be an important component in positive outcomes in treating addiction (Moyers & Miller, 2012). Developing counselor trainees' empathy for substance abusers can combat stereotypes and stigma commonly associated with this population, (Lay & McGuire, 2008) and lead to better treatment outcomes.

Experiential Learning

Experiential learning is a common pedagogical approach used in various areas of counselor education, including multicultural counseling, ethics, group counseling, counseling techniques, and substance abuse counseling (Achenbach & Author, 2002; Barak, 1990; Luke & Kiweewa, 2010; Warren, Hoff, et al., 2012). Based on Experiential Learning Theory (Kolb, 1984; Kolb & Kolb, 2009), experiential activities are implemented as a way to enhance knowledge, skills, and awareness among counselor

trainees by providing experiences that integrate knowledge and create deeper thinking and behavioral change. The theory involves a concrete experience, structured reflection on the experience, abstract conceptualization, and experimentation with a new experience. Research has shown that experiential activities have had positive effects on students' satisfaction with their learning and motivation to learn (O'Connell & Smith, 2005), increased empathy and introspection (Osborn & Lewis, 2005), and is frequently cited by students as important components to their learning (Heppner & O'Brien, 1994). However, research on the effectiveness of experiential learning activities in achieving learning goals has mostly focused on qualitative and anecdotal evidence of students' reactions to the experience; as such, its generalizability is rather limited. Experiential learning activities are also implemented differently among researchers and include a wide variety of factors, which makes it difficult to assess and compare outcomes across research studies.

Research has specifically focused on the impact of experiential learning on students' attitudes and empathy (Suthakaran, 2011), including the use of experiential learning in substance abuse counseling training. Common activities in substance abuse counseling include helping students understand cravings, ambivalence, 12-step programs, and difficulty implementing behavioral changes (Caldwell, 2007; Sias & Goodwin, 2007; Warren, Hoff, et al., 2012). Anecdotal evidence of the effectiveness of experiential learning in substance abuse has shown that students do gain insight into the perspectives of substance abusers that lead to empathy, awareness of biases, and changes in negative attitudes (Blagen, 2007). However, more rigorous studies using more objective measurements are needed to test the impact of experiential activities on proposed

outcomes associated with empathy and attitudes (Heppner & O'Brien, 1994; Lewis & Williams, 1994).

Statement of Problem

Counselor educators are now required to prepare counseling trainees to competently work with clients experiencing substance abuse disorders (CACREP, 2009). However, there is little guidance on how counseling programs should implement new training criteria for substance abuse counseling, leading to wide variations in how students are trained (Salyers et al., 2006). In addition to skills and knowledge, counseling trainees are required to gain awareness into their own biases and attitudes towards substance abuse in order to work effectively with this population. Empathy and positive attitudes toward substance abusing clients and treatment outcomes have been shown to decrease students' negative stereotypes about addiction that lead to better treatment outcomes (Chasek et al., 2012; Moyers & Miller, 2012). Therefore, it is critical that counselor educators address students' attitudes towards substance abuse in order to increase empathy for clients in treatment for addiction.

Research suggests a link between attitudes and empathy, with attitude change coming from knowledge and experience (Carroll, 2000; Davis, Sneed, & Koch, 2010). Empathy as a skill is heavily emphasized and taught in counselor education programs, but there is a need to foster students' empathy towards stigmatized groups (Bohart & Greenberg, 1997; Clark, 2007). A common teaching method used in counseling is experiential learning activities (Swank, 2012), which are commonly used in substance abuse training to give students an understanding of substance abuse through personal experience (Caldwell, 2007; Harrawood et al., 2011). However, there is a lack of

outcome data on the effectiveness of experiential learning on students' empathy and attitudes towards substance abuse. Particularly, the abstinence project, in which students are required to abstain from a behavior, activity, or substance for a set period of time, appears to be an experiential activity commonly used in substance abuse counseling related courses to help students increase awareness, empathy, and attitudinal change toward substance abuse (Harrawood et al., 2011). A review of the literature reveals its effectiveness has yet to be verified through experimental or quasi-experimental research.

Counselor educators and the counseling field recognize the growing need of effective substance abuse counseling. The new standards of substance abuse training (CACREP, 2009) require counselor educators to implement effective training related to knowledge, skills, and awareness. These standards allow students to gain new knowledge while also developing positive attitudes and empathy for substance abusing clients. In response to the needs outlined above, this study aimed to measure the effect of an experiential learning activity on students' positive attitudes and empathy towards clients with substance abuse disorders. Students participating in one of two substance abuse counseling courses, one with the abstinence project and one without, were examined to test for changes on empathy and attitude.

Significance of the Study

Empathy in general is an important component to the counseling field, as seen by a heavy emphasis on empathy in training and theory (Hartley, 1995). In fact, empathy is a component of all of the major counseling theories used in practice and is considered a necessary component for client change (Clark, 2007; Rogers, 1957). Therefore, it is important for counselor educators to promote an empathic stance in all counseling

trainees throughout their training. This study also added to the literature on one such method for fostering students' empathy in counseling in general, and in substance abuse counseling specifically.

It is important for counselor educators to train students to effectively work with substance abusing clients and to use techniques that will foster understanding and empathy for this population. However, outcome research investigating the effectiveness of experiential learning on students' attitudes and empathy has focused largely on students' self-report reactions (Blagen, 2007; Caldwell, 2007; Harrawood et al., 2011). Anecdotal data are limiting because they reflect only students' interest in an activity rather than its global impact on cognitive thinking and changes in attitudes. A review of the literature also indicated a variety of ways that experiential learning activities are initiated in teaching, which makes it difficult to know what factors of the activity are effective in creating change.

This study fills a gap in the current literature by addressing the effectiveness of a commonly used experiential learning activity, the abstinence project, using a quasi-experimental design with pre- and post-outcome measures. Counseling students enrolled in two substance abuse counseling courses participated in either the abstinence project as a part of their coursework (treatment group) or did not participate in the activity (control group). The abstinence project was conducted based on the components of the Experiential Learning Theory outlined by Kolb (1984) using a manualized version of the project outlined by Hagedorn (2011). This study not only tested if the abstinence project is effective in changing students' attitudes and empathy, it also analyzed the factors of experiential learning that make the activity effective. Analyzing the factors related to the

effectiveness of experiential learning also informs the overall theory of experiential learning, which adds to the literature of theory development. Consequently, it is believed that the results of this study provide data to further inform the use of experiential learning activities in fostering transformative learning in counselor training in general and in substance abuse counselor training specifically.

Research Questions

This study addressed the following questions:

1. Is there a significantly larger increase in positive attitudes towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?
2. Is there a significantly larger increase in empathy towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?

Statement of Hypotheses

The research questions were assessed using a quasi-experimental design comparing two different groups of master's level counseling students in a semester-long substance abuse counseling course. The control group consisted of students enrolled in a substance abuse counseling course in a CACREP-accredited counseling program but were not exposed to the abstinence project. The experimental group also consisted of students enrolled in a substance abuse counseling course in a CACREP-accredited counseling program and participated in a structured version of the abstinence project as part of their coursework. Attitude changes were measured by pre- and post-tests using the Substance Abuse Attitudes Survey (SAAS; Chappel, Veach, & Krug, 1985) and empathy

was measured using the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972). The study proposed the following hypotheses:

1. There will be significant differences between the treatment and control conditions on their non-stereotyping attitudes towards substance abusers as measured by the SAAS, with the experimental group having a significant increase compared to the control group at post-test.
2. There will be significant differences between the treatment and control conditions on their treatment intervention attitudes towards substance abusers as measured by the SAAS, with the experimental group having a significant increase compared to the control group at post-test.
3. There will be significant differences between the treatment and control conditions on their treatment optimism attitudes towards substance abusers as measured by the SAAS, with the experimental group having a significant increase compared to the control group at post-test.
4. There will be significant interaction from pre-test to post-test between the two groups in empathy as measured by the EETS, with the experimental group having a significant increase in empathy compared to the control group at post-test.

Assumptions

The study made the following assumptions:

1. Participants responded honestly to the empathy and substance abuse attitudes assessments.
2. Participants were actively engaged in all aspects of the abstinence project activities.

3. Instructors of the substance abuse courses involved in the research abided by established protocol.

Delimitations

1. Participants were limited to students enrolled in CACREP-accredited graduate level counselor education programs.
2. Participants were limited to students who are enrolled in a substance abuse counseling course.

Limitations

The following factors are beyond the control of the researcher and may limit generalizability of the findings of the study:

1. The lack of randomization into groups may cause inherent differences between the groups.
2. The sample of trainees in CACREP-accredited programs may limit generalization to trainees in non-CACREP-accredited programs.
3. The sample of trainees in the U.S. may not generalize to a training environment outside of the U.S. setting.
4. Variability of teaching styles and topics in the substance abuse courses may influence participants' empathy and attitudes outside of the proposed intervention.
5. Participants' previous experiences with substance abuse may influence their empathy and attitudes outside of the proposed intervention.

Organization of the Study

Chapter 1 introduced the overall research problem, purpose, background, and significance of the proposed study. Further, it introduced the proposed research questions

and hypotheses that will be tested through the research, including the assumptions, delimitations, and limitations. Chapter 2 will provide an in depth review of the related literature, giving a more thorough understanding of what has already been addressed, a critique of the past research, and gaps in the literature that need to be addressed. Specifically, Chapter 2 addresses literature related to counselor education in substance abuse, empathy, and experiential learning. Chapter 3 will introduce the methodology of the study. Specifically, it will address the research design, participants, procedures, instruments, and the proposed data analysis techniques. Chapter 4 will discuss the results of the study, including the demographic information of the study participants, the scale reliabilities, and results of the data analyses. Finally, Chapter 5 will discuss the meaning of the findings, including the implications for counselor educators, limitations, and recommendations for future research.

CHAPTER 2: REVIEW OF THE LITERATURE

The purpose of this literature review is to introduce the existing literature on the subject of substance abuse counseling education and how it relates to empathy, attitudes, and experiential learning. The review is organized into four sections according to the variables of interest in the study. The first section addresses counselor education and substance abuse counseling. This includes the need for substance abuse counseling training in counselor education programs due to the prevalence of substance use disorders and trends in counselor education related to substance abuse counseling training. The second section will address the issue of stigma in substance abuse, how stigma relates to attitudes towards substance abuse, and the effects of stigma on people with addiction and treatment. The third section will address the concept of empathy. Specifically, it will review the different uses of and theories associated with empathy, issues related to examining and measuring empathy, and the use of empathy in substance abuse counseling. The fourth section will review the literature on experiential learning, including the theory and purpose of experiential learning, its use in counselor education, and its use in substance abuse counseling training.

Before beginning, it is necessary to highlight the methods used to obtain the relevant literature. The literature review was conducted through the university's library resources website. The databases that were searched included PsychINFO, Education Full Text, Education Research Complete, ERIC, Mental Measurements Yearbook with Tests

in Print, and PsychARTICLES. Relevant search terms included: stigma, substance abuse, counseling, counselor education, addictions, training, empathy, experiential learning, experiential learning activities, and attitudes. The terms were often used in combination in order to narrow the search to more relevant topics. For example, "substance abuse" AND "training," or "empathy" AND "addictions." The collection and review of the literature took place in a cycle, with a review of the literature leading to a more focused review and search for specific primary articles through article references. Articles and books were either directly downloaded from the databases or submitted for interlibrary loan through the university's website. Internet search of general information about drug use statistics and the Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards was also used. This is not meant to be a thorough review of the literature; however, it is believed that the current literature search is adequate for the purpose of this working proposal.

Counselor Education and Substance Abuse Training

According to the 2012 national survey on drug use and health conducted by the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA; 2013), 20.7 million adults met criteria for substance use disorder in the past year, as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; American Psychiatric Association, 2000). Approximately 41% of those adults with substance abuse disorders also met criteria for a co-occurring mental illness during the past year. Only 7.9% of those with co-occurring substance abuse and mental health disorders received treatment for both disorders, 34% received only mental health care, and 4.3% received specialized substance abuse

treatment (SAMHSA, 2013). In 2007, 23.2 million people ages 12 years and older needed treatment for a substance use disorder. However, only 2.4 million of them received specialty treatment. These findings were similar to the estimates made in 2006 and 2002 (SAMHSA, 2008).

The result of the high prevalence of substance use disorders and limited treatment availability is a high impact on global health. Rehm et al. (2009) estimated that alcohol contributes to about 3.8% of all global deaths and 4.6% of global disability. The costs associated with alcohol use is more than 1% of the gross national product in high-income and middle-income countries, making alcohol use one of the major avoidable risk factors. Nationally, the abuse of tobacco, alcohol, and illicit drugs cost is over $600 billion related to crime, lost work productivity, and healthcare (NDIC, 2011). The prevalence of substance abuse among the population, its negative impact on society, and continued lack of specialized treatment available for those who need it reflect a growing need for substance abuse services by trained treatment providers. Given that most people with co-occurring disorders only receive treatment for mental illness, it is especially advantageous for counselors to be trained in mental health and substance abuse counseling (Miller & Brown, 1997).

The prevalence of substance abuse disorders and need for treatment is also evident by the number of clients counselors-in-training treat in practicum and internship sites. A recent survey of CACREP-accredited counselor education programs revealed that 18% of these programs had more than half of their practicum students work with substance abusing clients, and 64% of the programs reported 11-50% of their students intern in substance abuse treatment facilities (Salyers, Ritchie, Cochrane, & Roseman,

2006). The prevalence of counseling interns working in substance abuse counseling reflects a need for counseling programs to educate counselor trainees in competencies related specifically to substance abuse treatment.

Before the inclusion of CACREP standards for addiction counseling, a majority of CACREP-accredited counseling programs included substance abuse counseling in their curriculum (Morgan & Toloczko, 1997; Salyers et al., 2006; Whittinghill, Carroll, & Morgan, 2004). Surveys of CACREP-accredited programs' implementation of substance abuse curriculum from 1997 to 2006 found an increase from 81% to 84.5% (Morgan & Toloczko, 1997; Salyers et al., 2006), and the most recent survey found that 46% of the programs reported that at least half of their students completed at least one substance abuse course (Salyers et al., 2006). The perception of the importance of including training and education for substance abuse increased from 52% in 1997 to 63.7% in 2006. These longitudinal statistics of substance abuse training reflect an increase in implementation and professional acknowledgement of the importance of training in addictions.

Even if counseling programs implemented substance abuse counseling, it was not guaranteed that all students would be exposed to some level of substance abuse training because only a small percentage of programs required the course or reported that their students completed at least one course. There were also variations in how substance abuse counseling training is implemented among programs. Morgan and Toloczko (1997) reviewed the surveyed counseling programs' syllabi for information about the topics, objectives, and the substance abuse counseling courses' requirements. They found a large variation in focus and implementation with only a small portion that simultaneously challenged students personally and academically. In other words, substance abuse courses

were less likely to focus on student awareness of their own biases of substance abuse but rather focused more on students' knowledge of the subject. Salyers et al. (2006) found that only 58.2% of respondents included a separate course for addictions counseling, with the others reporting a combination of a separate course and integration of substance abuse counseling curriculum in other courses.

The results of the above mentioned surveys must take into account response rate and selection bias. Not all CACREP-accredited programs responded to the survey and there was variability in response rate across the studies: 81% in 1997, 55% in 2004, and 61% in 2006. The non-responders might be different from those who did respond. Also, this did not include non-CACREP-accredited programs, which may have different standards of curriculum implementation. It is also difficult to compare results over time as different CACREP-accredited programs may have responded to the surveys at different points in time. Also, the data were collected through self-report, which might not accurately reflect the implementation of substance abuse courses and the students who took them. Finally, although each survey addressed substance abuse courses in CACREP-accredited counseling programs, they did not follow the same procedures such as using the same Likert scale questions, which may have resulted in differences in data collection and analyses. Nonetheless, the results of the studies reflect an upward progression of CACREP-accredited programs implementing substance abuse counseling training over time. However, the content and process of substance abuse courses may not adequately address the knowledge, skills, and awareness that counseling students may need to effectively work with substance abuse clients.

CACREP (2009) standards currently require substance abuse counseling training

in counseling programs; however, they do not indicate how these competencies must be met. This may lead to a large variation in skills and competencies in addictions counseling among counseling graduates. Madson, Bethea, Daniel, and Necaise (2008) surveyed 136 counseling and counseling psychology graduate students about their perception of their substance abuse counseling training. Only 34% completed a separate course on substance abuse treatment and 52% indicated they completed coursework that integrated substance abuse issues and treatment. A review of the types of training they received showed a wide variety in training goals and the participants reported feeling, at most, adequately trained to address substance abuse issues. However, they reported that the quality of their training was poor. An earlier study by Carroll (2000) concluded that students with at least three semester hours of substance abuse counseling instruction were more likely to recognize and treat substance abuse disorders in clients compared to students with less training in this area. Therefore, students may feel adequately trained in substance abuse counseling and may even be able to demonstrate an awareness of addiction in hypothetical case examples, but may perceive the quality of their training as low.

Given the prevalence of substance use disorders and co-occurring disorders in the U.S., it is imperative that counselors are trained to effectively recognize and treat clients with addiction. CACREP recently included substance abuse counseling as a requirement for students in CACREP-accredited counseling programs and even approved the implementation of addiction counseling programs. However, evidence from surveys of counseling programs and counseling students suggests a lack of consensus on how to

train counselors to work effectively with substance use disorders (G. Miller, Scarborough, Clark, Leonard, & Keziah, 2010; Salyers et al., 2006).

Stigma and Attitudes Related to Substance Abuse

Substance use disorders have been designated a disease by the American Medical Association (AMA) since 1956 (G. Miller, 2010), indicating that they are legitimate medical diseases that warrant treatment. Even though there are various theories of addiction and its treatment (e.g., G. Miller, 2010), it is believed to be a chronic disease with biological, social, psychological, and environmental components. Despite the endorsement and label of addiction as a chronic disease, there is still a high level of stigma associated with people who suffer from substance use disorders. Dr. Alan Leshner, former director of the National Institute on Drug Abuse (NIDA), discussed the gap between public perception of addiction and research, which continues to stigmatize those with the disorder (Leshner, 1996). Dr. Volkow of NIDA emphasized the opinion of Dr. Leshner and suggested that treatment providers may also harbor stigma towards individuals with addiction (Flatow, 2006, as cited in Lay & McGuire, 2008).

Therefore, the issue of stigma with substance use disorders effects how the public and treatment providers may view people who struggle with this disease. Stigma has the potential to negatively affect those with the disorder and their treatment outcome, and impact others' attitudes and beliefs about addiction (Keyes et al., 2010; Palamar, 2013; Skinner, Feather, Freeman, & Roche, 2007). Students enter substance abuse counseling courses and programs with their own biases, attitudes, and beliefs about addiction, which must be addressed in order to prevent the negative effects of misperceptions.

Theory and Conceptualization of Stigma

In the seminal work on stigma, Goffman (1963) defined it as an attribute that makes an individual different from others. The attribute is discrediting to the person's status, essentially reducing the individual from a whole person to a discounted one. Essentially, Goffman defined stigma as the relationship between an attribute a person holds and a stereotype of that attribute. Not all negative attributes are stigmatized with an individual, but only when an attribute is inconsistent with the stereotype of what the person is expected to be. Therefore, stigmatized attributions can cause a disconnect between "virtual" social identities, which are based on stereotypes about certain characteristics, and "actual" social identities, which are what they actually are. Goffman also distinguished the types of attributes, labeling them discredited and discreditable attributes. Discredited attributes are those with obvious or visible signs of deviation from the norm, such as being in a wheelchair or having a birth defect. Discreditable attributes are those that are less apparent but could potentially damage a person's reputation, such as having a substance use disorder. Goffman also described different categories of stigma: (a) abominations of the body (i.e., physical deformities), (b) blemishes of character (i.e., mental disorders and substance use disorders), and (c) tribal stigma (i.e., race, nation, religion). The interaction between types of stigma and categories of attributes can have different implications for social and personal consequences (Jones & Corrigan, 2014).

Stigma is conceptualized as a social phenomenon where a person is given a label based on the social and cultural meaning of an attribute. The stigmatized person is then treated in accordance with the meaning of the attribute, constituting complex social interactions. Furthermore, those with a stigmatized label may begin the process of

internalizing and adjusting to the meaning of the label by aligning with the social expectations of the label, creating self-stigma. Given stigma's association with social and cultural issues, social psychologists have studied the concept of stigma extensively (Jones & Corrigan, 2014). Embedded in the social psychological research on stigma are the basic components of stereotyping, prejudice, and discrimination. Stereotype is defined as assumptions made about individuals based on their group affiliation. Prejudice is defined as negative affective attitudes about a group, indicating agreement with a stereotype. Discrimination constitutes negative reactions or behaviors towards members of a stigmatized group based on prejudices (Jones & Corrigan, 2014).

Jones and Corrigan (2014) discuss the different approaches research has taken towards stigma: cognitive approaches, affective approaches, and motivational approaches. Cognitive approaches have revealed the process of stigma through categorization and the impact it can have on social, emotional, and cognitive performance of those who are stigmatized. Research on the affective components related to stigma have shown the power of conditioned responses to stigmatized attributes and the effect these conditioned responses have on evaluating those with the stigma. This research has also shown how difficult it is to neutralize negative responses to attributes. Motivational approaches have outlined the purpose and function of stigma in society. One theory holds that stereotypes function to rationalize negative comparative evaluations of other groups because social identity is largely dependent on group identity. In order to maintain a positive in-group identity, the group must hold negative views of the out-groups. Another theory states that stereotypes go beyond justifying negative evaluations but also rationalize systemic inequality and discrimination (Jones & Corrigan, 2014).

The impact of stigma can take different forms, according to the literature outlined by Jones and Corrigan (2014). Public stigma is when the general public endorses stereotypes about stigmatized attributes and discriminates against them. Self-stigma is when a person internalizes the meaning the public attaches to a particular attribute, and can lead to self-discrimination. Individuals with a stigmatized attribute may engage in label avoidance, where they avoid services in order to prevent being labeled or stereotyped. Finally, structural stigma includes institutional rules, regulations, and norms that may intentionally or unintentionally discriminate against people with stigmatized attributes. The concepts outlined above show that stigma is not inherently an issue of the individual but consists of socially constructed norms imposed on members of society.

Link and Phelan (2001) provide their own conceptualization of stigma focused more on the nature and consequences of stigma rather than the source of stigma. They critique the literature on stigma as being too individualistic, which focuses the attention on those that are stigmatized rather than those who stigmatize. They argue that in order to create change in how people are characterized and treated, researchers must focus on the forces that contribute to and maintain stigma and its negative effects. They conceptualize stigma as an interrelationship of different components. In order for stigma to occur, human differences must be distinguished and labeled. Then negative stereotypes are created about these labels based on dominant social beliefs. People who meet criteria for the label are linked to these undesirable characteristics, which are then used as a separation of in-group and out-groups. This separation is similar to the motivational concepts outlined by Jones and Corrigan (2014). Finally, labeled individuals experience status loss and discrimination, which lead to unequal access to resources or opportunities.

One addition to the conceptualization of stigma is the concept of power. Link and Phelan argue that stigma is dependent on social, political, and economic power of those who stigmatize. Goffman (1963) stated that when one individual is stigmatized, the other is normalized, which contributes to the power of those without the stigmatized attribute or label. Based on their conceptualization, Link and Phelan define stigma as a process that exists when the components of labeling, stereotyping, separation, loss of status, and discrimination occur in an unequal power situation that allows stigma to occur.

Because stigma is a socially constructed label placed on people with undesirable characteristics and has the potential to negatively impact the well-being of those who are stigmatized, it is necessary to address it in counselor education. Link and Phelan (2001) and Jones and Corrigan (2014) discuss stigma as a public health concern that needs to be addressed through social justice. The consequences of stigma include a loss of status and discrimination at the individual and institutional level, which negatively influences well-being. Interventions must be used to target the specific beliefs, attitudes, and behaviors of those who have the power to stigmatize and discriminate against others.

Stigma and Substance Abuse

Despite the official classification of substance use disorders as chronic relapsing disorders similar to other chronic medical conditions (McLellan, Lewis, O'Brien, & Kleber, 2000), they are highly stigmatized in society (Schomerus, 2014). Public attitudes towards substance abusers are a reflection of the cultural discourse. They determine how the public perceives addicts, how people with addiction are treated, and how addicts perceive themselves (Schomerus, 2014). According to Goffman's (1963) conceptualization of stigma, substance abusers fall under the category of "blemishes of

character" and have a discreditable identity because their attribute may not be easily discernable to others. Stigma related to substance abuse disorders are largely based in myths about addiction, such as addiction as a choice and people with addiction are morally weak. Unlike with other mental disorders, the public views substance use disorders as the result of an individual's choices (Schomerus, 2014). A recent study of the public's attitudes and stigma towards drug use found that those who stigmatized drug use more were more likely to believe that addiction is a choice, hold more negative views about individuals who have used drugs, and blame individuals for becoming addicts (Palamar, 2013). These views lead to a higher level of stigmatization because people are more likely to reject conditions that are perceived to be self-inflicted or controllable than conditions that are not (Schomerus, 2014). Stigma attached to substance abusers is also related to perceived danger and fear, in that higher levels of perceived dangerousness and fear increase desire for social distance from drug users (Janulis, Ferrari & Fowler, 2013).

The stigma of addiction has several functions and consequences. The larger social discourse of addiction as a stigmatized characteristic has shown to have some preventative impact on individuals' substance use (Palamar, 2013). Palamar, Halkitis, and Kiang (2013) researched the extent that perceived public stigma and personal stigmatization explain lifetime drug use. They surveyed 1021 emerging adults (ages 18-25) about their drug use, stigmatized attitudes towards drug use, and exposure to drug users. The researchers found that personal disapproval toward drug use (stigmatization) protects individuals from lifetime drug use; however, perceived public stigma of drug use was not associated with preventing lifetime drug use. Based on these findings, the researchers suggest that personally holding negative attitudes towards substance abuse

may prevent personal use, but public stigma towards drug use is not an effective tool to deter people from using. Palamar et al. argue that it may be unethical to use stigma as a public health tool against substance use because it does not seem to prevent use on a larger scale. Schomerus (2014) argued that some negative stereotypes concerning addiction have some level of truth, such as the dangers of driving under the influence and alcohol-related domestic violence. Completely eliminating negative stereotypes about addiction may trivialize the negative social consequences of addiction.

Despite some of the positive effects of stigma, the stereotypes associated with addiction are often generalizations that ignore the variability within and between individuals with substance use disorders. These stereotypes may apply to some people under certain circumstances, but they are damaging to many more people with addiction (Schomerus, 2014). Public stigma towards substance abuse disorders has been shown to negatively impact the mental health and well-being of those with addiction, deter addicts from seeking treatment, and can negatively influence the attitudes health professionals have towards substance abusers (Lloyd, 2013). When clients are given the label of addict or substance abuser, they may become concerned about how others will treat them based on the stigma attached to the label. They may also internalize the negative attitudes associated with the stigma and apply these concepts to the self, known as self-stigma (Schomerus, 2014). It has been hypothesized that experiencing stigma-related rejection might make stigmatized individuals more aware of the prevalence of stigmatized attitudes and actions in society, and increase their level of internalized stigma (Luoma et al., 2007). People with substance use disorders may be aware of the negative stereotypes the public

holds towards the label and may even agree with them to an extent, causing problems in social interactions and overall well-being.

Ahern, Stuber, and Galea (2007) studied the impact of two types of stigma (alienation and devaluation) and experiences of discrimination on mental and physical health of 1008 illicit drug users. They found that alienation, defined as an internalization of the stereotypes associated with drug abusers, was associated with poorer mental health. Discrimination was associated with both poorer mental health and poorer physical health. Alienation has to do with the internalized belief that drug users are marginalized members of society, which may be a chronic source of stress. The authors also concluded that anger associated with experiences of discrimination had a negative impact on mental health. Although this large sample study showed the differential impact of stigma and discrimination on mental and physical health of illicit drug users, it was a cross-sectional design and cannot determine causality. Another limitation of the study was the population sampled, which was mostly racial and ethnic minorities of low-income status. These other variables may have impacted experiences of stigma and discrimination beyond those based on drug use status.

A related study of interpersonal discrimination and health using the same sample of 1008 drug users found that the majority of participants (81.7%) experienced at least one form of discrimination in their lifetime. The most reported reason for discrimination was due to drug use, above and beyond poverty, race, age, gender, and sexual orientation. It was also the most impactful type of discrimination they reported and was associated with poorer mental health, depression, and the number of chronic health problems (Young, Stuber, Ahern, & Galea, 2005). Young et al. (2005) concluded that the

experiences of discrimination might cause mental distress, which may trigger physiological reactions that negatively impact physical health. These results show that discrimination based on drug use, which conceptually stems from stigmatized attitudes, may be more pervasive than discrimination due to other stigmatized attributes, and that discrimination has a profound negative impact on those with addiction.

Stigma, and discrimination associated with stigma, can also negatively impact a person's attempts to access treatment for substance use disorders. Perceived stigma of health professionals may deter addicts from seeking health care or disclosing substance use to health care providers (Lloyd, 2013). Keyes et al. (2010) surveyed 34,653 individuals about their attitudes towards alcohol use, their own alcohol use, and treatment utilization in order to understand how these variables related. They found that among individuals with an alcohol use disorder, those who perceived high public stigma were less likely to have utilized alcohol treatment services. As stigma increased, the likelihood of engaging in treatment decreased even after controlling for demographic variables and alcohol disorder severity. Based on this study, stigma may actually prevent people with addiction from seeking services.

Being labeled with a stigmatized condition, such as a diagnosis of a substance use disorder, has some positive effect of allowing an individual to gain access to treatment. However, if individuals with substance use disorder do seek treatment, the act of being labeled as an addict in a treatment program may cause an increase in stigma-related rejection (Luoma et al., 2007). There is also evidence that those who have more treatment experiences (i.e., more instances of being in treatment) experience more instances of stigma-related rejection, which may indicate that stigma makes it more difficult to

succeed in recovery (Luoma et al., 2007). The effects of stigma have been shown to negatively impact people even after successfully completing treatment. A longitudinal study of men with dual-diagnoses of mental disorder and substance abuse showed that even though their symptoms decreased and they were in recovery for addiction, stigma continued to negatively affect their well-being at the one-year follow-up (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997).

The research shows the pervasive and negative impact that stigma has on substance abusing clients above and beyond any positive effects it may have on prevention and treatment. The attitudes towards people with addiction can lead to social distancing due to fear and perceived dangerousness, which negatively impacts people with addiction. Negative public attitudes towards addiction can cause addicts to avoid treatment, make them less likely to succeed in treatment, and negatively impact their physical and mental health. Attitudes towards stigmatized conditions are part of the larger social discourse that impacts how people in that society think about a condition. Counselors working with substance abuse clients must be aware of the impact that stigma has on their clients and to be aware of their own attitudes towards people with these disorders in order to provide quality treatment.

Substance Abuse Training and Attitudes

Stereotypes, negative attitudes, and discrimination affect people with substance use disorders just as much, or even possibly more, than people with other marginalized characteristics (Young et al., 2005). The counseling profession has endorsed a multicultural and advocacy orientation in their ethical code, counselor education standards, and research (ACA, 2014; CACREP, 2009) related to working with culturally

diverse and oppressed populations. The multicultural standards, originally presented as the Multicultural Counseling Competencies (MCC; Arredondo et al., 1996), call for counselors to develop knowledge, skills, and awareness of the populations they serve and their own biases and attitudes towards marginalized groups. Given the similar experiences of discrimination and stigma experienced by people with substance use disorders and the negative and pervasive impact on their well-being, counselors should also be aware of their own attitudes towards this population.

The wide variations in implementation and training in substance abuse counseling may differentially affect students' competence and attitudes toward substance abusers. Research has shown that health care providers' attitudes towards people who abuse substances can directly affect the level of care they provide (Griffiths & Pearson, 1988), with negative attitudes possibly preventing appropriate treatment for substance abusers (Chappel & Veach, 1987). Counselors' expectations about treatment outcomes can also influence treatment, with more positive expectations related to more successful outcomes (Leake & King, 1977). The history of the substance abuse field shows a lack of understanding about its causes, which have created moralistic and stereotyping attitudes among the public and health professionals (Richmond & Foster, 2003). Counselors in training have also been found to hold their own biases and attitudes towards people who abuse substances stemming from misinformation, myths, and personal experiences with substance abuse (Chasek, Jorgensen, & Maxson, 2012). In contrast, treatment optimism for substance abusers is predicted by non-stereotypical attitudes and viewing substance abuse in the context of treatment (Chasek et al., 2012). Given the importance of misconceptions and negative attitudes in impacting treatment of substance abuse, it is

necessary to address counselor trainees' attitudes in substance abuse counseling training.

Educational interventions. One strategy to reduce stigma of a group is to target specific populations who hold some level of power over the group (Roe, Lysaker, & Yanos, 2014). Decreasing stigmatized attitudes in these more powerful groups can decrease incidents of intentional or unintentional discrimination and increase opportunities to gain resources and community functioning. Common ways to reduce public stigma are education and contact. The goal of education is to challenge stereotypes and attitudes based on evidence-based information that challenges stigmatizing views (Roe et al., 2014). Education may increase accurate knowledge about substance abuse and decrease blame (Roe et al., 2014).

Researchers have addressed factors related to attitudes towards people with substance abuse disorders and factors related to change. Factors that are commonly found to be associated with more positive attitudes towards substance abusers include higher education, personal experience in recovery or a family member in recovery, and courses in substance abuse counseling (Carroll, 2000). However, the research on the effectiveness of education on attitudes is mixed. Davis, Sneed, and Koch (2010) surveyed 148 college students enrolled in rehabilitation counseling courses about their recovery status, level of education, and attitudes toward substance abuse. They found that students who completed substance abuse courses adhered to the medical model, which aligned with previous findings by Carroll (2000). The model, or theory, behind addiction is an important distinction. The moral model of addiction states that people develop addiction due to a character defect in morals. This leads to a shame-based approach to treatment, which has been found to be contraindicative of positive treatment outcomes (Moyers & Miller,

2012). The medical model states that addiction is due to a person's biology and environment. This model removes the blame from the substance abuser, preventing shame and promoting empathy, which is consistent with more positive treatment outcomes.

Education about substance abuse can also change health care professionals' attitudes towards treatment and motivation to work with substance abuse clients. Social workers who participated in a 9-month training program on substance abuse had more positive attitudes towards substance abuse clients and engaged more with substance abuse clients than a matched sample of social workers who did not take the training course (Amodeo, 2000). The social workers who had the post-graduate training were more likely to assess and intervene in substance abuse issues, hold titles and roles in the substance abuse field, and had more clients with substance use disorders. These results indicate that educational interventions can have long-term effects on professionals' attitudes towards substance abuse clients. A study of psychiatric residents' attitudes towards substance abuse clients after an educational conference showed an increase in treatment optimism and interest in pursuing addiction work after the conference (Karam-Hage, Nerenberg, & Brower, 2001). One limitation in both of these studies was that participation in these educational programs was voluntary. Participants in both studies may have had an intrinsic interest in the population, which influenced their attitudes towards substance abuse. Furthermore, the study of social workers did not look at attitudes before the educational program; therefore, participants may have already had positive attitudes towards the field.

In contrast to past studies that found higher education contributed to fewer

moralistic values (Richmond & Foster, 2003), Davis et al. (2010) found that graduate students adhered more to a moralistic view of addiction than undergraduate students. Their results show that class standing alone (graduate vs. undergraduate) does not necessarily lead to positive attitudes towards substance abuse. However, the results may have been due to the small sample of students ($N = 20$) who completed at least one graduate course in substance abuse, compared to undergraduate students ($N = 33$) with at least one substance abuse course. Davis et al.'s study did not include a pre-test for students before they completed a substance abuse course; therefore, the results did not take into account attitudes before taking the course. Stein (2003) conducted a pre- and post-test quasi-experimental control group design study on the effectiveness of a brief educational program on social work students' attitudes towards substance abuse. The intervention was only four hours long and there were no differences between the groups on attitudes after the intervention. The results indicate that brief educational interventions may not be enough to change attitudes about substance abuse. Gassman (1997) reported that students with more formal knowledge about substance abuse had higher moralistic attitudes towards addiction. Therefore, more knowledge does not guarantee less moralistic attitudes or more optimism for treatment. Standards in counselor education have already included the requirement of substance abuse counseling knowledge and skills (CACREP, 2009). However, education alone may not be enough to change attitudes towards the substance abuse population.

Contact interventions. Contact involves interactions with people from a stigmatized group. One of the theories of stigma states that labeling and stereotyping a group is a way to maintain a positive in-group identity by separating from out-groups that

are perceived as inferior in some way (Goffman, 1963; Roe et al., 2014). Studies have shown that people with personal experiences of addiction or have family or friends with substance use disorders are more likely to have more positive attitudes towards treatment (Gassman, 1997), less stigmatized attitudes towards substance abusers (Palamar et al., 2013), and decreased perceptions of fear, dangerousness, and social distance towards this population (Janulis et al., 2013). Koch, Sneed, Davis, and Benshoff's (2006) study of education level, recovery status, and attitudes toward substance abuse showed that graduate students with a history of recovery were more likely to adhere to the medical model than graduate students without a history of recovery. Davis et al. (2010) found that students with personal experience in recovery or a family member in recovery adhered more to the medical model of substance abuse, as opposed to an adherence to the stereotypical moral model of addiction.

Experiences with people from the stigmatized group do not always have to be personal in order to be effective in changing attitudes toward the group. Christison and Haviland (2003) studied the effects of a one-week psychiatry rotation at an addiction site on 153 psychiatric students' attitudes towards alcohol dependent patients. Residents were required to observe treatment groups, interview substance abuse patients, attend a one hour lecture each day, and attend one 12-step meeting throughout the week in order to gain exposure to substance abuse clients. Pre-post score differences in attitudes towards alcohol dependence increased after the experience, showing a positive effect on attitudes towards this population. Ballon and Skinner (2008) also studied the impact of a month long addiction rotation on psychiatric residents' attitudes towards addiction. Using qualitative analyses of residents' reflective papers during the course of their rotation, the

authors found that residents gained new skills, knowledge, and awareness of their biases and attitudes towards substance abuse clients. These results suggest that there may be an interaction between personal experience and education on attitudes towards substance abusers, with experience being an important factor contributing to positive attitudes. However, the variability in length of the programs, the educational components, and experiences studied in the research makes it difficult to understand what components are necessary for change.

Rationale for findings. There are several explanations as to why recovery status, education level, and experience in substance abuse counseling courses affect attitudes about substance abuse. Davis et al. (2010) based their research in the Elaboration Likelihood Model of Persuasion (ELM), which postulates two routes of persuasion that can create certain attitudes: peripheral and central. A person adopts an attitude towards a subject peripherally when it is based on environmental cues outside of cognitive processing, such as critical thinking. This route is often influenced by the source of information, such as peers and important family members. Attitudes adopted through the central route involve critical thinking and consideration based on gathering information. Attitudes based on the central route tend to last longer and are more predictive of behavior while attitudes based on peripheral information can be changed through critical thinking and new information. Davis et al. argued that people who have experience recovering from substance abuse, or have a family member in recovery, have benefited from peripheral knowledge, while those who have taken a substance abuse course have developed attitudes at the central route via formal education. This theory explains the importance of accurate information and knowledge in an educational setting and the

positive impact of personal experience with substance abuse on attitudes.

Level of education in general may positively impact attitudes about substance abuse because of the increase in moral development and cognitive complexity associated with higher education. Sias, Lambie, and Foster (2006) surveyed 188 substance abuse counselors with various levels of education on their recovery status, cognitive complexity, and moral reasoning skills. They found that participants with higher education (master's degree and higher) predicted higher cognitive complexity and moral reasoning scores. There was no relationship between recovery status and cognitive complexity or moral reasoning, however. The authors argued that substance abuse counselors with high cognitive development and moral reasoning are more effective at utilizing complex counseling skills with clients and are less prejudiced towards others. Despite the findings, this study used correlations between factors to show a relationship between education, cognitive complexity, and moral reasoning, making it difficult to show a causal relationship between the variables.

In summary, there is recognition among professionals that specific training in substance abuse counseling is needed in order to effectively work with substance abusing clients. Despite changes in the field, there are still stereotypes and myths associated with substance abuse that can interfere with effective interventions. Counselor trainees' are not immune to these negative attitudes about addiction, suggesting that they must be addressed in training. The research highlights that education level, personal experience in recovery, and history of substance abuse training can positively change attitudes towards substance abuse, as well as moral and cognitive development that allow substance abuse counselors to better understand and treat substance abuse clients.

Educational components of substance abuse have already been implemented in counselor education program standards (CACREP, 2009); however, education may not be enough to counter deeply ingrained negative attitudes towards substance abuse. Goffman (1963) discussed the concept of "wise" people, or those who are not afflicted with the stigmatized affliction but who are especially aware of the secret life of, and sympathize with, a stigmatized group. "Wise" people are those who are accepted by the stigmatized group and with whom stigmatized individuals do not feel shame. Goffman believed that a person must become "wise" by passing through a heart-changing personal experience. According to this concept, substance abuse counselors may serve as "wise" individuals to the substance abuse population by going through a personally relevant experience related to the population, such as the abstinence project.

Empathy

In his seminal theory of person-centered theory, Rogers (1957) discussed the role of empathy as the fifth necessary condition of personality change. Following his initial work, he further explained and refined his theory, speaking specifically about how counselors can use empathy effectively with clients. This necessary condition of counseling has been infused with almost all other counseling theories at different degrees, including psychoanalytic theory, cognitive-behavioral theory, self-psychology, and solution-focused brief therapy (Bohart & Greenberg, 1997; Clark, 2007), just to name a few. Empathy is believed to be an important component to all types of therapy and with all types of populations, including people with substance abuse disorders. In order to better understand the various roles of empathy in counseling and substance abuse, this section will review the theory of empathy, related efficacy research, the importance of

empathy in substance abuse counseling, and methodological issues in research and measurement of empathy. It is important that counselors have an empathic orientation when working in substance abuse (Moyers & Miller, 2012), which may be difficult given the unique nature of addictions. By understanding the role of empathy in counseling, counselor educators can help promote it in substance abuse counseling education.

Theory of Empathy

Rogers (1957) initially conceptualized empathy as a state of being in order to perceive the client's internal experience without over identifying with the client. Rogers (1975) later revised his definition of empathy as a process rather than a state. Several facets of this definition included entering the private world of the client, sensing meaning within the client's world without judgment, and verifying the accuracy of understanding and responding to them. Put another way, Rogers promoted an interpersonal (Clark, 2010) and experiential (Clark, 2007) mode of empathy in his work with clients. He used empathy as a way to establish and enhance the therapeutic relationship with the client so that the therapist can sense the client's internal world "as if" it were the counselor's own (Rogers, 1957, p. 99). This allows the counselor to communicate understanding of the client's internal experience and also to help the client become aware of previously unknown feelings. Relationally, it is important for the counselor to communicate this understanding to the client in order for the client to feel understood (Clark, 2010). Experientially, empathy is a stance taken by the counselor and a way of being in therapy that creates a therapeutic environment (Clark, 2007). This approach allows the counselor to respond in the moment with the client, which can lead to verifying the client's experience in real time. Accuracy of understanding is not as important as the client

feeling understood (Hartley, 1995).

The importance of empathy in counseling is not only to enhance the relationship but to promote change as well. Empathic understanding conveys caring and value of the client by another person. In the presence of this understanding climate and through reflection of meaning and emotions, a client is opened to previously unknown feelings, encouraging the perception of a new aspect of self (Rogers, 1975). The theory continues that a client who gains a new perspective of self is able to move toward changing his or her self-concept, which ultimately creates behavior change in order to be congruent with the new self-concept. This process is fundamentally related to the need to reduce counselor biases in order to foster understanding and empathy for clients struggling with addiction. It can be argued that positive attitudes related to substance abuse counseling can help create an empathic environment for clients to become fully aware of their emotions and begin the process of changing self-concept and self-destructive behaviors.

Following Rogers' (1957; 1975) description of empathy and its use in counseling, many other theories have integrated the concept at varying degrees. The concept of empathy has expanded to include different modes and definitions, including empathy as a mode of communication and a mode of observation (Clark, 2007). In terms of communication, the client must perceive empathy in verbal and non-verbal interactions. These variations in empathy have led researchers to create various operational definitions of empathy with the belief that empathy is a skill that needs to be taught and understood by counselors in training (Hartley, 1995). Essentially, the conceptualization of empathy in counseling moved from a way of being with a client to an observable interaction with the counselor using a set of skills in counseling.

The creation of operational definitions for empathy allowed researchers to study empathy using various methods to measure empathy in counseling relationships, to enhance counselor training, and in outcome studies (Hartley, 1995). The observational mode of empathy was conceptualized by Rogers (1957) as a different way of understanding clients but was not promoted to the same degree as the interpersonal mode (Clark, 2010). The observational mode allows counselors to understand clients using psychological data and observation of clients at a broader level. It is essentially a more detached mode of understanding that can help develop a conceptualization of the client in a developmental context rather than an immediate understanding of a client's emotions (Clark, 2007). This enhanced knowledge allows the counselor to develop a deeper understanding of the client from a different perspective.

The theory of empathy has had a long history in counseling and has evolved over time to fit the needs of different theories, research, and training. The fact that it has been integrated into most theories of counseling shows its importance in building the therapeutic relationship and facilitating client change. However, there is some controversy in how it should be defined and used in practice and in research (Hartley, 1995).

Empirical Research

Following the use of empathy as a mode of communication, researchers in the 1960s and 1970s began developing operational definitions of empathy in order to study its effectiveness in counseling and methods for training counselors (Bohart & Greenberg, 1997; Clark, 2007). However, research in this area has been less consistent since then (Bohart & Greenberg, 1997). Rogers' (1975) review of the outcome research on empathy

drew several conclusions. First, empathy is regarded as the highest quality to have as a therapist. Second, empathy in a therapeutic climate is associated with high levels of client self-exploration and progress in therapy. Third, the use of empathy in the early stages of therapy can predict positive therapeutic outcomes. Fourth, clients and outside raters report more empathy when counseling is successful. Finally, empathy has been found to be a quality specific to counseling when compared to friendships. Research has also been focused on counselor effectiveness, which provides implications for training and efficacy of training programs (Hartley, 1995). Research has shown that people can learn to be empathic by observing and interacting with other empathic people, by way of social learning (Rogers, 1975). However, Bath and Calhoun's (1977) review of the literature on counseling training in empathy concluded that counselor training programs fail to increase trainees' empathy. Their review may not accurately capture the current state of empathy training but points to important methodological and programmatic needs in order to increase counselor effectiveness in empathy. Other reviews of research concluded that there is an overall relationship between clients' perception of empathy in counseling and outcome; however, it is not clear what factors contribute to the change (Bohart & Greenberg, 1997).

A common issue in research on empathy involves the operational definition and measurement of empathy (Bohart & Greenberg, 1997; Hartley, 1995). In their review of research on empathy, Duan and Hill (1996) describe three constructs of empathy in research: empathy as a personality trait or general ability, empathy as situation-specific cognitive-affective state, and empathy as a multiphased experiential process. Research on empathy as a personality trait assumes that some individuals are more empathic than

others and allows for research on empathy and development. Empathy as a situation-specific cognitive-affective state implies that empathy varies by the situation and assumes that empathy can be trained. The multiphased process of empathy assumes that the experience and communication of empathy is a process with sequential stages. Duan and Hill argue that research in empathy does not often distinguish between these constructs, causing confusion in the literature.

In addition to constructs of empathy, there is some controversy over the nature of empathy as being either cognitive or affective, with a third view believing that empathy contains both cognitive and affective components. This debate about the nature of empathy has caused more confusion in the literature. The authors suggest that the terms intellectual empathy and empathic emotions should be used to distinguish between the two phenomena in research. Intellectual empathy refers to the cognitive processes of empathy and empathic emotions refer to the affective aspect of empathic experiences. Duan and Hill argue that there is a dearth of research on empathic emotions, which limits our knowledge of empathy in psychotherapy.

Overall, the disorganization and lack of clear conceptualizations of empathy have led to theoretical and methodological issues, inconsistent findings, and neglected areas in the research on empathy.

A more recent review of empathy research and training also echoed some of the concerns of research on empathy, specifically empathy training (Lam, Kolomitro, & Alamparambil, 2011). Lam et al. (2011) described three constructs of empathy when reviewing the literature: cognitive, affective, and behavioral. The cognitive component is the ability to take the perspective of others. The affective component refers to

experiencing the feelings of another person, and the behavioral component refers to communicating the understanding of an emotional experience with another person. It is unclear if all three components are necessary for a person to be empathic or if only one is sufficient, but there is research that at least some of these components of empathy are positively correlated but not necessarily the same (Davis, 1980). Lam et al. conclude through their literature review that training can enhance an individual's empathy, but there are methodological issues in the literature. Similar to Duan and Hill (1996), the researchers found methodological issues, lack of clear definition of empathy, and issues with conceptualization of empathy in the research. Methodological issues included incongruence between what component of empathy was being taught and the component of empathy being measured. Of the 29 studies they reviewed, only 34% were congruent in the type of empathy being taught and the type of empathy they were measuring. In other words, researchers would train participants on behavioral empathy but use measurements specifically for cognitive empathy. They also found that research focuses on teaching the cognitive component of empathy more than the affective or behavioral components, which shows that research efforts have continued to favor the cognitive/intellectual components since Duan and Hill's review.

Along with methodological issues in research on empathy, measuring empathy has also been debated. Common measurements of empathy include outside raters, empathy scales, counselor self-report, and client self-report. When focusing on in-therapy empathy skills, measurements can include therapist ratings of self, client ratings of therapist empathy, or objective ratings of therapist empathy (Bohart & Greenberg, 1997). Some have criticized the use of outside raters because of the difficulty in assessing the

client's unique internal experience (Hartley, 1995). Bohart and Greenberg (1997) also reported that research had found that clients' ratings of therapist empathy did not correlate significantly with therapists' self-report. Taken together with Kurtz and Grummon's (1972) study that showed client ratings of empathy were predictive of therapeutic outcome, therapists' self-report of empathy may not be as accurate as client self-report in terms of positive outcomes.

Self-report questionnaires have also been developed to assess counselor and counselor trainees' individual tendencies towards empathy. Hogan (1969) created the Hogan Empathy Scale based on the definition of empathy as a broad moral development. The measurement showed initial validity and reliability; however, it was created largely based on empathic personality characteristics of men (Hogan, 1975). Also, it has been described as more of a measure of social skills mediated by a more cognitive definition of empathy (Davis, 1983).

Mehrabian and Epstein (1972) created the Emotional Empathic Tendency Scale (EETS) based on the theory that emotional empathy involves an understanding of another's emotions and the ability to express them and is distinct from predictive accuracy of empathy. Initial testing of the measure found that emotional empathy was related to helping behavior in undergraduate students and also showed discriminate validity to social desirability. Davis (1983) compared Mehrabian and Epstein's emotional empathy measurement with subscales of the Interpersonal Reactivity Index (Davis, 1980), a multidimensional approach to individual empathy, and found that it was positively correlated with empathic concern and fantasy constructs, indicating the validity of the emotional empathy constructs.

A comparison study of six different measurements of empathy in relation to therapy process and outcome found low correlations among the different measurements, indicating that the instruments may be measuring different types of empathy (Kurtz & Grummon, 1972). Ridgway and Sharpley (1990) recognized empathy as a multi-faceted concept and sought to compare the affective, cognitive, and communicative constructs of empathy, as well as self-efficacy and purpose-in-life, as predictor variables to counseling outcome. They used the Hogan Empathy Scale (HEMP) as the cognitive component, Mehrabian and Epstein's (1972) Emotional Empathic Tendency Scale (EETS) as a measure of affective empathy, and the Affective Communication Test (ACT; Friedman, Prince, Riggio, & DiMatteo, 1980) as the measure of communicative empathy. Forty-two counseling graduate students were administered the assessments before undergoing training in counseling skills. Student performances after training were assessed through a simulated counseling interview with one of three trained raters who role-played clients and rated the students on the outcome measures. The study found that affective empathy, as measured by the EETS, was predictive of counseling skills when combined with low purpose-in-life, which indicated to the authors that counselor training should emphasize the personal qualities underlying the skills as much as the actual skills.

Overall, empathy is an important component to counseling practice and training. It is integrated into most theories and highly regarded by counseling professionals as an important way to establish a working alliance in therapy and to facilitate change. Because of its importance, counselor education programs emphasize the acquisition of empathic skills and evaluate counselor trainees' effective use of empathy as a skill. Research appears to be mixed in this area because of methodological issues in measuring empathy

based on various definitions and measures of empathy. Despite these complications, research demonstrates a relationship between empathy and therapeutic outcomes. The ability to measure different aspects of empathy in counselor trainees continues to evolve, suggesting implications for assessing empathy in substance abuse counseling trainees. Based on the issues in empathy research, this study will aim to intervene with and measure the construct of affective empathy, which is the ability to experience the feelings of others (Lam et al., 2011). The EETS has been shown to specifically measure the affective component of empathy, which makes it an appropriate measurement tool in this study.

Empathy and Substance Abuse Counseling

Historically, treatment of substance abuse was based on the moral model that viewed an addicted person as a degenerate with a moral weakness (Miller, 2010). People who adhere to this model may believe that a person with an addiction is personally responsible for the disorder, which makes it less likely that someone who holds this view will empathize with addicted clients (Decety, Echols, & Correll, 2010). The moral model resulted in shame-based approaches to break the client of his or her denial. Research has also shown that the traditional confrontational style of therapy has been associated with negative outcomes in addiction treatment (Moyers & Miller, 2012). Progression in the field of substance abuse research has provided evidence of addiction as a disease unrelated to a lack of personal morals or deviance (McLellan et al., 2000). New counseling interventions for substance abuse treatment have been created to meet clients at their stage of change, thus decreasing the use of confrontational styles. There are many different counseling approaches to substance abuse treatment; however, it has been

argued that empathy is an evidence-based technique critical for positive outcomes (Miller, 2000; Moyers & Miller, 2012).

Moyers and Miller (2012) argued that variations among client success in substance abuse treatment are related to non-specific variables such as the interpersonal skills of the counselor. Their review of the literature on substance abuse outcome concluded that an increase in counselor empathy is related to better treatment outcomes. Luborsky, McLellan, Diguer, Woody, and Seligman (1997) compared the caseloads of 22 therapists treating clients with addiction and depression. They found that the differences in client outcomes reflected therapists' interpersonal efficacy with their clients regardless of therapeutic interventions used or variations in clients' backgrounds. Tierney, Mauer, Williams, Howard, and Bianco (1983) assessed paraprofessional substance abuse counselors before and after empathy training and found an increase in counselors' self-efficacy in implementing skills and the counselors had a more positive perception of empathy skills in counseling. Based on these results, Moyer and Miller argued that empathy is a necessary component in substance abuse counseling, which must be taught and assessed in counselors who work with this population using empirically-based interventions (Adams & Madson, 2006). Tierney et al.'s research further shows that empathy can be taught in relation to substance abuse counseling and that it can have a positive impact in treatment.

Empathy, Stigma, and Attitudes

Stigma is a social phenomenon where a person is given a label based on the cultural and social meaning of an attribute and treated according to that meaning (Goffman, 1963; Link & Phelan, 2001). Negative attitudes and stereotypes based on this

label can lead to discrimination and loss of status based on the stigma. Essentially, stigmatized groups are devalued and dehumanized based on their stigmatized status, which may lead to others having less empathy towards people who are stigmatized (Decety et al., 2010), which can impede helping behavior (Batson, Chang, Orr, & Rowland, 2002).

Affective approaches to stigma have shown the link between a stereotype about a stigmatized attribute and emotions conditioned to it, which makes both components closely linked when triggered (Jones & Corrigan, 2014). An example of this link is from a study of empathy towards patients with AIDS. The researchers found that participants were more empathic towards the pain of AIDS patients who contracted AIDS through a blood transfusion than patients who contracted it through drug use (Decety et al., 2010). Participants who did not blame the patients with AIDS due to drug use for their condition tended to experience more empathy and personal distress in reaction to their pain. Emotional reactions to stigmatized groups can possibly be more detrimental than attitudes. Even though stereotypes, beliefs, and emotional prejudices are all related to discriminatory intentions towards stigmatized groups, emotional prejudices are more closely related to actual discriminatory behavior (Talaska, Fiske, & Chaiken, 2008). A study of the role of values, affect, and deservingness judgments in health professionals' views of patients with substance use disorders found that affect predicted nurses' satisfaction with the quality of care the patients received. Nurses with negative affect, which was associated with conservative values, believed the patients deserved lower quality of care and were more likely to be satisfied with the care provided (Skinner et al., 2007). Therefore, the relationship between attitudes and emotions is an important

indicator in how an individual treats and responds to individuals and groups who are stigmatized.

One of the functions of stigma is to provide strong in-group identity (Jones & Corrigan, 2014). Changing attitudes towards the negatively perceived out-group may threaten this identity, making attitude change difficult. Given the difficulty in changing attitudes towards stigmatized groups, it has been proposed that inducing empathy for a stigmatized group can improve attitudes (Batson et al., 1997). Emotional empathy can override the evaluation bias of an attitude, which may increase valuing the welfare of a stigmatized individual and create more positive attitudes towards the whole group (Batson et al., 1997). A series of experiments by Batson et al. (1997) showed that empathy for stigmatized groups (i.e., young woman with AIDS, homeless man, and convicted murderer) can be induced and result in more positive attitudes towards the groups as a whole. Participants were instructed to either take the emotional perspective of the stigmatized individuals or an objective perspective when listening to the audio recording of the stigmatized individuals' stories. The results showed that it is possible to evoke empathy and attitude change even for people who are believed to be responsible for their stigma, and the results persisted at 1-2 week follow-up.

Batson et al. (2002) conducted another study to see how inducing empathy affected attitudes and helping behavior towards stigmatized groups. They hypothesized that adopting the perspective of a needy individual from a stigmatized group would increase empathy towards that individual, which would lead to an increased valuing of the individual's welfare, more positive attitudes towards the group as a whole, and increased motivation to help the group. Participants were either asked to take the

emotional perspective or objective perspective while listening to an audio interview of a man convicted of dealing and using heroin. Participants were either told that the interview was real or fictional to test for differences in empathy and attitudes towards a stigmatized individual who is not real. Participants were tested on empathy and attitudes towards the individual and group and then asked to suggest how funds should be spent on a local substance abuse treatment program. The researchers found that participants who were instructed to take the emotional perspective of the individual increased empathy for the individual, which increased attitudes towards the whole group. Those in the empathy-inducing group also allocated more money towards the drug treatment program than those who were asked to be objective while listening to the audio interview. Finally, empathy towards a fictional character was less effective than a real character. The researchers emphasized that an individual must be a salient member of a stigmatized group in order for empathy to translate to attitude change for the whole group. Therefore, perspective taking is an important part of increasing empathy towards a person, which can lead to attitude changes towards the whole group and increase helping behavior. However, the effects of empathy on attitude change must be done in an activity that is realistic to the stigmatized group or issue.

There appears to be a strong link between empathy and counseling outcomes in general and in substance abuse treatment specifically. Due to the moral stereotypes related to substance abuse, clients may already be prone to shame, embarrassment, and guilt. A lack of empathic understanding and failure to convey empathy in treatment may further reinforce these feelings in clients, leading to poor treatment outcomes (Moyers & Miller, 2012). Counselors typically harbor their own stereotypes about substance abusers

that may prevent adequate empathy and a resistance to working with addicted clients (Miller, 2010). Therefore, it is important to educate counselor trainees about addiction and address counselor biases against persons abusing substances in order to increase positive attitudes and empathy towards clients struggling with substance abuse. Counselor trainees who are taught evidence-based information about addiction may be less prone to blame their clients, which may increase empathy and positive attitudes towards them. However, education may not be enough to change empathy and attitudes towards the substance abuse population. When attempting to increase emotional empathy towards a stigmatized group, taking the perspective of an individual from that group may be required. Pedagogically, experiential learning activities have been used to address these needs in counselor education, specifically the ability to take the perspective of an addict in treatment through an abstinence project.

Experiential Learning

Experiential learning activities are commonly used in counselor education courses in order to enhance knowledge, practice skills, increase awareness, and assessment of student learning (Swank, 2012). Counseling courses that typically use experiential learning activities include multicultural counseling (Achenbach & Arthur, 2002; Byrnes & Kiger, 1990), substance abuse counseling (Warren, Hof, McGriff, & Morris, 2012), ethics (Warren, Zavaschi, Covello, & Zakaria, 2012), group counseling (Luke & Kiweewa, 2010), and counseling techniques (Barak, 1990; Cummings, 1992). The nature of experiential learning activities also varies from role-playing and use of creative media to cultural immersion experiences, games, and group work. Many experiential learning methods incorporate a group processing or reflective journaling component. Despite the

wide use of these activities in counselor training, limited research exists examining the effectiveness of experiential learning on enhancing knowledge, skills, and awareness. This section will discuss the theory behind experiential learning activities, the research related to experiential learning in counseling, and experiential learning related specifically to substance abuse.

Experiential Learning Theory

Experiential learning theory (ELT) is a way to gain knowledge through meaningful and reflective experiences (Kolb & Kolb, 2009). Kolb's (1984) experiential learning theory was based off the work of Dewey, Lewin, and Piaget. Specifically, the work of Piaget included the developmental process of learning through experience and action. Lewin created a cycle of experiences where data is analyzed and conclusions are given as feedback to modify behavior for new experiences. Dewey's work, similar to Lewin's model, included a spiral of experiences where experience influences ideas and ideas give direction for new experiences. Across all of these theories, Kolb adapted common themes he believed were critical to learning. First, learning is best conceived as a process, not based on outcomes. This tenet holds that the process is where concepts are constantly being modified by experience. Second, learning is a continuous process grounded in experience. It is the belief that learning happens through the interplay between expectations and experience. When the experience does not meet expectations, then it causes changes. Third, learning is a process that requires the resolution of conflicts between dialectically opposed modes of adapting to the world. Specifically, the conflict is between grasping an experience and transforming the experience. Learning occurs through resolution of these conflicts. The fourth concept is the belief that learning is a

holistic process of adaptation to the world. This belief holds that learning is an integration of the whole organismic functioning, including thoughts, feelings, perceptions, and behaviors, that continues over the lifespan. Next, learning involves the transaction between the person and the environment where the environment is both an internal and external state. It is not just the environment acting upon the person, but the transaction between them that causes both to change through their interaction. Finally, learning is the process of creating knowledge. Rather than a person gaining knowledge, the transaction between the objective and subjective experiences create new knowledge. Kolb's emphasis on the interaction of the subjective and objective in order to create new understanding is what makes his theory a constructivist approach (Kitchenham, 2008).

Kolb (1984) defined learning as "the process whereby knowledge is created through the transaction of experience" (p. 38), which is reflected in ELT. The model is a 4-stage cycle of four adaptive learning modes of grasping an experience and transforming the experience. A person grasps an experience through concrete experience (CE) and abstract conceptualization (AC) and transforms the experience through reflective observation (RO) and active experimentation (AE). A concrete experience is a raw experience that involves the individual's senses without bias. Abstract conceptualization is a conceptual interpretation and symbolic representation of the experience for comprehension. Reflective observation is a way to transform the experience by observing and reflecting on experiences from multiple perspectives. Active experimentation is another way to transform through an external manipulation of the outside world.

As previously stated, one of the major tenets of ELT states that learning is a tension and conflict-filled process that needs to be resolved for learning to occur (Kolb,

1984). These opposing concepts are reflected in the four modes of adaptation. Concrete experience and abstract conceptualization are dialectically opposed ways of grasping an experience, called prehension. When an individual simultaneously engages both of these modes of knowing, then integrated learning occurs (Baker, Jensen, & Kolb, 2005). Reflective observation and active experimentation are dialectically opposed ways of transforming that experience, called transformation. Learning process occurs in the transaction of the four adaptive modes and the way in which the adaptive dialectics get resolved, generally in a cyclical model (Kolb, 1984). A person can have a concrete experience, which can be transformed through reflection to a theory or understanding (i.e., abstract conceptualization) that changes a person's behavior in active experimentation. Therefore, it is not the experience alone that leads to enhanced knowledge and awareness, but the careful transformation of the experience through processing or reflective journal writing that can create deeper meaning and behavioral change.

Experiential Learning in Higher Education

Experiential learning is being used more in higher education because of the move to post-modern learning philosophies, the increase in adult learners, and the pressure for educators to be accountable for students' learning (Lewis & Williams, 1994). The increase in use of the theory has changed the ways educators use it in order to promote critical thinking, problem-solving skills, and professional competence of students grounded in knowledge, skills, and awareness. Students must be given opportunities to connect their learning to prior experiences, actively engage in meaningful experiences, and challenged to reflect on those experiences (Edmundson, 2007). Effective use of this theory to meet these goals includes purposeful selection and planning of the activities that

connect to the specific learning goals, preparing students for the activity and reflection, facilitating group discussions, and assessing the effectiveness of the activity on learning goals (Edmundson, 2007). Other important elements in experiential learning activities include timing, flexibility, and debriefing. Debriefing is especially important to transforming an experience into learning, similar to reflective observation (Baker et al., 1997). The three most common applications of experiential learning in higher education are field-based experiences, prior learning assessment, and classroom-based experiential learning for personal development (Lewis & Williams, 1994). However, there are variations in the goals and method for each of these adaptations.

Research on ELT in higher education. The majority of empirical research on ELT has focused on measuring individual learning styles based on the four adaptive modes rather than the use of ELT as a teaching tool. Individual learning styles based on ELT have been supported through research and clinical observations (Kolb & Kolb, 2009); however, empirical outcome research on ELT in higher education is lacking (Lewis & Williams, 1994). Although some guidelines exist for using ELT in higher education, there is much room for educators to adjust an activity to the needs of their students and the objectives of the course. The theory outlines that experience is not enough to elicit increase in understanding and knowledge; it must include additional components in order to facilitate learning and attitude changes. Because of these broad criteria, educators have been able to adopt experiential activities in many domains; however, there is a large variability in how these activities are implemented and supplemented based on Kolb's (1984) theory (e.g., Luke & Kiweewa, 2010; Sias & Goodwin, 2007; Sommer, Fush, & Ingene, 2011; Swank, 2012; Warren, Hof, et al., 2012), making outcome research

difficult and with mixed results.

DeNeve and Heppner (1997) implemented a semester-long role-play simulation with undergraduate students in an industrial psychology course. Through structured interviews with 29 students immediately after the course and at an 8-month follow-up, the researchers found that students reported positively to the role-play simulations, recalled more information learned from the role-plays than the lectures, and that the material from the lectures was more important for other college courses than the activity. These results show the importance of both the lectures and experiential learning activities in students' learning. However, these results were based on students' self-report, which is subject to social desirability and there was no control group, making it difficult to conclude that the activity increased students' learning of the concepts. There was also little description of how the activity related to concepts of experiential learning theory, making it difficult to connect the concepts to the outcomes.

Another study on ELT in higher education is Lundy's (2007) research of the impact of service-learning on empathy and exam scores. Rather than measuring empathy as a skill, Lundy measured changes in emotional empathy using the Emotional Empathic Tendency Scale created by Mehrabian and Epstein (1972). She utilized a pre-post quasi-experimental control group design using 192 undergraduate students in a developmental psychology course. The students had the option of either engaging in a semester-long service-learning activity or an alternative research project. Both groups were required to take four exams throughout the semester to test knowledge acquisition. Her results indicated that students who engaged in service learning had higher exam scores throughout the semester except on the first exam, which was a pre-intervention exam

used for baseline measurements. Students in the service-learning group also had significant increases in emotional empathy over time and compared to the control group. Lundy believes that the reflection component of the service-learning activity positively impacted the increase in empathy. However, the lack of random assignment into groups may have created a self-selection bias, with students more motivated to succeed choosing to participate in the service-learning activity.

Research has also shown that experiential learning activities can actually have a negative or contradictory impact on students. Bruschke, Gartner, and Seiter (1993) conducted a study on the impact of BAFA BAFA, an intercultural simulation, on undergraduate students' motivation for learning, dogmatism, and ethnocentrism. Students (n = 272) were divided into four groups: a control group of students without any instruction on culture, a lecture control group of students in a culture communications course but did not experience the activity, the BAFA BAFA group, and a group of students in an introductory communications course. The results indicated that students in the BAFA BAFA group became more motivated to pursue intercultural instruction but also became more dogmatic and ethnocentric. The activity essentially increased attitudes that it was meant to eliminate. The authors warn educators to carefully consider the goals of the course and the rationale for the activity before implementing it in the classroom.

The theory and philosophy of ELT outlined by Kolb provides great potential for learning. Even though the use of ELT in higher education is growing, there is a lack of outcome research on its effectiveness. The research that does exist shows mixed results, rarely outlines how the activity fits the model of ELT, and how the activity is meant to accomplish learning goals. Given the theory's potential to be harmful in some instances,

it is important to understand the impact of these activities and which components are necessary for change.

Experiential Learning in Counseling

Kolb (1984) described six tenets of experiential learning. According to his theory, learning is a process; grounded in experience; created through tension and conflict between the two dialectic points of CE and AC, and the dialectic points of RO and AE; adaptation to the world; an interaction between person and environment; and a way to create knowledge rather than gain it. These tenets have been promoted by constructivist educators in counseling, claiming that it engages students into the learning process and emphasizes inductive teaching methods (McAuliffe & Lovell, 2000).

Traditional transmission-based teaching is not sufficient to create intentional, purposeful counselors because the work of counseling involves a level of uncertainty and critical thinking (McAullifee, 2011). Experiential learning techniques have been used to integrate knowledge, create personal meaning, and provide a practical outlet for knowledge gained in counseling courses, often under the context of a safe learning environment (Warren, Zavaschi, et al., 2012), especially in fields that require more than just subject knowledge. Because CACREP standards do not specifically state how knowledge, skills, and awareness should be taught, counselor educators are able to use creative activities to facilitate the acquisition of these standards (Swank, 2012). Awareness is an especially important goal of counselor education but can also be the most difficult to accomplish. Westwood (1994) argues that students acquire insight into why and how they function when participating in an experiential learning activity. This insight can be used to change behavior through cognitive and attitudinal changes.

In addition to gaining knowledge, skills, and awareness, Swank (2012) argues that experiential learning can foster collaboration among students and provide opportunities to learn from others. Students also find experiential learning activities as critical to their own learning. Furr and Carroll (2003) surveyed counseling students about critical incidents in their development during training. Students reported experiential learning activities as critical to their growth as counselors. Heppner and O'Brien (1994) also found that students reported experiential learning activities as the most important components of their multicultural counseling training. Therefore, experiential learning may have a greater impact on students beyond awareness, skills, and knowledge and may be seen as important to both students and counselor educators. However, more research is needed on the outcome of experiential learning beyond students' self-report interest in the activities.

Impact of ELT on attitudes and empathy. Research on the effectiveness of experiential learning activities often discusses the activity's impact on students' attitude changes and empathy. For example, Suthakaran (2011) believes the use of analogies in multicultural counseling training can enhance self-awareness and empathy towards other cultures. By discussing common multicultural issues in a new way, it gives students a new perspective on the topic and forces students to engage with the information differently. Kolb's (1984) concept of learning as a holistic process of adaptation to the world included an integration of all aspects of an individual, such as feeling, thinking, behaving, and perceiving. Counseling students have reported that experiential learning activities in their counselor-training program had a greater emotional impact than courses with cognitive learning strategies (Furr & Carroll, 2003). Therefore, the process of

human adaptation in learning also includes changes in attitudes, self-awareness, and emotional awareness.

Though researchers have examined the effectiveness of experiential learning, the majority of studies involves anecdotal or qualitative methods or provides conceptual rationalizations for using ELT in different areas (e.g., Arthur & Achenbach, 2002; Kim & Lyons, 2003; O'Connell & Smith, 2005; Walter & Thanasiu, 2011; Westwood, 1994). A qualitative grounded theory study of experiential learning in multicultural counseling found that students developed empathy for people who are culturally different (Achenbach & Arthur, 2002). Sommer et al. (2011) also found positive student responses regarding multicultural sensitivity after an experiential activity involving food-based activities. Analysis of student reflections after an activity to enhance multicultural sensitivity revealed an increase in self-reported insight, empathy, and awareness of privilege (Cook, Lusk, Miller, Dodier, & Salazar, 2012). These studies provide rich descriptions of students' reflections of experiential activities, but do not provide systematic quantitative data to draw conclusions that can be generalized. These studies also used different experiential techniques and provided open-ended responses to the activities immediately after the activity ended. The results did not show if these activities resulted in lasting attitude changes and might be subject to social desirability bias. There is also a lack of longitudinal studies that document the effectiveness of experiential learning activities in counseling training and treatment outcomes.

Byrnes and Kiger (1990) tested the effects of a simulation game on education major's prejudicial attitudes using quantitative quasi-experimental design. They found an increase in positive attitudes towards African-Americans and an increased willingness to

engage in anti-discriminatory behaviors, but no change in comfort level of interacting with minorities in the experimental group. However, the magnitude of the change in attitudes as measured on the assessments did not reflect the greater magnitude of self-report impact of the experience in informal interviews after the activity. In order to measure long-term behavioral changes after the study, all participants were sent a small donation request to the Martin Luther King, Jr. fellowship fund in the mail approximately one year later. Only three donations were made, all from the participants in the control group. This finding may be evidence that what students perceive as important initially following the experience may not generalize to measureable changes in attitudes and behaviors, making anecdotal evidence less reliable. Alternatively, the measurements of attitude change may not have been sensitive enough to detect the change. The follow-up measurement of a donation may also not be a valid measure of anti-discriminatory behavior. Therefore, it is possible that attitude changes may need a longer period of time to generalize to behavioral changes. Even though this study was conducted with undergraduate education students and not counseling students, it shows potential impact of experiential learning activities on attitudes and empathy towards culturally different groups. This study also shows the potential impact of other learning experiences in students' program of study and students' developmental level, with graduate-level counseling students in a program that challenges biased attitudes may have different results.

Another example of quantitative analysis of the impact of experiential learning is Barak's (1990) study of the use of a game to teach empathy skills to counselor trainees. As indicated by the results, the game helped increase counselor trainees' empathy skills,

especially related to communication of empathy, but the study had many methodological flaws. For example, there were only nine students in the study and no control or comparison group. The results of the study were positive in that empathy may be learned through experiential methods; however, these limitations make it difficult to establish what factors contributed to the changes. Another study also attempted to enhance students' skills and emotional awareness while using a mixed methods approach. Grant (2006) implemented a study to enhance students' emotional responsiveness and skills with complex clients using experiential methods. Based on student course evaluations and focus group interviews, the study showed that students increased their confidence in working with more difficult clients and managing their own emotional reactions. However, similar to other studies reviewed, the study had many methodological flaws. For example, course evaluations do not necessarily reflect students' learning in the course, just their satisfaction with the learning. Also, there was no control group comparison or pre-test, making it difficult to conclude that the intervention had a significant impact on students' skills and emotional awareness.

Some studies have focused on specific factors that have impacted change through experiential learning. Achenbach and Arthur (2002) found that the impact of an experiential activity generalized to working with clients when students understood the relevance of the experience. They also found that students who were able to understand their emotional reactions during the activity were better able to interpret the meaning of the experience, making it more impactful. Empathy development was also influenced by students' level of exposure to the experience, readiness to engage in the experience, anxiety, stress, and apathy. Reflection is also an important component of experiential

learning, which helps challenge students' faulty beliefs and attitudes. Effective ways to foster reflection include asking questions that stimulate deeper reflection, encouraging students to think critically about assumptions, and including opportunities for feedback (Griffith & Frieden, 2000). Finally, debriefing of the experience is important to fully integrate the meaning and knowledge gained from the experience (Arthur & Achenbach, 2002).

Based on the review of the literature, there appears to be a wide use of experiential learning in different aspects of counselor training but little quantitative data on its effectiveness in changing attitudes, increasing self-awareness, and increasing empathy. The quantitative research that does exist, however, shows positive results for the impact of experiential learning on these factors. The research results may be further complicated by the different approaches to experiential learning, which may impact how the experience is perceived and processed by students. Research that specifically uses interventions based on the Kolb's (1984) ELT rarely describes how the intervention matches with the four components of the model, which may further complicate the research findings. More systematic research needs to be done on the impact of experiential learning on these concepts using valid and reliable assessments, random assignment, and control groups. Future research should also take care to implement experiential learning activities specifically related to experiential learning theory to enhance consistency and aid in replication.

Experiential Learning and Substance Abuse Training

Experiential learning activities are introduced to students in substance abuse counseling as a way to develop a deeper understanding of addiction and challenge myths

and stereotypes counseling students may have about addiction. Similar to its use in multicultural counseling (Warren, Hof, et al., 2012), experiential learning can help students gain cultural competence about substance abuse (MacMaster & Holleran, 2006). Common experiential learning activities used in substance abuse counseling courses include 12-step group attendance (MacMaster & Holleran, 2006; Osborn & Lewis, 2005; Sias & Goodwin, 2007), structured reflective exercises (Lay & McGuire, 2008), and the abstinence project (Blagen, 2007; Caldwell, 2007; Harrawood, McClure, & Nelson, 2011; Warren, Hof, et al., 2012). Overall, research on the impact of experiential learning activities on counseling students' attitudes and empathy towards substance abuse clients has been positive.

Research has shown that the activities have increased students' empathy, introspection, understanding of the change process, and reflection of biases. However, some research does not support the impact of experiential learning on all of these components. For example, Sias and Goodwin (2007) provided anecdotal evidence of the relationship between experiential learning and challenging of students' stereotypes of substance abusers. They required students in a substance abuse counseling course to attend various 12-step meetings in order to understand the process of self-help groups and increase exposure to people in recovery. They found that this activity did challenge stereotypes and increased understanding of 12-step meetings, but the students did not report increased empathy for people with addictions. However, Osborn and Lewis (2005) found an increase in empathy when students were required to do both the abstinence project and attend 12-step programs. These studies emphasize the importance of choosing

experiential activities based on objectives and purpose of the activity since different ones may impact different areas of students' understanding and knowledge.

The abstinence project. Kolb's (1984) model of ELT portrays a process of experiencing, reflecting, thinking, and acting that creates knowledge. To review, Kolb's model states that there are two ways to grasp experience: concrete experimentation (CE) and abstract conceptualization (AC), and two ways to transform experience: active experimentation (AC) and reflective observation (RO). Immediate experiences (CE) can serve as the basis for reflections (RO) of the experience, which are assimilated into abstract concepts (AC), from which new actions can occur (AC). The abstinence project is an activity based on this theory and is commonly used in substance abuse counseling training to increase empathy and attitudes towards substance abuse clients (Blagen, 2007; Caldwell, 2007; Harrawood et al., 2011; Warren, Hof, et al., 2012). Students are required to abstain from a substance, activity, or behavior for a set duration of time in order to experience what it is like to be a client in treatment for addiction. The activity is supplemented with journaling of the experience for the duration of the activity, processing of students' reactions and experiences, and a debriefing at the end of the activity to integrate new knowledge.

The goal of the abstinence project is to make the activity personally relevant for students in order to address biased attitudes and feelings towards clients with substance abuse disorders. There are several assumptions of the abstinence project. For one, there is a wide use of mood-altering substances among humans. Second, people develop a personal relationship with the behavior or substance and are unaware of this relationship. And third, abstaining from a substance or behavior can help students become more aware

of this relationship (Caldwell, 2007). By increasing this awareness, students will gain a better understanding of the relationship addicts have with their addiction and the difficult process of change in order to decrease negative attitudes and increase empathy.

The abstinence project follows Kolb's (1984) ELT model by how it requires students to initially monitor their own use of a substance or behavior (CE), then asks students to reflect on their biases and feelings towards their use, their relationship with the substance or behavior, and the project throughout the duration of the activity (RO). The experience of learning the material in class, reflecting on their own journey in abstinence, and the activity of abstaining can lead to an assimilation of knowledge based on learning material and personal experience (AC). The implications of this new learning lead to new experiences (AE), which for this activity involves abstaining from the substance or behavior for a period of time. Kolb described this process as cyclical; therefore, the student is continually experiencing, reflecting, and integrating knowledge throughout the process. The ongoing processing and final debriefing of the activity can facilitate this cycle, which aims to change students' attitudes and biases of substance abuse.

Blagen (2007) argues that inaccurate beliefs, attitudes, and biases can interfere with addiction course objectives and ultimately with treatment. It has already been established that empathy is an important part of treatment outcomes in substance abuse counseling and that stigma can interfere with empathy. Therefore, counselor educators have a responsibility to challenge biased attitudes and foster empathy in their students by helping them understand the internal experience of addicted clients. Similar to research on experiential learning in counseling, there is a lack of empirical data that shows the

effectiveness of experiential learning, specifically the abstinence project, in substance abuse counseling on counselor trainees' attitudes and empathy for addicted clients. There is also some inconsistency in how researchers and counselor educators implement the abstinence project with students.

Harrawood et al. (2011) describe three experiential activities to help counselor trainees understand the effect of cravings on clients in recovery. The craving exercise is similar to the previously described abstinence project. It requires students to give up a substance for two weeks to understand the difficulty of change and the feeling of craving. They implement a reflective journal exercise in this process to facilitate self-understanding. Reflective practices in substance abuse have been shown to enhance students' development of empathy towards addicted clients (Shepherd & Pinder, 2012), especially when specific instructions were given on how to be reflective. Blagen (2007) also provided evidence for the impact of the abstinence project on students' biased attitudes and empathy. However, his evidence was also mostly anecdotal though it did include pre- and post-test of students' ratings on two Likert scale questions before and after the activity. One question asked the students' opinion for how much responsibility a person has in causing his or her addiction to measure attitudes. The second question asked students' to rate their empathy for people who were addicted to alcohol and drugs. Quantitative analysis revealed that students reduced their stereotypes about addiction and increased empathy for addiction. However, it was only based on responses to two questions on a Likert scale, making validity questionable, especially with only 17 participants. The use of single-item measurements can be valid (Bergkvist & Rossiter, 2007); however, the lack of validation of the items makes them questionable. Also, the

face value of the questions makes the questions vulnerable to social desirability. More sophisticated research design is needed to verify the findings.

Additional experiential activities proposed by Harrawood et al. (2011) include use of video, film, and music in conjunction with reflective processing facilitated by the instructor. They argue that the use of these experiences can provide an understanding of cravings experienced by addicted clients and facilitate empathy towards clients struggling with substance abuse. However, the effectiveness of these supplemental experiential activities with the abstinence project has yet to be tested empirically.

Warren, Hof, et al. (2012) also described five similar experiential activities, including the abstinence project, in substance abuse training for the purpose of enhancing knowledge, increasing empathy, and changing attitudes in students in substance abuse counseling. They reported students' responses to the activities and found that students did gain perspective into the internal experiences of addicted clients, especially related to difficulties in changing behaviors. Again, anecdotal evidence was given in analysis of the activity and cannot be generalized to lasting changes in students' attitudes or work with clients. Also, students were required to engage in the abstinence project for the entire semester while engaging in other experiential activities, making conclusions about the impact of any specific activity difficult.

In a more systematic study of the impact of the abstinence project on students' learning and awareness, Caldwell (2007) analyzed reflective journals for 450 social work students who participated in the abstinence project in a substance abuse course over a nine-year period. Students were only required to observe their use of the behavior or substance for one week and abstain for another week. The results indicated that students

developed a greater awareness of their relationship with the behavior or substance and how difficult it is to change. They also reported experiences similar to substance abuse clients in treatment, such as substituting a new behavior to replace the old one, resentment for being forced to change, powerlessness, cravings, and loss of control. The project forced students to reconsider and change their biases about substance abuse. They also developed a greater emotional understanding for those with addiction. The results of Caldwell's study suggest positive impact of the activity on students; however, the results were based on student reports in their reflective journals. These may be subject to social desirability bias and may not represent student changes in attitudes and empathy. The activity also required students to sit for a half an hour each day and "do nothing," which is not commonly associated with the abstinence project and may have influenced the results.

A review of the literature on the use of experiential learning activities in substance abuse counseling courses shows that there is ample justification for its use in order to change negative attitudes, increase empathy, and challenge stereotypes. Counselor understanding of substance abuse from a cognitive and emotional perspective may increase empathy when working with addicted clients, which can positively impact treatment outcomes. However, there are multiple techniques that seem to impact different aspects and it is unknown if the results generalize to long-term changes in counselor trainees. Research on the impact of the abstinence project largely utilizes anecdotal or qualitative methods, includes other supplemental activities that make it difficult to ascertain the impact of just the abstinence project on students, and has not included any pre-post assessments or control group comparisons. Further outcome research using

quantitative methods is needed to see if the students' self-report impact generalizes to attitudinal and empathic changes towards this population.

Chapter Summary

This paper provided an overview of the proposed study and a review of the literature related to the variables, including substance abuse prevalence, substance abuse counselor education, stigma and attitudes, empathy, and experiential learning. It includes a review of the theory of stigma and attitudes, especially related to stigma of people with addiction and how it impacts treatment and health. It also includes a review of the theories related to empathy, including the theory of change using empathy, the empirical research related to empathy and treatment outcomes, the relationship between empathy and attitudes, and empathy in substance abuse counseling. It also contains an outline of the theory and use of experiential learning in counselor education in general and substance abuse, specifically.

Overall, there is an increasing need for substance abuse counseling training that specifically addresses counselor trainees' attitudes and empathy for substance abuse clients in the counseling profession. The training that is incorporated into substance abuse counseling also needs further outcome research in order to improve the effectiveness of these interventions on attitudes and empathy. Given the history of substance abuse, there are many negative attitudes and stereotypes associated with people with addiction. Counselors who hold these negative attitudes may interfere with timely and effective interventions. Empathy is an essential aspect of substance abuse treatment, which may also be hindered due to counselor bias. Attitudes and stereotypes must be addressed directly when training counselors so as to provide competent services to people who need

them and prevent further marginalization of this population. Experiential learning is a common method used in counseling and substance abuse to facilitate counselor trainees' deeper understanding of the experiences of addicted clients in order to change negative attitudes and provide accurate empathy in treatment. However, there is a lack of research in the effectiveness of experiential learning, especially in substance abuse counseling training.

Based on the review of the literature, the counselor education field is in need of empirical evidence using quantitative methods, valid measures, control group comparisons, and larger sample sizes to test the effectiveness of experiential learning techniques in facilitating counselors' understanding of and empathy for people with substance abuse. Different levels of experiential learning activities also need to be compared in order to identify specific factors that are related to change. Further implications of this review could also inform training and practice in other areas of counseling. Experiential learning activities are commonly used in multicultural counseling training and other areas of counseling; therefore, improving the use of these activities could have implications for attitudes and empathy in these areas. Using more strategic quantitative methods to test experiential learning could inform training in other areas where experiential learning is used, which could have positive implications in counselor trainees' work with clients and treatment outcomes.

CHAPTER 3: METHODOLOGY

This study investigated how counselor educators can impact counselor trainees' attitudes and empathy towards substance abusers in order to provide effective treatment. Specifically, this study addressed the effectiveness of using an experiential learning activity in substance abuse counseling training in order to significantly impact emotional empathy and attitudes towards substance abuse clients. The goal was to compare two groups of counseling students in two separate graduate-level substance abuse counseling courses, with one group participating in an experiential learning activity called the abstinence project (experimental group) and the other not participating in the abstinence project (control group). The goal was to see if there were any significant effect of the experiential learning activity on empathy and attitudes towards substance abusers within each group and between groups.

Research Questions

The study addressed the following questions:

1. Is there a significantly larger increase in positive attitudes towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?
2. Is there a significantly larger increase in empathy towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?

Hypotheses

The two groups of participants were graduate-level counseling students enrolled in a substance abuse counseling course. The experimental group was assigned to do the abstinence project as part of their course work, and the control group did not participate in any abstinence project activities. Both groups were measured twice on empathy and substance abuse attitudes during the semester, once at the beginning of the semester before the abstinence project was implemented and again at the end of the semester after the completion of the abstinence project. Empathy was measured using the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972). Attitudes concerning substance abuse were assessed using the Substance Abuse Attitudes Survey (SAAS; Chappel, Veach, & Krug, 1985).

Based on the research questions and the research design, the following hypotheses were proposed:

1. There will be significant differences between the treatment and control conditions on their non-stereotyping attitudes towards substance abusers as measured by the SAAS, with the experimental group having a significant increase compared to the control group at post-test.
2. There will be significant differences between the treatment and control conditions on their treatment intervention attitudes towards substance abusers as measured by the SAAS, with the experimental group having a significant increase compared to the control group at post-test.
3. There will be significant differences between the treatment and control conditions on their treatment optimism attitudes towards substance abusers as measured by the

SAAS, with the experimental group having a significant increase compared to the control group at post-test.

4. There will be significant interaction from pre-test to post-test between the two groups in empathy as measured by the EETS, with the experimental group having a significant increase in empathy compared to the control group at post-test.

Research Method

Research Design

This study implemented a quasi-experimental design. Specifically, it was a nonequivalent pre- and post-test design with one experimental group and one control group. The research was quasi-experimental because participants were not randomly assigned into conditions and intact classes received the intervention. The dependent variables were emotional attitudes and empathy towards substance abuse. There was a between-subjects factor, which were the two conditions, and a within-subjects factor consisting of the pre-test and post-test.

Participants

Participants were recruited from two substance abuse graduate-level counseling courses at Council for Accreditation of Counseling and Related Educational Programs (CACREP)-accredited counselor education programs. Each course was assigned to one of two groups: the experimental group or the control group (no intervention). Students in the substance abuse counseling course at a midsize university in the southeast were assigned to the experimental group because the researcher facilitated the course. This allowed the researcher to ensure treatment fidelity of the intervention process throughout the semester. Students in the substance abuse counseling course at a midsize university in the midwest

were assigned to the control group because the abstinence project intervention was not assigned in the course. The faculty members for each course were contacted and given information about the study before being asked to participate. Once faculty permission was granted and the university's institutional review board approved the research, the students were also given information about the study and asked to participate as a volunteer. Participants in each group were provided with information about the study and asked to participate. Instructors for the respective group courses presented information about the study based on a recruitment script (see Appendix A). The recruitment scripts differed only in the descriptions of the study based on the group membership. If students decided to participate they signed an informed consent form (see Appendix B) and were administered the demographic sheet and assessments. Participants completed a questionnaire for demographic information and completed pre-test measures of emotional empathy using the EETS and attitudes towards substance abuse using the SAAS when the semester began. Post-test measures of empathy and attitudes were administered at the conclusion of the course, after the completion of the intervention.

The demographic form asked about age, gender, race/ethnicity, past experience with substance abuse counseling courses, total number of credits earned in graduate program, family history of addiction and recovery, personal recovery status, degree program (undergraduate, master's, or Ph.D.), and counseling track (i.e., school, clinical mental health, addictions, marriage and family; see Appendix C). Students provided their student identification number on each document in order to match pre- and post-test data with the specific participant and to protect confidentiality. Students in the control group

were not at risk of being identified via their student identification number due to the researcher not being affiliated with the university.

However, students in the experimental group had a higher risk of being identified via student identification number due to the researcher's role as instructor of the course. Students were informed of this risk, and measures were taken to prevent student identification with data. Specifically, the faculty investigator, who also served as the researcher's dissertation chair, introduced the study to the students with the researcher in order to convey the process of confidentiality involved in the study. Furthermore, students completed the informed consent and assessments under the supervision of an individual not involved in the study while both researcher and faculty investigator were absent from the room. This individual monitored the students while they completed the assessments. After completion, this individual collected the assessment packets, sealed them in an envelope, and delivered the assessments to the faculty investigator, who locked the envelope in his office for the remainder of the semester. Therefore, pre- and post-survey data were not viewed until after the semester had ended. Student identification numbers were removed from all assessment data forms and replaced with new identifying numbers. These steps prevented any connection between the particular student and his or her data and prevented any undue influence or pressure to participate. They also protected students' privacy and confidentiality in their decision to participate.

Measurements

EETS. The Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972) is a 33-item self-report questionnaire designed to measure a person's ability to vicariously experience the emotions of others (see Appendix D). The survey items consist

of intercorrelated subscales that measure related aspects of emotional empathy: susceptibility to emotional contagion (items 10 and 20), appreciation of the feelings of unfamiliar and distant others (items 15 and 28), extreme emotional responsiveness (items 8 and 23), tendency to be moved by others' positive emotional experiences (items 14 and 22), tendency to be moved by others' negative emotional experiences (16 and 30), sympathetic tendency (items 26 and 33), and willingness to be in contact with others who have problems (items 12 and 21). The items were selected based on insignificant correlations with a social desirability scale, significant correlation ($p \leq .01$) with the total score on the scale, and content validity as seen through a factor analysis of a larger pool of items. The subscale intercorrelations are all significant ($p \leq .01$) and exceed .30 in all instances. Due to the high intercorrelations and small item number per subscale, subscale scores are not computed. Instead, a total score based on responses to all the items was used.

Participants are asked to respond to each question on a 9-point scale ranging from -4 (*very strong disagreement*) to +4 (*very strong agreement*) in reaction to each statement. A total score is obtained by reversing the sign of participants' scores next to items with a negative sign (-) and then summed, with higher scores indicating higher tendency for emotional empathy. The EETS has a split-half reliability of .84 (Mehrabian & Epstein, 1972) and an internal reliability of .85 (Mehrabian, 1997). The assessment has shown discriminate validity when compared to social desirability (Mehrabian & Epstein, 1972); therefore, it is not likely to be influenced by participants' perception of socially appropriate answers. Reliability and validity have also been acceptable across various

studies of emotional empathy (Mehrabian, Young, & Sato, 1988) and has the ability to measure changes in pre- and post-test research designs (e.g., Lundy, 2007).

SAAS. The Substance Abuse Attitudes Survey (SAAS; Chappel et al., 1985) is a 50-item self-report survey originally designed to measure attitudes related to substance abusers among medical students and health professionals (see Appendix E). However, the SAAS has also been used in attitude-based studies with undergraduate students (Jenkins, Fisher, & Applegate, 1990), social workers (Stein, 2003), mental health professionals (Richmond & Foster, 2003), and counselors-in-training (Chasek, Jorgensen, & Maxson, 2012). The survey consists of five attitude subscales: Treatment Intervention, Permissiveness, Nonmoralism, Nonstereotypical Attitudes, and Treatment Optimism. The Treatment Intervention subscale has to do with how much an individual perceives substance use and misuse in the context of treatment and intervention. For example, one item states, "Group therapy is very important in the treatment of alcoholism or drug addiction." The Permissiveness subscale refers to how much a person endorses substance use as a part of human behavior. Attitudes associated with this scale include endorsing legalization of marijuana. The Nonmoralism subscale has to do with an individual's low endorsement of moralistic attitudes towards substance abuse, such as believing substance abuse is the result of a "weak will" or the belief that all drugs are equally dangerous. Nonstereotypical Attitudes refers to low endorsement of common stereotypes associated with substance abuse, for example the belief that marijuana use leads to mental illness or that smoking tobacco leads to drug use. Finally, Treatment Optimism includes items that reflect positive attitudes of addiction as a treatable illness.

Each item is answered on a 5-point Likert scale to indicate level of agreement or

disagreement (1 = *strongly disagree*, 5 = *strongly agree*). A score of 50 or above in a single group indicates an appropriate attitude for effectively working with substance abusers. Individual scores are calculated according to the scoring rubric, where each subscale is scored for its own raw score. Raw scores are transformed into *T*-scores for standardized comparisons between subscales. The subscales are assessed independently because there is no total score for the survey instrument. The SAAS is a valid and reliable survey with subscale reliabilities ranging from 0.63 to 0.77 (Chappel et al., 1985; Chappel & Veach, 1987).

For the purpose of this research and in order to increase parsimony, only three subscales were used in the data analysis: Treatment Optimism, Treatment Intervention, and Nonstereotypical attitudes. The goal of the research was to see the effects of an experiential learning activity on counselor trainees' attitudes towards substance abuse. Attitudes are influenced by endorsement of stereotypes of substance abusers and can influence students' optimism towards treatment and their ability to perceive addiction in the context of interventions. Chasek et al. (2012) found that counseling students' scores on nonstereotypical attitudes and orientation towards treatment interventions predicted their optimism for treatment concerning substance abuse. Therefore, these three scales are most related to the goals of the intervention and were used in analysis.

Procedure

Students were recruited from two graduate-level substance abuse counseling courses from two different universities with CACREP-accredited counseling programs. The experimental group included students enrolled in the substance abuse counseling course in the counseling program at a midsize university in the southeast, under the

instruction of the researcher, a doctoral student in the counseling department. These students participated in the intervention, the abstinence project. The control group included students enrolled in the substance abuse counseling course in the counseling program at a midsize university in the Midwest, under the instruction of a faculty member in the counseling department. The control group did not participate in the abstinence project. After students were recruited for the study, they were assessed at the beginning (T1) and the end (T2) of the semester. TI pre-survey assessment took place for both groups immediately after the add/drop period closed and prior to the implementation of the abstinence project in the experimental group. At T1, the students in both groups were given the demographics questionnaire, the EETS, and SAAS. T2 post-survey assessment took place at the end of the semester following the conclusion of the abstinence project. At T2, both groups were assessed again on the EETS and SAAS to test for any changes in empathy and attitudes towards substance abuse. The researcher collected the data for the experimental group and the faculty of the control group substance abuse course collected data for the control group. The assessments were given in paper-and-pencil format in the classroom setting. The control group did not participate in an experiential activity related to abstinence over the semester. Both groups participated in classroom assignments and readings as assigned. The procedures for the experimental group will now be discussed.

The Abstinence Project. The experimental group participated in the abstinence project for 10 weeks during the semester of their substance abuse counseling course, which was instructed by the researcher. Similar activities have been outlined in previous research (e.g., Caldwell, 2007; Harrawood, McClure, & Nelson, 2011; Osborn & Lewis,

2005; Warren, Hoff, McGriff, & Morris, 2012); however, the structure and time limit of the activities in the research varies. For example, researchers have varied the length of time of the activity from two weeks to 15 weeks. Others have required brief periods of behavior observation before abstaining and others have implemented additional activities or requirements with the activity. One commonality among the previous research is the implementation of the abstinence project from the theory of experiential learning (e.g., Harrawood et al., 2011; Osborn & Lewis, 2005; Warrern, Hoff et al., 2012). Therefore, the abstinence project for this study was based on commonalities in the previous literature and the experiential learning theory outlined by Kolb (1984).

The goal of the activity was for students to understand what it is like to implement change, similar to what substance abusers experience in treatment for drugs and alcohol use, in order to raise awareness of their own attachment to certain substances and behavior. By making the activity personally relevant to counselors-in-training, students will be able to transfer this awareness to more positive attitudes and empathy towards people with addiction (Caldwell, 2007). Caldwell outlines several underlying assumptions for this assignment. First, all humans engage in "mood-altering activities" that either enhance or create a more desirable state or change an undesirable one. Second, people often develop a personal relationship with the mood-altering activity, similar to a friend, which becomes a routine coping mechanism. Lastly, the act of consciously abstaining from a preferred activity raises students' awareness about their relationship with these behaviors. By understanding their own relationship with mood-altering substances, previous stigma about substance abuse will be challenged and counselors-in-training will gain new awareness and understanding of individuals with substance abuse

disorders.

Kolb's (1984) theory outlines four aspects of activities that must be present in order to enhance learning; however, these aspects can be presented in any order. Students were provided with the rationale for the project at the beginning of the semester in order to convey intentionality and provide them with a frame of reference for their experience. The activity began on the fifth week of the semester in order for them to gain some level of knowledge about addiction and treatment to be used to frame their experience. The first step was a concrete experience (CE), which is a method of intentionally taking in information. This was achieved by having students choose a behavior or substance they believe will be in their best interest to change (i.e., TV, Internet, texting, shopping, caffeine, sweets, smoking) and observing their use or involvement in their chosen activity. At the beginning of the fifth week of the semester, students were asked to observe their use of the behavior or substance for a period of two weeks and document their use in a daily journal before abstaining from their chosen activity. Specifically, students were asked to indicate how many times they performed the activity and their thoughts, emotions, and behaviors before and after their use (see Appendix F). This raised students' awareness of their current behavior and habits, creating a concrete experience for reflection.

The next stage in Kolb's (1984) experiential learning theory is reflective observation (RO), where students reflect on the concrete experience from a different perspective. Reflection that is structured and intentional allows students to discover their own biases, challenge old ways of thinking, and be open to new knowledge and worldviews (Lay & McGuire, 2008). This was achieved through the "Letter to My

Substance/Behavior" activity outlined by Hagedorn (2011), which took place in class at the end of the two-week observation period. This activity has typically been used for clients in addiction treatment in order to highlight resistance and ambivalence that is commonly found in substance abuse treatment. Hagedorn suggested that this activity could be used as part of the educational experience of counselors-in-training engaging in the abstinence project as a way to prepare students for the challenges of their own abstinence. Students had the opportunity to reflect on their observations of their chosen activity in addition to experiencing resistance and ambivalence common in addictions treatment. The researcher followed the guidelines of Hagedorn's activity (see Appendix G) in order to provide intentionality and guidance through the reflection process, which took place in class as a group activity. In addition to processing and reflecting on students' experiences with the letter writing activity, they also had the opportunity to discuss how it relates to their own upcoming abstinence and their work with substance abuse clients. The knowledge they gain from the course was used to frame their own experiences, which created new ideas for the next stage.

The third step is abstract conceptualization (AC), which involves comprehending an experience through conceptual interpretation. Students were able to formulate a greater comprehension of addiction, abstinence, and their own biases and behavior through their own concrete experience of use, the reflective observations, and the definitions and theories of substance abuse through readings and lectures about the various concepts of addiction during the semester. The final stage of Kolb's (1984) experiential learning theory is active experimentation (AE), which is where students test their new knowledge and awareness in more complex situations. This is where students

abstained from their chosen activity for eight weeks after the two-week reflection period and immediately following the "Letter to My Substance/Behavior" activity. As students engaged in the abstinence period, they were required to write weekly reflections outlined by Caldwell (2007). They were instructed to write reflections regarding the impact the change made in terms of bio-psycho-social factors. Specifically, students were instructed to comment on the physical impact of the change, psychological effects (emotions, thoughts, and behaviors), social effects, and how personal diversity issues might have been relevant to the experience (see Appendix H).

Ongoing reflection is important to continuing the integration of new experiences and knowledge to learning (Shepherd & Pinder, 2012). At the end of the 10 week abstinence project, students were required to write a 6-7 page final reflection paper integrating their knowledge and awareness from the experiential activity and how it related to their worldview of addiction and treatment. The students were provided with instructions adapted from Caldwell (2007) on the structure and key points to attend to for the paper (see Appendix I). The journals and final paper were not used in the research. The students in both the experimental and control groups were administered the SAAS and EETS in the last week of class.

"Letter to My Substance/Behavior" protocol. The experimental group engaged in this activity after the initial two-week observation period. This activity has been used in substance abuse treatment with the goal of helping clients to navigate resistance and ambivalence commonly experienced in the change process. This activity specifically highlighted the ambivalence and resistance students may have experienced in their own change process. The researcher, who has experience implementing the activity with

counselor trainees in a substance abuse counseling course, facilitated the activity. The activity has been outlined by Hagedorn (2011) and is explained in Appendix E.

The activity lasted about one hour including the outcome-oriented debriefing, which is considered an important aspect of experiential learning because it helps to create meaning and connect their experience to their knowledge of the subject (Achenbach & Arthur, 2002). It allowed students to process their feelings and reactions to the activity, including their feelings and reactions to others in the group. The processing allowed students to share their experience, make meaning of the experience, think about how the experience will impact their future behavior for change within the group, and think about how it relates to their future work with substance abuse clients. After the Letter writing activity was over, students began the eight-week abstinence period.

Treatment fidelity. Treatment fidelity was assessed and maintained by the researcher in several ways. For one, the researcher was also the instructor of the course and monitored the implementation of the intervention by maintaining the schedule set forth in the intervention procedure. Also, the abstinence project was a required activity for successful completion of the substance abuse counseling course. In other words, students' participation in the pre- and post-test assessments was voluntary but their engagement in the intervention was required. Therefore, the activities and assignments outlined here and in the appendices were required and took place on a set schedule as outlined in the course syllabus in accordance with the intervention timeline.

Threats to Internal Validity

Internal validity is the degree to which any changes in a dependent variable are the direct result of changes in the independent variable (Gay, Mills, & Airasian, 2009),

which may interfere with the results of the research. For this study, several threats to internal validity have been identified and measures taken to control or decrease their impact on the results. Students in both groups may also be taking other counseling courses or participating in clinical work with clients that may have influenced their attitudes or empathy between pre- and post-tests. Also, participants may have previously taken substance abuse counseling courses in the past or some participants may have taken more counseling courses than others. These background differences were assessed in the demographic portion of the pre-test in order to test and control for differences in experiences prior to the research. Finally, the two groups are being taught by different instructors in different settings, which may influence the information participants receive about the course subject. The research reviewed the course syllabi for both groups to assess for differences and similarities in course content.

Multiple tests using the same instruments over time may have also been a threat due to pre-test sensitization (Gay et al., 2009). However, the SAAS and the EETS have been used in previous studies using pre- and post-test analyses with reliable results (e.g., Chappel & Veach, 1987; Lundy, 2007). Also, the length of time between assessments should decrease the impact of this threat. Another threat is the possibility of differences between participants in each group on pre-test scores, which is more common in nonrandom groups. If this occurs, then it may be necessary to control for pre-test differences in the final analyses. Maturation is also a threat, which was accounted for by beginning the pre-test assessment after the add/drop period in order to avoid attrition.

Threats to External Validity

External validity has to do with how well the treatment results generalize to the

population, making it necessary to set up the research in a way that closely approximates the population and setting. However, this reduces control and increases the threats to internal validity (Gay et al., 2009). There was the possibility of a pretest-treatment interaction because of the pre-post test design. Participants may have responded differently to the intervention and post-test due to the pre-test. This threat was addressed by not informing participants' directly about the study and the purpose of the assessments until after the study was completed. Participants may have participated in a similar intervention in a previous course, which may have also interfered with validity. Participants were screened for any prior participation in abstinence projects, including their own recovery from addiction or experience with family or friends in recovery, in order to test for differences. Treatment diffusion was not expected to be an issue because of the distance between the two groups.

Another possible threat was selection-treatment interaction concerning group membership. For example, the counseling program at UNC Charlotte offers a specialization in addictions counseling. Therefore, participants in the treatment group at UNC Charlotte may have specifically attended the program based on their interest in substance abuse counseling and may not accurately represent the counseling student population. The variables chosen may also influence external validity. As mentioned in Chapter 2, there are many different types of empathy and ways to measure it. This study specifically measures emotional empathy; however, the intervention may have influenced a specific type of empathy that was not measured. Finally, experimenter effects and reactive arrangements may have also been threats to validity. Because the researcher was

also the instructor of the course with the intervention, there is a possibility that unconscious behaviors may have influenced participants' performance.

Data Analysis

After the activity was completed and the final data were collected, the data was entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Participants were identified using the student identification number they provided on their assessments in order to test for changes between the pre-test and post-test. The data was screened for normal distribution, outliers, and all major assumptions associated with the statistical analyses. Sample size is approximate and based on maximum class size limits for each program: 30 participants in the control group and 25 in the experimental group, for a possible maximum total of 55 participants.

Differences in attitudes. Hypotheses 1, 2, and 3 were tested using three two-way (Group x Time) mixed analyses of variance (ANOVAs) to analyze the within-between interaction on the three SAAS subscales. A two-way mixed ANOVA is used where there are two or more groups measured repeatedly on the same scale (Tabachnick & Fidell, 2013). The three subscales of the SAAS were converted into *T*-scores to adjust for differences in items per subscale, making them commensurate. The hypotheses would supported by a statistically significant interaction among the groups over time, with a significant increase in attitudes for the experimental group compared to the control group. If a statistically significant interaction was found, post-hoc analyses was conducted to test the nature of the interaction effect. Effect sizes were also reported with all results. Cronbach's alpha was reported for each subscale used of the SAAS.

An a priori power analysis for repeated measures ANOVA, within-between

interaction, and within factors based on a medium effect size of 0.25 (Cohen, 1988), alpha of .05, and power of .80 suggested a sample size of 24, indicating that the proposed sample size for this study would have adequate power when all other assumptions are met. The limitation to conducting the three analyses was a possible Type I error inflation. However, given the proposed sample size, the three analyses are considered the most powerful, making it more likely to identify any significant differences.

Differences in empathy. Hypothesis 4 was tested using a two-way (Group x Time) mixed ANOVA to analyze interaction effects and within-group differences of the single-score EETS. A two-way mixed ANOVA is used where there are two or more groups measured repeatedly on the same scale (Tabachnick & Fidell, 2013). The two groups (i.e., control group and experimental group) were measured twice throughout the semester on the EETS to find changes between groups and time. Hypothesis 4 will be supported with a statistically significant interaction between groups and time of assessment, with the experimental group having a significant increase in empathy compared to the control group. If significant, post-hoc tests of simple effects will be conducted for significant differences among the variables. Similar to the test of differences in changes in attitudes, effect sizes and confidence intervals will be reported for all significant results and estimates of the reliability of the EETS will be conducted using Cronbach's alpha. Again, an a priori power analysis for repeated measures ANOVA, within-between interaction, and within factors based on a medium effect size of 0.25 (Cohen, 1988), alpha of .05, and power of .80 suggests a sample size of 24, indicating that the proposed sample size for this study will have adequate power when all other assumptions are met.

Chapter Summary

This chapter included the proposed methodology that will be used to test the research questions and hypotheses outlined in the first chapter. It included a review of the research questions and hypotheses, the rationale for a quasi-experimental design with comparative pre- and post-test design, how participants were recruited, what measurements were used, and the procedure of the study. The chapter also contained a description of the data analyses that was performed once the data had been collected, which corresponded with the research hypotheses and research design.

CHAPTER 4: RESULTS

The purpose of this study was to investigate the effectiveness of an experiential learning activity on counseling trainees' attitudes and empathy towards substance abuse using a quasi-experimental pre-post-test control group design. The following sections will cover: (a) descriptive characteristics of study participants, (b) data preparation and screening, (c) results of the three two-way (Group x Time) mixed analyses of variance (ANOVAs) for the subscales of the Substance Abuse Attitudes Survey (SAAS; Chappel, Veach, & Krug, 1985), and (d) results of the two-way (Group x Time) mixed ANOVA for the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972). All data screening and analyses were conducted using the Statistical Package for Social Sciences (SPSS). The following questions were addressed in the research:

1. Is there a significantly larger increase in positive attitudes towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?
2. Is there a significantly larger increase in empathy towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?

Participant Demographics

The sample consisted of two groups of graduate-level counseling students from two programs accredited by the Counsel for the Accreditation of Counseling and Related

Programs (CACREP). The experimental group, which received the treatment intervention, consisted of 18 students who were enrolled in a graduate-level substance abuse counseling course at midsize university in the southeast. The control group consisted of 24 students who were enrolled in a graduate-level substance abuse counseling course at midsize university in the midwest and did not receive the treatment intervention. Two participants in the experimental group and two participants in the control group were removed from the data for failure to complete both pre- and post-test assessments, leaving n =16 in the experimental group and n = 22 in the control group. Participants failed to complete both assessments due to absences in their respective classes, which suggested that the data are missing at random and not due to the intervention.

The average age of participants in both groups were similar, with a mean age of 29.75 (SD = 9.92) for the experimental group and 29.55 (SD = 10.79) for the control group. The groups differed in the number of credit hours completed in their respective programs, with the experimental group completing an average of 27.56 (SD = 18.07) credit hours and the control group completing an average of 12.14 (SD = 14.59) credit hours. An independent t-test comparing the two groups on credit hours showed a statistically significant difference, $t(35) = 2.873$, $p < .05$. These results indicate that participants in the experimental group may have been more advanced in their program requirements, which suggested differences between the two intact groups. All participants in the experimental group and 21 participants in the control group were master's-level students.

The remaining participant characteristics are displayed in Table 1. The majority of both groups were White and female, with slightly more diverse ethnicity in the

experimental group. The majority of participants in both groups were in the clinical mental health program, with 31.3% of the experimental group in a specific addictions counseling program. An almost equal percentage of participants had previously completed a course in substance abuse counseling. However, no control participants have completed a behavior reduction activity similar to the abstinence project nor held an internship in addiction counseling. Regarding participants' personal experience with addiction, the experimental group had more experience with family members' addiction and recovery compared to the control group. These demographics indicate that the experimental group may have been more advanced in terms of their clinical, educational, and personal experience with addiction.

Table 1: Participant characteristics for experimental and control groups

	Experimental		Control	
Variables	*n*	%	*n*	%
Gender				
Female	14	87.5	21	95.5
Male	2	12.5	1	4.5
Ethnicity				
White	11	68.8	19	86.4
African-American	2	12.5	0	0
Latino/a	2	12.5	2	9.1
American Indian	1	6.3	0	0
Biracial	0	0	1	4.5
Counseling track				
Clinical	10	62.5	12	54.5
Addiction	5	31.3	0	0
School	0	0	3	13.6
Other	1	6.3	7	31.8
Addiction course				
Yes	7	43.7	9	40.9
No	9	56.3	12	54.5
Abstinence project				
Yes	4	25.0	0	0
No	12	75.0	22	100.0
Family-addiction				
Yes	14	87.5	15	68.2
No	2	12.5	7	31.8
Family-recovery				
Yes	13	81.3	10	45.5
No	3	18.8	12	54.5
Self-recovery				
Yes	1	6.3	0	0
No	15	93.8	22	100.0
Internship-addiction				
Yes	4	25.0	0	0
No	12	75.0	22	100.0

Scale Reliabilities

As discussed in Chapter 3, two assessments were used in this study, the EETS to measure empathy and the SAAS to measure attitudes towards substance abuse. The SAAS consists of five subscales, only three of which were used for this study: Nonstereotyping, Treatment Intervention, and Treatment Optimism. Internal reliability for each scale at pre- and post-test was measured using Cronbach's *a*. Previous studies have reported a split-half reliability of .84 (Mehrabian & Epstein, 1972) and an internal reliability of .85 (Mehrabian, 1997). In this study, Cronbach's *a* for the EETS was .71 at pre-test and .76 at post-test. These reliabilities were slightly lower than previously reported but still considered adequate for research purposes.

Cronbach's *a* was calculated for the three subscales of the SAAS at pre- and post-test. Previous studies have reported reliabilities ranging from .63 to .77 (Chappel et al., 1985; Chappel & Veach, 1987). In this study, the reliabilities for Nonstereotyping subscale were .67 for pre-test and .77 for post-test. Treatment Intervention had a reliability of .19 at pre-test and .56 at post-test. Cronbach's *a* for Treatment Optimism was .62 for pre-test scores and .60 for post-test scores. Most subscale reliabilities for the SAAS were consistent with previous studies' analyses except for the Treatment Intervention pre-test reliability, which may have influenced further analyses.

Data Preparation and Screening

The raw data were computed into scale scores for each variable, one for empathy using the EETS and three subscales from the SAAS (Nonstereotyping, Treatment Intervention, and Treatment Optimism). The raw subscale scores for the SAAS were converted to *T*-scores using the conversion table provided by the assessment creators. The data were screened for missing data, outliers, and normality. One participant in the

control group failed to complete questions 1-15 in the SAAS post-test. Given the configuration of the SAAS subscales, the missing data only affected the participant's score on the Nonstereotyping subscale. A mean substitution was created and added for the missing data; however, it did not change the impact of the scores and later analyses so it was removed and the participant was not used in the analysis of the Nonstereotyping subscale.

Normality was screened by assessing skewness and kurtosis scores ±1 standard deviation from zero for each scale within each group. Significant kurtosis and skewness was found for the pre-test Nonstereotyping subscale in the control group. SPSS EXPLORE of this scale found one outlier greater than two standard deviations below the mean in the control group. When the outlier was removed, the normality fell within normal ranges. Therefore, this outlier was removed for analysis of the Nonstereotyping subscale.

Significant skewness and kurtosis were also found for Treatment Intervention pre-test subscale in the control group. Further analysis found three outliers on this scale in the control group, two significantly below the mean and one above the mean. Three outliers were also found for the Treatment Intervention post-test subscale in the experimental group, two significantly above the mean and one below. However, it did not have significant skewness or kurtosis of the post-test score for the experimental group. Removal of all six outliers significantly improved the normality for the Treatment Intervention pre-test score for the control group and did not negatively impact the distribution of the experimental group scores. Therefore, these outliers were removed for further analysis of the Treatment Intervention subscale.

Significant skewness and kurtosis values were also found for the Treatment Optimism pre-test subscale for the experimental group. Analysis of outliers found one extreme outlier (less than three standard deviations from the mean) in the pre-test scores of the experimental group. Further analysis found two outliers for the Treatment Optimism post-test scores, one the experimental group and one in the control group. Removal of all three outliers significantly improved the distribution of the pre-test scores for the experimental group and did not negatively impact the distribution for the other subscale scores. These outliers were removed for further analysis of the Treatment Optimism subscale. The means, standard deviations, and sample sizes for all dependent variables can be found in Table 2.

Table 2: Means and standard deviations for EETS and SAAS subscales by group

	Experimental			Control		
Variable	*n*	*M*	*SD*	*n*	*M*	*SD*
Nonstereotyping						
Pre	16	50.31	4.45	20	53.55	7.39
Post	16	52.81	8.50	20	51.05	9.22
Treatment Intervention						
Pre	13	40.92	6.49	19	37.37	4.75
Post	13	38.08	5.56	19	38.95	10.02
Treatment Optimism						
Pre	14	54.79	7.14	21	49.33	8.49
Post	14	55.00	9.04	21	49.19	7.52
EETS						
Pre	16	45.31	16.96	22	44.52	19.74
Post	16	48.00	18.43	22	43.23	20.60

The first research question was addressed by three two-way (Group x Time) mixed analyses of variance (ANOVAs) to analyze the interaction between groups over time for each subscale. The first research question addressed the interaction between group membership and time on the three subscales of attitudes towards substance abuse: Nonstereotyping, Treatment Intervention, and Treatment Optimism. Hypotheses 1, 2, and 3 stated that there would be significant differences between the treatment and control groups on their attitudes towards substance abuses, with the experimental group having a significant increase in the three attitude variables compared to the control group at post-test.

Hypothesis 1 addressed the Nonstereotyping attitude variable. Before running the two-way mixed ANOVA, an independent *t*-test was conducted to test for any significant pre-test differences between the groups. Equal variances were assumed using Levene's test of equal variances. The independent *t*-test was non-significant, $t(34) = -1.54$, $p = .13$, indicating that groups had equal pre-test scores on this variable. A two-way mixed ANOVA was conducted with Nonstereotyping as the repeated measure at pre- and post-test and treatment condition as the grouping variable. Box's test of equal covariance was non-significant, Box's $M = 6.62$, $p = .10$, indicating that the covariances of the dependent variables are equal across groups. The interaction of group over time approached significance at $p = .051$, with a medium effect size, partial $\eta^2 = .11$ (Table 3). A visual analysis of the profile plot in Figure 1 shows the experimental group increasing in Nonstereotyping attitudes from pre-test to post-test, with the control group decreasing over time on this variable. The results from the analysis were approaching significant with a moderate effect size, suggesting that the intervention had a positive effect on

nonstereotyping attitudes towards addiction for the experimental group. A post hoc power analysis using sample size and effect size shows power at 0.98, indicating adequate power for this analysis.

Hypothesis 2 addressed the Treatment Intervention attitude variable. An independent *t*-test was conducted to screen for significant differences in pre-test scores between the two groups. Equal variances were assumed and the independent *t*-test was non-significant, $t(30) = 1.79$, $p = .08$, indicating that the groups had equal pre-test scores. A two-way mixed ANOVA was conducted using Treatment Intervention as the repeated measure at pre- and post-test and treatment condition as the grouping variable. Equality of covariances was assumed, Box's $M = 7.01$, $p = .09$. The results of the mixed ANOVA are available in Table 3, which show that there was no significant interaction or main effects in this variable, which indicates no statistically significant interaction of treatment condition over time. Even though the results were not statistically significant, a visual analysis of the plot profile in Figure 2 shows that the experimental group actually decreased over time on this variable and the control group increased over time. The results suggest that the data may have been trending in the opposite direction, with a decrease of attitudes for the experimental group. A post hoc power analysis found estimated power to be at 0.85, indicating adequate power for this analysis.

Hypothesis 3 addressed the Treatment Optimism subscale as a variable of attitudes. An independent *t*-test was conducted to screen for significant pre-test differences on this variable between groups. Equal variances were assumed and the independent *t*-test was non-significant, $t(33) = 1.98$, $p = .06$, indicating equal pre-test scores between the groups. A two-way mixed ANOVA was conducted using Treatment

Optimism as the repeated measure and treatment condition as the grouping variable. Equality of variances was assumed, Box's $M = 1.73$, $p = .66$. As shown in Table 3, there was no significant interaction or main effect for time; however, there was a significant main effect for group. The results of the analysis indicate that the experimental group had higher treatment optimism attitudes towards substance abuse compared to the control group, but did not change as a function of the intervention over time. Post hoc power analysis for interaction effects resulted in an estimated power of 0.07, which is extremely low and may have influenced the results of the analysis.

Table 3: Results of mixed ANOVAs for SAAS subscale variables.

Source	*SS*	*df*	*MS*	*F*	*p*	partial η^2
Nonstereotyping						
Between Subjects		35				
Group	9.67	1	9.69	.11	.75	.003
Error	3107.28	34	91.39			
Within Subjects		36				
Time	.00	1	.00	.00	1.00	.00
Time x Group	111.11	1	111.11	4.08	.051	.11
Error	926.50	34	27.25			
Treatment Intervention						
Between Subjects		31				
Group	27.81	1	27.81	.391	.54	.01
Error	2131.05	30	71.04			
Within Subjects		32				
Time	6.20	1	6.20	.19	.66	.01
Time x Group	75.57	1	75.57	2.37	.13	.07
Error	958.16	30	31.94			
Treatment Optimism						
Between Subjects		34				
Group	532.69	1	532.69	5.25	.03	.14
Error	3348.80	33	101.48			
Within Subjects		35				
Time	.02	1	.02	.001	.98	.00
Time x Group	.54	1	.54	.02	.89	.001
Error	949.46	33	28.77			

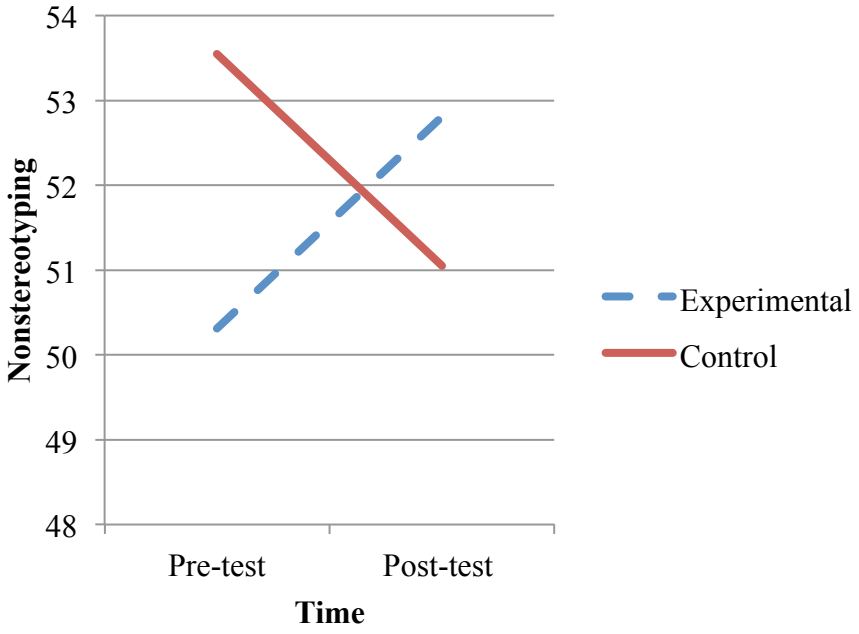

Figure 1: Profile plot of Nonstereotpying subscale by group over time.

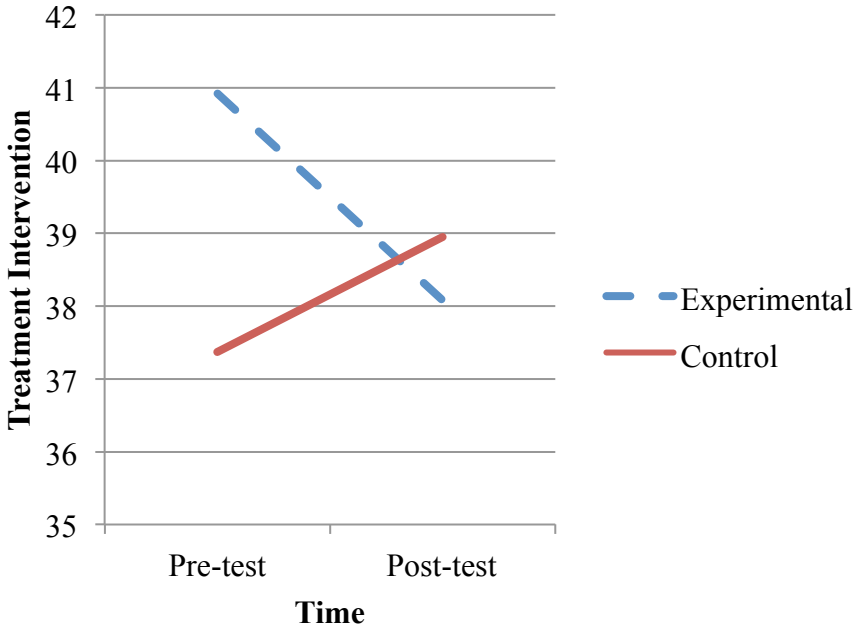

Figure 2: Profile plot of Treatment Intervention subscale by group over time.

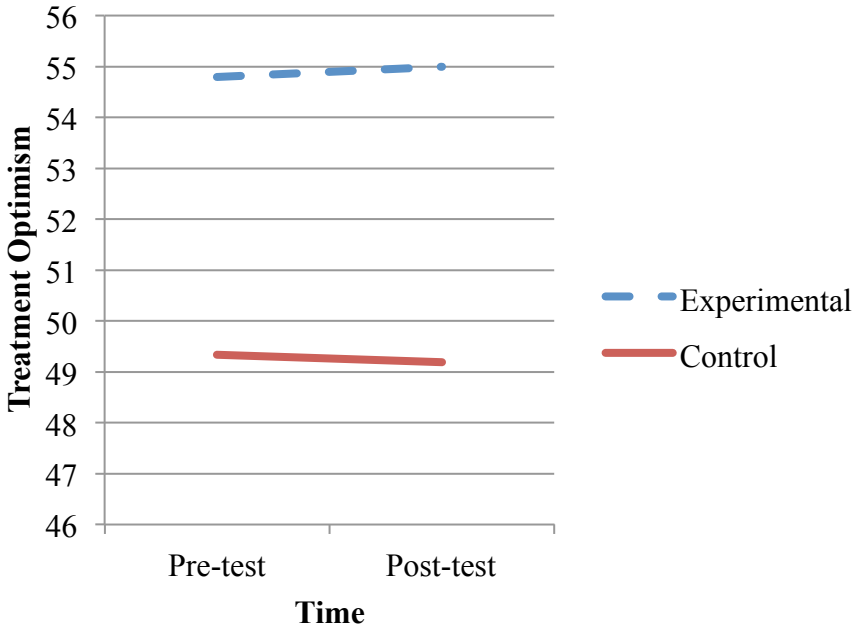

Figure 3: Profile plot of Treatment Optimism subscale by group over time.

Changes in Empathy

The second research question was addressed using a two-way (Group x Time) mixed ANOVA to analyze the interaction of groups over time using the EETS as the dependent variable. The second research question asked if there was a larger increase in empathy for counseling students who participated in the experimental group compared to those in the control. This research question was addressed with Hypothesis 4, which stated that there would be a significant interaction over time between the two groups in empathy, with the experimental group having a significant increase in empathy.

Similar to the analyses for the SAAS subscales, an independent *t*-test was conducted to test for a significant difference between groups on pre-test EETS scores. Equal variances were assumed and the results were not significant, $t(36) = .13$, $p = .90$, indicating that the groups had similar pre-test scores. A two-way mixed ANOVA was

conducted with EETS as the repeated measure and the treatment condition as the grouping variable. Equality of covariances were assumed, Box's $M = 1.12$, $p = .79$. Results of the analysis were non-significant for interaction and main effects (Table 4). Visual analysis of the profile plot in Figure 4 shows that the data were trending in the hypothesized direction, with empathy increasing at post-test for the experimental group and decreasing for the control group. The results indicate that the intervention did not significantly increase empathy towards substance abusing clients compared to a control group. A post hoc power analysis for EETS estimated the power to be 0.45, indicating low power in the EETS analysis.

Table 4: Results of mixed ANOVA for EETS

Source	*SS*	*df*	*MS*	*F*	*p*	partial η^2
EETS						
Between Subjects		37				
Group	143.31	1	143.31	.22	.64	.006
Error	23327.66	36	647.99			
Within Subjects		38				
Time	8.98	1	8.98	.10	.75	.003
Time x Group	73.48	1	73.48	.83	.37	.023
Error	3173.88	36	88.16			

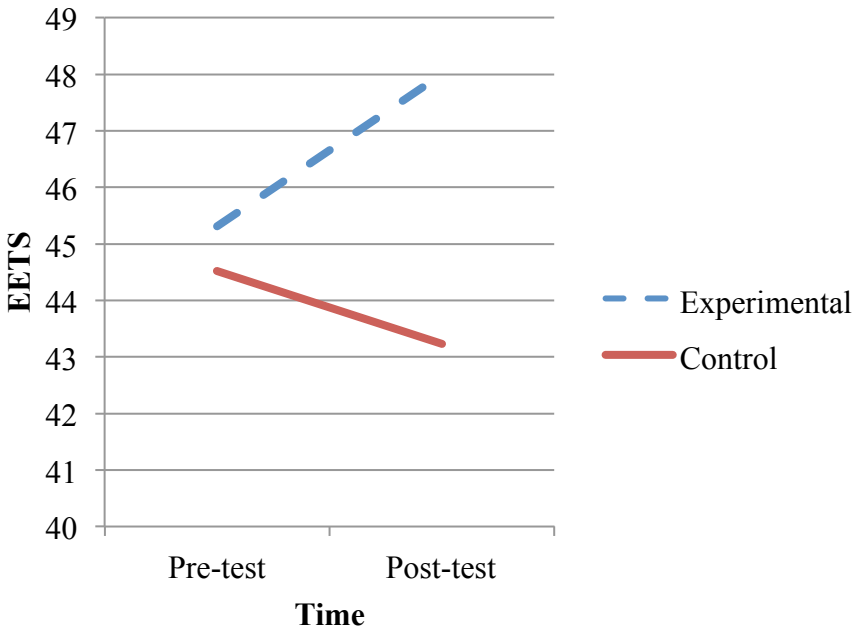

Figure 4: Profile plot for EETS by group over time.

Conclusion

In summary, the statistical analyses to address the research questions yielded results as follows:

1. The hypothesis that there would be a significant difference between treatment and control groups on their attitudes towards substance abusers, with the experimental group having an increase in non-stereotyping attitudes at post-test was marginally supported at $p = .051$. Analysis of profile plot showed an increase in non-stereotyping attitudes at post-post, with a decrease for the control group.
2. The hypothesis that there would be a significant difference between groups in treatment intervention attitudes towards substance abuse, with the experimental group having an increase at post-test compared to the control group was not supported at $p < .05$. Visual analysis of the profile plots revealed a decrease in

these attitudes for the experimental group, although it was not statistically significant.

3. The hypothesis that there would be a significant difference between groups in treatment optimism attitudes towards substance abuse, with the experimental group having an increase at post-test compared to the control group was not supported at $p < .05$. Although there was a significant main effect for group.
4. The hypothesis that there would be a significant difference between groups in empathy as measured by the EETS, with the experimental group having a significant increase in empathy was not supported at $p < .05$. However, visual analysis of the profile plots showed non-significant trends in this direction, with experimental group having an increase in empathy scores compared to the control group.

CHAPTER 5: DISCUSSION

This study investigated the effect of the abstinence project, an experiential learning activity, on counseling students' empathy and attitudes towards substance abuse clients. A review of the literature suggests that clients with addiction are commonly stigmatized for their disorder and that students are required to gain awareness of their own biases in order to work effectively with this population. Research has shown that positive attitudes and empathy lead to better treatment outcomes. However, there is little consensus in how to challenge students' biases towards addiction. Experiential learning is a common educational tool used in counselor education and is based in Experiential Learning Theory (Kolb, 1984); however, there is a dearth of quantitative research on its effectiveness in changing students' attitude and increasing empathy. This study is the first to use a quasi-experimental pre- and post-test control group design in testing the effectiveness of an experiential learning activity on counselor trainees' empathy and attitudes towards substance abuse. This final chapter will review the statement of the problem and the methodology and then will summarize the results of the study in light of previous research. Finally, the chapter concludes with limitations of the study and recommendations for practice and further research.

Discussion of Findings

As previously stated, this study utilized a quasi-experimental pre-post control group design to test the effectiveness of an experiential learning activity on counselor

trainees' empathy and attitudes towards substance abusing clients. The study took place during the fall 2014 semester and included pre- and post-test assessments of two master's-level substance abuse counseling courses, one without the abstinence project (control group; $n = 22$) and one with the abstinence project (experimental group; $n = 16$). Students in both groups were assessed at the beginning and at the end of the semester in order to test for changes in empathy and attitudes towards substance abuse based on group membership. The following sections will discuss these findings in the context of current literature on experiential learning theory in counselor education and empathy and attitudes towards substance abuse. The research questions were:

1. Is there a significantly larger increase in positive attitudes towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?
2. Is there a significantly larger increase in empathy towards clients who abuse substances for counseling students participating in the experiential learning group compared to those in the control group?

Changes in Attitudes Towards Addiction

Research Question 1 explored the changes in attitudes towards substance abusing clients based on counseling students' participation in an experiential activity while in a graduate-level substance abuse counseling course. The study hypothesized that participation in the experiential activity would increase Nonstereotyping attitudes, Treatment Intervention attitudes, and Treatment Optimism attitudes for the experimental group compared to the control group. The results of these analyses were mixed, with Nonstereotyping attitudes approaching significance and treatment intervention and

treatment optimism showing no significant differences between groups over time. Visual analyses of the graphs show that Nonstereotyping attitudes trending in the hypothesized direction, with the experimental group increasing in these attitudes, but treatment intervention attitudes trending in the opposite direction, with the experimental group decreasing over time. Treatment optimism attitudes were not significantly different over time but did show group differences, with the experimental group having more positive attitudes than the control group.

Perhaps the most significant finding in the study is the marginally significant increase in Nonstereotyping attitudes for the experimental group at post-test. Defined as assumptions made about others based on group membership, stereotypes are imbedded in the concept of stigma, where people who hold biased beliefs about a stigmatized attribute tend to believe in stereotypes associated with that attribute (Goffman, 1963; Jones & Corrigan, 2014). Prejudice and discrimination are also closely linked to stigma and stereotypes, where prejudice is a negative affective attitude about a group based on stereotypes and discrimination consists of negative behaviors based on prejudices (Jones & Corrigan, 2014). Therefore, a decrease in stereotyping attitudes about addiction may decrease prejudice and discrimination towards that group.

Items in the Nonstereotyping subscale include statements concerning the progression of addiction ("Smoking leads to marijuana use, which, in turn, leads to hard drugs"), personality characteristics of drug users ("People who use marijuana usually do not respect authority"), treatment prognosis ("Heroin is so addicting that no one can really recover once he/she becomes an addict"), and treatment setting ("A hospital is the best place to treat an alcoholic or drug addict"). These statements reflect an all-or-nothing

viewpoint about people who use/abuse substances, which may have been challenged as a result of personally exploring their own relationship with mood-altering substances via the experiential learning activity. Not only were stereotypes about addiction changed, the results may indicate that counseling students in the experimental group may have a more complex view of the causes and progression of addiction.

Even though the results were not statistically significant, Treatment Intervention attitudes evidenced a trend in the opposite direction of what was hypothesized. The scores show that the experimental group actually decreased in their treatment intervention attitudes, with the control group evidencing an increase in these attitudes. Statistically speaking, the Treatment Intervention subscale had the appropriate amount of power but poor pre-test reliability, which may have influenced the results. Another explanation is that the participants in the experimental group may have begun questioning some of the common beliefs about addiction treatment based on their abstinence experience. For example, the items included in this subscale refer to common aspects of addiction treatment, like the importance of group therapy and family involvement, the importance of early diagnosis for successful treatment outcome, and the use of urine drug screens. Based on their own struggles and successes of abstaining from a personally relevant substance or behavior, they may question their own endorsement of these statements.

Other items in the Treatment Intervention subscale include statements that may be outdated for instance, “Long-term outpatient treatment is necessary for the treatment of drug addiction.” Studies have shown that long-term outpatient treatment is not always necessary for successful treatment of addiction (Miller & Rollnick, 2012). Another statement indicates, “Paraprofessional counselors can provide effective treatment for

alcohol or drug misusers." Based on participants' exposure to educational and experiential components of substance abuse counseling, they may recognize the importance of trained and qualified professionals in the treatment of addiction. The results may also be a function of the assessment instrument, which was created in 1985 and may include outdated statements that have been challenged or discredited with recent research in addiction treatment.

Counselors' positive expectations about substance abuse treatment have been shown to correlate with more successful outcomes in treatment (Leake & King, 1997), which is why it is important for counselors to have optimistic attitudes towards treatment. There was no statistically significant difference between groups over time in Treatment Optimism attitudes. However, there was a significant main effect for group, with the experimental group having higher Treatment Optimism attitudes compared to the control group. Items included in the Treatment Optimism subscale refer to addiction as a treatable disease, and the treatability of people with multiple relapses and those who have not hit "rock bottom." Past educational, personal, and clinical experiences in addiction may explain why participants in the experimental group may have already had high Treatment Optimism attitudes that were not changed due to the intervention.

The overall higher levels of optimism towards treatment of addiction for the experimental group may be due to this group's significantly higher number of courses completed in their counseling program. Students in the experimental group also had more training in substance abuse counseling, more personal experience with addiction and recovery, and more clinical experiences in addiction settings. Higher education, personal experience in recovery or family member in recovery, and courses in substance abuse

counseling have been associated with more positive attitudes towards substance abusing clients (Carroll, 2000) and more positive attitudes towards treatment (Gassman, 1997). However, past research has been mixed about the impact of higher education alone on attitudes towards addiction (e.g., Davis, Sneed, & Koch, 2010; Richmond & Foster, 2003). Therefore, educational level and formal knowledge of addiction may not be enough to change attitudes. Contact with the stigmatized group, in this case people with substance abuse disorders, has also shown to decrease stigmatized attitudes (Palamar, Halkitis, & Kiang, 2013). Participants in the experimental group evidenced more clinical experience with substance abusing clients. The combination of higher education, more substance abuse training, and personal and clinical experiences with addiction may have influenced a more positive endorsement of treatment outcomes overall. The impact of the intervention may have also been influenced by the low statistical power associated with the subscale analysis.

A final explanation of the results of the experiential learning activity on attitudes towards addiction may have to do with differences between the attitudes targeted by the activity and the attitudes being measured. The goal of the abstinence project was to integrate knowledge of addiction with personal experiences of abstaining from a mood-altering substance or behavior in order to understand the experiences of those with addiction. Therefore, this activity may not have affected attitudes related to treatment intervention or treatment optimism but instead challenged how they view people with addiction in light of their own "addictions." In other words, the activity may have decreased the psychological gap between their positive in-group identity as non-addicted individuals and the negative view of the out-group of addicted individuals common in

stigma (Goffman, 1963; Jones & Corrigan, 2014). By participating in the activity, participants may have become more aware of the similarities between themselves as non-addicted individuals and those who have substance use disorders, which may have challenged the all-or-nothing perspective of stereotyped beliefs about addiction but not the attitudes related to treatment intervention or optimism.

Changes in Empathy

Research Question 2 explored the changes in empathy based on counseling students' participation in an experiential activity while in a graduate-level substance abuse counseling course. The study hypothesized that participation in an experiential learning activity would increase counseling students' empathy compared to students who did not participate in the activity as part of their coursework. The results were not statistically significant and the hypothesis was not supported. However, visual analysis of the plot of both groups over time show a trend in the hypothesized direction, with the experimental group increasing in EETS scores at post-test.

Given the importance of empathy in substance abuse treatment outcomes (Miller, 2000; Moyers & Miller, 2012) and its relationship with stigmatizing attitudes (Jones & Corrigan, 2014), it is imperative that counselor educators encourage counseling trainees to develop this skill in relation to addiction. The positive trend for the higher empathy scores over time for the experimental group shows promise for the impact of the abstinence project on counseling students' empathy. It is possible that taking the perspective of an addicted person during the experiential activity could have caused the trend toward increasing empathy at post-test for the experimental group. However, alternative explanations exist for the lack of significance in the analysis. As mentioned in

Chapter 2, there are multiple operational definitions and conceptualizations of empathy that have made research inconsistent (Bohart & Greenberg, 1997; Hartley, 1995). Previous research on empathy often makes the mistake of teaching or intervening on one type of empathy or multiple types of empathy (i.e., coginitive, emotional, behavioral) but measuring a different type of empathy (Lam, Kolomitro, & Alamparambil, 2011). In order to avoid this methodological flaw, this study focused only on emotional empathy due to its theoretical and empirical connection to attitude changes and experiential learning theory. There is evidence that similar but separate constructs of empathy exist (Davis, 1980), and they may have been differentially impacted based on the experiential learning activity. In other words, even though there is previous research that suggests the positive impact of experiential learning activities on emotional empathy, it may also impact other forms of empathy, which were not measured in this study. For example, cognitive empathy refers to the ability to understand the perspective of others (Lam et al., 2011). Given the nature of the abstinence project, this component of empathy may have also been impacted but not measured. Finally, the low statistical power associated with the analysis of the EETS may have also impacted the results as well as experimental group participants' advanced training in the counseling program and substance abuse counseling.

Limitations

In light of certain limitations, caution should be exercised when interpreting the results of this study. A lower sample size than anticipated, low power on some of the analyses, and low reliability on the Treatment Intervention pre-test scores may have prevented statistical analyses from accurately capturing the impact of the intervention.

Specifically, the items of the SAAS may be outdated regarding some of the terminology and concepts related to addiction, which may influence how participants responded. Participants were chosen based on convenience sampling of students already enrolled in graduate-level substance abuse counseling courses; therefore, there was no random sampling or random assignment of participants into research groups. Because there was no random assignment, the groups were significantly different in the number of courses completed in their counseling programs, as well as differences in personal and clinical experiences in addiction counseling. Even though both programs require students to take a substance abuse counseling course, the experimental group attended a counseling program that includes a concentration in addiction and students may have chosen the program based on this factor, creating a self-selection bias. These inherent differences between the groups may have influenced the results of the study. The convenience sampling may have also created a threat to external validity. Participants came from two university counseling programs that were accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2009). Therefore, the results may not generalize to counseling trainees' in non-CACREP-accredited programs. Finally, the study focused on a manualized version of one experiential learning activity, the abstinence project, in relation to attitudes and empathy towards addiction. The results may not generalize to other kinds of experiential activities or to other populations.

Limitations should also be considered regarding the study design. Both groups were enrolled in graduate-level substance abuse counseling courses in CACREP-accredited counseling programs; however, the courses were facilitated by different instructors and had different formats and topics. The control group was enrolled in a

course that focused on treatment planning and assessment and was taught in a hybrid format, with classroom time split between online and face-to-face meetings. The experimental group course focused on theories of addiction and was taught in a face-to-face classroom format. These threats to internal validity may have influenced students' perceptions of addiction and the results of their responses. The study also involved students' self-report data, which may have been biased based on the questions or perceived expectations.

Despite the limitations noted above, this study has notable strengths. The study attempted to address a need in the counselor training literature on the impact of experiential learning theory on counselor trainees' knowledge, skills, and awareness. Given the open-ended nature of experiential learning theory (ELT, Kolb, 1984), there is a large variability in how experiential learning theories are implemented. This study's use of a quasi-experimental pre- and post-test control group design, operational definitions, and a manualized experiential activity based on the theory were attempts to overcome numerous challenges and limitations of the current research on this approach in counselor education. Based on the review of the current research in this area, this study is the first to utilize a quantitative design with a control group and pre-test assessment. It is a needed addition to the previous research on ELT in changing trainees' empathy and attitudes towards addiction, which relied on qualitative and anecdotal data, and it contributes to the literature on ELT in counselor education and training.

Implications and Recommendations for Future Research

The theory behind experiential learning has great potential to supplement and enhance counselor trainees' knowledge, skills, and awareness in a variety of counseling

courses and topics (Warren, Zavaschi, Covello, & Zakaria, 2012). Rather than focusing on knowledge or experience, ELT postulates that the interaction of these two factors, along with reflection and active experimentation, can have deep and lasting impact on trainees' learning and understanding (Kolb, 1984). Numerous studies have been written on the impact of various experiential learning activities in addiction counseling training (e.g., Blagen, 2007; Caldwell, 2007; Harrawood, McClure, & Nelson, 2011; Lay & McGuire, 2008; MacMaster & Holleran, 2006; Osborn & Lewis, 2005; Sias & Goodwin, 2007). However, the previous research has largely focused on conceptualizations and anecdotal data and rarely attempted to outline the activity based on specific components of the theory. This may explain some of the mixed results of various experiential activities in addiction counseling training outlined in Chapter 2. This study is the first to manualize an activity based on ELT components for use in a quasi-experimental pre- and post-test control group design. Results of this study uniquely contribute to the research on the effect of ELT in counselor education in general, and in substance abuse specifically. The following implications and recommendations for counselor education are discussed based on the results of this study.

A theoretical implication of this study includes the use of ELT in counselor education in general and addiction counseling specifically. As previously discussed, this theory holds that learning is a holistic process of adaptation to the world through integration of knowledge, experiences, and reflective practice (Kolb, 1984), especially related to attitudes and empathy towards substance abuse (Osborn & Lewis, 2005; Sias & Goodwin, 2007). Based on the results of this study alone, it is difficult to support the claim that certain experiential learning activities have significant effects on empathy and

attitudes towards addiction. However, the study shows that the abstinence project has promising potential to positively change counselor trainees' perceptions of addiction, at least in terms of non-stereotyping attitudes and empathy. Significant group differences may be implicated in the lack of significant findings. Several recommendations for research on the theory should be considered, including random assignment of participants into groups to reduce the impact of these differences, and including participants' reflections on their own experience of the abstinence project with quantitative data. The integration of multiple types of data may shed light on the various ways the activity impacts counselor trainees. Longitudinal research and follow-up data should also be collected in future research to test for any changes over time. Because of the cyclical and process-oriented nature of ELT, it is possible that the effects of the activity may continue to increase over time. This study also focused on attitudes and empathy, which are cognitive and affective components. It is unknown how this intervention impacted participants' behaviors toward addicted individuals. Future research could also study the behavioral component of the abstinence project on participants' actions towards substance abuse, such as pursuing clinical opportunities in addiction.

This study asked students in the experimental group to abstain from a personally relevant mood-altering substance or behavior. Therefore, there was variability in what students chose to abstain from, including tobacco, caffeine, sugar, "junk" food, social media, and cell phone use. This allows students to have a more personal connection with the project; however, the variability may influence how the activity impacts students' attitudes and empathy. Future research on the abstinence project may attempt to narrow the scope of what students could choose to abstain from, or collect data on what students

abstain from, in order to reduce variability and test for moderating effects of substance/behavior on the activity's impact.

Based on the findings of this study, it is recommended that experiential learning activities continue to be used in counselor education in general and substance abuse counseling training specifically. Past research has shown that experiential learning activities have the potential to negatively impact students (Bruschke, Gartner, & Seiter, 1993). However, there is no evidence from this study that shows a negative impact of the abstinence project on counseling students. Past research has shown that counseling students often report experiential learning activities as important components to their growth as counselors (Furr & Carroll, 2003; Heppner & O'Brien, 1994). Even though this particular study did not find a statistically significant increase in attitudes and empathy towards addiction based on participation in the abstinence project, students may find the activity personally important to their training. Future research could also assess trainees' perceptions of the abstinence project to see how they viewed the relevance of the activity to their own training.

Further implications to counselor education and substance abuse counseling training include implementation of experiential learning activities. Past research has emphasized the importance of selecting and implementing experiential activities based on learning goals and purpose (Osborn & Lewis, 2005; Sias & Goodwin, 2007). It is also important for counselor educators to prepare students for the activity and facilitate reflection and group discussions (Edmundson, 2007). However, past research does not discuss how counselor educators should plan experimental activities based on trainees' prior knowledge and experience. Participants who engaged in the abstinence project in

this study had more advanced knowledge and experience in counseling and substance abuse and may have benefited from a more advanced experiential learning activity. A portion of the participants in the experimental group also had previous experience of participating in a similar abstinence project in the past. Repeated participation in this experiential activity may decrease its impact on students' attitudes and empathy towards addiction.

Counselor educators may increase the impact of these activities by assessing students' current knowledge, experiences, and needs prior to the activity and tailoring the interventions to meet students' unique situations. Counseling trainees who have participated in the activity in the past may benefit from a different version of the activity that focuses on a different aspect of knowledge, skills, or awareness associated with addiction. Because of the potential for experiential activities to negatively impact students, counselor educators should exercise caution when implementing a new activity. Preparing students in advance, facilitating reflection, and monitoring students' reactions over the course of the activity, and providing a safe environment may decrease the chance of negative outcomes.

In summary, results of the current study suggest the possibility of positive effects of the abstinence project on counseling trainees' non-stereotyping attitudes and empathy towards substance abusing clients and should continue to be used in substance abuse counseling training. As discussed previously, limitations associated with this study may have impacted the results and should be addressed in future research in ELT and counselor education. In addition to the suggestions already made, future studies of the abstinence project could focus on different kinds of attitudes towards addiction. For

example, the SAAS includes two additional subscales, Permissiveness and Nonmoralism, which were not included in this study. The abstinence project may have impacted these attitudes differently. Also, a different attitudes scales could be used, such as the Counselor Trainee Attitudes Measure (CTAM; Koch, Sneed, Davis, & Benshoff, 2006), which measures various attitudes related to addiction, including adherence to different model of addiction, perceptions of substance abuse treatment, and perceptions of the dangerousness of people with addiction. Other components of empathy could also be used, such as cognitive empathy. Larger sample sizes could also be used in future studies in order to avoid statistical issues associated with this study. Finally, other types of activities in experiential learning theory should also be studied using quantitative methodologies and greater adherence to the theoretical components. These future studies may shed light on how experiential activities impact learning in different areas of counseling and what components of the theory influence changes in counselor trainees' learning.

Conclusion

This study found that the abstinence project, an experiential learning activity, did not have a statistically significant higher impact on counselor trainees' attitudes and empathy towards substance abusing clients compared to trainees' who did not participate in the activity. However, the results show the possibility of increasing non-stereotyping attitudes and empathy based on hypothesized positive trends in the data. This study is unique in counselor education and experiential learning theory research for conducting a quasi-experimental pre-post-test control group design. This research fills a gap in the research by analyzing ELT from a quantitative perspective and has implications for the

future of counselor training and research. Given the need for more knowledgeable and skilled counselors in addiction and the importance of positive attitudes and empathy towards addicted clients, counselor educators may improve counseling outcomes by emphasizing the importance of knowledge, skills, and awareness with students. The abstinence project may be one way to promote these goals; however, further research is needed in order to further understand the impact this has on students' attitudes and empathy.

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APPENDIX A: RECRUITMENT SCRIPTS

Recruitment Script for Experimental Group

My name is Bailey MacLeod and I am a doctoral candidate at the University of North Carolina at Charlotte. I am conducting a study on the effects of an experiential learning activity on counseling trainees' empathy and attitudes towards substance abuse. This study involves new research that may enhance our understanding of the effectiveness of experiential learning activities on counseling students' empathy for and attitudes towards substance abuse clients. This knowledge may provide a better understanding of the process of experiential learning in counselor education.

Participants in this course are part of the experimental group, which means you are participating in the Abstinence Project as part of your coursework. The research involves pre-survey and post-survey assessment, which means you will be asked to complete the packet now and at the end of the semester. If you choose to participate, you will be asked to complete a demographic questionnaire at the beginning of the semester, and an emotional empathy and substance abuse attitudes survey at the beginning and the end of the semester. Each round of assessment should take less than 20 minutes. After taking the pre-test surveys, you will participate in the abstinence project for 10 weeks during the semester in accordance with your course requirements. You will be asked to monitor your normal use of a substance or behavior of your choice for two weeks and then abstain from the substance or behavior for eight weeks. Any reflection papers or documents you write for the Abstinence Project will not be used as data for the research, only your pre-survey and post-survey results. Your course instructor may require you to participate in the Abstinence Project as part of your coursework; however, it is voluntary

to participate in the research that requires the completion of pre- and post-survey assessments. The demographic questionnaire will briefly ask you to indicate if someone you know has any experience with substance abuse or recovery from substance abuse, and it will ask if you personally are in recovery from substance abuse; however, you participation will be confidential. You will be asked to provide your student identification number on your surveys for identification purposes. Although it is possible to identify you based on your student identification number, steps will be taken to avoid identification. Specifically, the data will **not** be viewed until after the completion of the semester to ensure that your participation will in no way impact your course grade. After your pre- and post-test surveys have been matched, your student identification number will be removed and replaced with an alternate identification number provided by the researcher. Therefore, there will be no information that will link your name or information to the data.

I will distribute an informed consent document and a questionnaire packet. This is a voluntary questionnaire and if you agree to participate, should take 15-20 minutes to complete. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started. Your participation in this study will in no way affect your course grade. I will leave the room while you complete the study. If you do decide to participate, please read and sign the informed consent form, complete the questionnaires, and return all materials to the envelope when you are finished. If you decide not to participate, please return all documents in the envelope without responding to any of the questions.

Recruitment Script for Control Group

To: Instructor of Substance Abuse Counseling Students-University of Nebraska at Kearney

From: Bailey MacLeod, University of North Carolina at Charlotte

Subject: Data Collection: The Effects of an Experiential Learning Activity on Counselor Trainees' Empathy and Attitudes Towards Substance Abuse

Thank you for agreeing to present my request for study participants to your students. I am asking that informed consents and questionnaires be distributed to students during the week of _____ through the _____. With this letter you will find enough packets (informed consent, demographic questionnaire, and assessments) for all of your students. After you have collected all packets, please return them to Bailey MacLeod. Please use the following script prior to distributing questionnaires to your students:

Bailey MacLeod, a doctoral student in the counseling department at the University of North Carolina at Charlotte is requesting your participation in her research investigating the effects of an experiential learning activity on counseling trainees' empathy and attitudes towards substance abuse. This study involves new research that may enhance our understanding of the effectiveness of experiential learning activities on counseling students' empathy for and attitudes towards substance abuse clients. This knowledge may provide a better understanding of the process of experiential learning in counselor education. Participants in this course are part of the control group, which

means you will not be required to participate in the study's intervention. The research involves pre-survey and post-survey assessment, which means you will be asked to complete the packet now and at the end of the semester. The demographic questionnaire will briefly ask you to indicate if someone you know has any experience with substance abuse or recovery from substance abuse, and it will ask if you personally are in recovery from substance abuse; however, you participation will be confidential. You will be asked to provide your student identification number on the documents in order to match your pre-survey and post-survey responses. Your student identification number will be replaced with a random number by the researcher; therefore, no information will connect you to the data. I will distribute an informed consent document and a questionnaire packet. I will not have any access to the data or your responses. This is a voluntary questionnaire and if you agree to participate, should take 15-20 minutes to complete. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started. Your participation in this study will in no way affect your course grade. I will leave the room while you complete the study. If you do decide to participate, please read and sign the informed consent form, complete the questionnaires, and return all materials to the envelope when you are finished. If you decide not to participate, please return all documents in the envelope without responding to any of the questions. I will return all documents to the investigator.

Thank you again for your assistance. If you have any questions, please email me at bmacleo1@uncc.edu or call me at XXX-XXX-XXXX.

APPENDIX B: INFORMED CONSENT FORMS

Informed Consent for University of Nebraska at Kearney Participants (Control Group)

You are invited to participate in a research study on the effectiveness of an experiential learning activity on counseling students' empathy and attitudes towards substance abuse clients. The purpose of this study is to test the effectiveness of the abstinence project on students' empathy for and attitudes towards substance abuse clients while enrolled in a substance abuse course. This study involves new research that will increase our understanding of the effectiveness of experiential learning activities on students' learning in counselor education. This dissertation project is being conducted by Bailey P. MacLeod as part of completion of her doctoral studies in the Department of Counseling in the College of Education at the University of North Carolina at Charlotte. The responsible faculty member is Dr. Jack Culbreth.

You may participate in this study if you are at least 18 years old, are enrolled in a CACREP-accredited program and are currently enrolled in a substance abuse counseling course. You may not participate if you are under 18 years old, enrolled in a non-CACREP accredited program, or are not currently enrolled in a substance abuse counseling course.

Approximately 55 participates are being sought from two different substance abuse counseling courses. In order to better understand the impact of the abstinence project, participants will either participate in a course that does not have the abstinence project as part of the course, or they will be in a course that requires the abstinence project as part of the coursework. You are a part of the control group, which means that the Abstinence Project is not required as part of your substance abuse counseling course.

Participants in both groups will be asked to complete assessments at two points in the semester, at the beginning and the end. You will be asked to complete a demographic questionnaire, an emotional empathy survey, and a substance abuse attitudes survey at the beginning of the semester. The demographic questionnaire will ask you about your experience with people with substance use disorders and recovery, and will ask if you are currently in recovery. You will be asked to only complete the emotional empathy and substance abuse attitudes surveys at the end of the semester. Each round of assessments will take approximately 15-20 minutes to complete.

The study will be conducted over the course of the Fall 2014 semester. You will be asked to complete two rounds of assessments, once at the beginning of the semester and once at the end of the semester. Each round of assessments should take approximately 15-20 minutes.

No risk or negative consequence is expected form your participation. You will not be compensated for your participation. In addition to contributing to the improvement of counselor education and training, your participation may increase your awareness of substance abuse counseling and future work as a counselor.

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started.

Any information about your participation, including your identity, is completely confidential. You will be asked to provide your student identification number on the surveys at both points during the semester in order to match your pre-test scores with

your post-test scores. No data will have your name on it. All data will be secured in a locked location and will be available only to myself and members of my dissertation committee. No published data will contain identifying information.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the university's Research Compliance Office if you have any questions about how you are treated as a study participant. If you have any questions about the actual project or study, please contact me at XXX-XXX-XXXX or bmacleo1@uncc.edu, or you may contact my dissertation chair, Dr. Jack Culbreth, at XXX-XXX-XXXX or jrculbreth@uncc.edu.

This form was approved for use on < > for use for one year.

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the principal investigator of this research study.

_____ _____

Participant Name (PRINT) DATE

_____

Participant Signature

_____ _____

Investigator Signature DATE

Informed Consent for UNC Charlotte Participants (Experimental Group)

You are invited to participate in a research study on the effectiveness of an experiential learning activity on counseling students' empathy and attitudes towards substance abuse clients. The purpose of this study is to test the effectiveness of the abstinence project on students' empathy for and attitudes towards substance abuse clients while enrolled in a substance abuse course. This study involves new research that will increase our understanding of the effectiveness of experiential learning activities on students' learning in counselor education. This dissertation project is being conducted by Bailey P. MacLeod as part of completion of her doctoral studies in the Department of Counseling in the College of Education at the University of North Carolina at Charlotte. The responsible faculty member is Dr. Jack Culbreth.

You may participate in this study if you are at least 18 years old, are enrolled in a CACREP-accredited program and are currently enrolled in a substance abuse counseling course. You may not participate if you are under 18 years old, enrolled in a non-CACREP accredited program, or are not currently enrolled in a substance abuse counseling course.

Approximately 55 participates are being sought from two different substance abuse counseling courses. In order to better understand the impact of the abstinence project, participants will either participate in a course that does not have the abstinence project as part of the course, or they will be in a course that requires the abstinence project as part of the coursework. You are part of the experimental group, which means that the professor of your substance abuse counseling course is requiring your participation in the abstinence project as part of your training. Even though you are

required by your professor to participate in the abstinence project, you are not required to complete the pre- and post-survey assessments as part of this research. Bailey MacLeod will oversee the implementation of the abstinence project throughout the semester, which will require reflection papers. Any reflection papers written as part of the activity will **not** be used as data for the research, only your assessment data. Participants in both groups will be asked to complete assessments at two points in the semester, at the beginning and the end. You will be asked to complete a demographic questionnaire, an emotional empathy survey, and a substance abuse attitudes survey at the beginning of the semester. The demographic questionnaire will ask you about your experience with people with substance use disorders and recovery, and will ask if you are currently in recovery. You will be asked to only complete the emotional empathy and substance abuse attitudes surveys at the end of the semester. Each round of assessments will take approximately 20 minutes to complete.

The study will be conducted over the course of the Fall 2014 semester. You will be asked to complete two rounds of assessments, once at the beginning of the semester and once at the end of the semester. Each round of assessments should take approximately 15-20 minutes.

No risk or negative consequence is expected form your participation. You will not be compensated for your participation. In addition to contributing to the improvement of counselor education and training, your participation may increase your awareness of substance abuse counseling and future work as a counselor.

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated

any differently if you decide not to participate in the study or if you stop once you have started.

Any information about your participation, including your identity, is completely confidential. You will be asked to provide your student identification number on your surveys for identification purposes. Although it is possible to identify you based on your student identification number, steps will be taken to avoid identification. Specifically, the data will **not** be viewed until after the completion of the semester to ensure that your results cannot impact your course grade even if you are identified. After your pre- and post-test surveys have been matched, your student identification number will be removed and replaced with an alternate identification number provided by the researcher. Therefore, there will be no information that will link your name or information to the data.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the university's Research Compliance Office if you have any questions about how you are treated as a study participant. If you have any questions about the actual project or study, please contact me at XXX-XXX-XXXX or bmacleo1@uncc.edu, or you may contact my dissertation chair, Dr. Jack Culbreth, at XXX-XXX-XXXX or jrculbreth@uncc.edu.

This form was approved for use on < > for use for one year.

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the principal investigator of this research study.

_____ _____

Participant Name (PRINT) DATE

_____

Participant Signature

_____ _____

Investigator Signature DATE

APPENDIX C: DEMOGRAPHIC QUESTIONNAIRE

Counseling Student Demographic Questionnaire

STUDENT ID# _____

1. Age: _____

2. Gender (check one): Male _____ Female _____

3. Race/ethnicity (check one):

_____ White

_____ Black/African American

_____ Latino/a/Hispanic

_____ American Indian/Alaska Native

_____ Asian/Pacific Islander

_____ Biracial/Multiracial

_____ Other

4. What degree are you **currently** seeking?

_____ Bachelor's degree

_____ Master's degree

_____ Doctoral degree

_____ None of the above (i.e., post-bachelor student; seeking certification)

5. Counseling track/specialization (check one):

_____ Clinical mental health/community counseling

_____ School counseling

_____ Marriage and Family Therapy

_____ Addictions counseling

_____ Other (please specify) _____

6. **NOT** counting the substance abuse counseling course you are currently taking, how many graduate-level substance abuse counseling courses have you taken in the past? (If None, put 0) _____

7. How many credit hours have you **completed** in your graduate program? (If this is your first semester in your program, put 0. Each course is typically worth 3 credit hours) _____

8. Have you ever participated in an Abstinence or Behavioral Reduction activity in a previous course? _____ Yes
_____ No

9. Have you completed or are you currently engaged in a practicum or internship at a substance abuse treatment program or a program that primarily serves the substance abuse population?
_____ Yes
_____ No

10. Has anyone close to you (family member or close friend) ever struggled with addiction to alcohol and/or drugs?
_____ Yes
_____ No

11. Do you personally know someone who is in recovery from alcohol or drug abuse?
_____ Yes
_____ No

12. Are you currently in recovery from alcohol or drug abuse?
_____ Yes
_____ No

THANK YOU

APPENDIX D: EMOTIONAL EMPATHIC TENDENCY SCALE

STUDENT ID# _____

Please indicate your level of agreement or disagreement with each statement by circling the number corresponding with your response from -4 “Very Strong Disagreement” to +4 “Very Strong Agreement”.

1. It makes me sad to see a lonely stranger in a group.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

2. People make too much of the feelings and sensitivity of animals.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

3. I often find public displays of affection annoying.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

4. I am annoyed by unhappy people who are just sorry for themselves.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

5. I become nervous if others around me seem to be nervous.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

6. I find it silly for people to cry out of happiness.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

7. I tend to get emotionally involved with a friend's problems.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

8. Sometimes the words of a love song can move me deeply.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

9. I tend to lose control when I am bringing bad news to people.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

10. The people around me have a great influence on my moods.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

11. Most foreigners I have met seem cool and unemotional.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

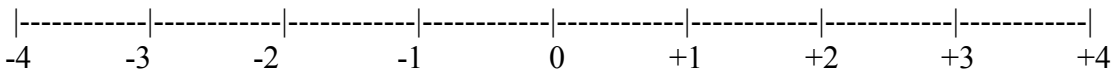
12. I would rather be a social worker than work in a job training center.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

13. I don't get upset just because a friend is acting upset.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

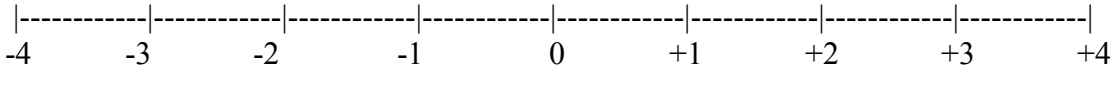
14. I like to watch people open presents.



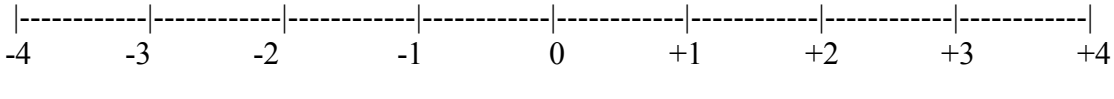
15. Lonely people are probably unfriendly.

16. Seeing people cry upsets me.

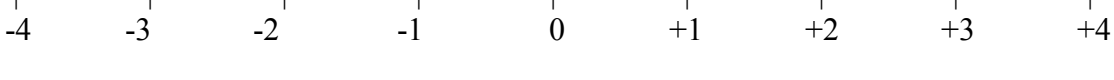
17. Some songs make me happy.



18. I really get involved with the feelings of the characters in a novel.



19. I get very angry when I see someone being ill-treated.



20. I am able to remain calm even though those around me worry.

21. When a friend starts to talk about his/her problems, I try to steer the conversation to something else.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

22. Another's laughter is not catching for me.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

23. Sometimes at the movies I am amused by the amount of crying and sniffling around me.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

24. I am able to make decisions without being influenced by people's feelings.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

25. I cannot continue to feel OK if people around me are depressed.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

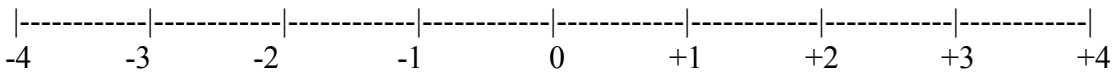
26. It is hard for me to see how some things upset people so much.

|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

27. I am very upset when I see an animal in pain.

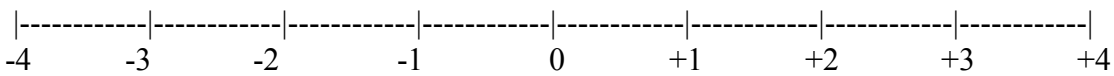
|----------|----------|----------|----------|----------|----------|----------|----------|
-4 -3 -2 -1 0 +1 +2 +3 +4

28. Becoming involved in books or movies is a little silly.



29. It upsets me to see helpless old people.

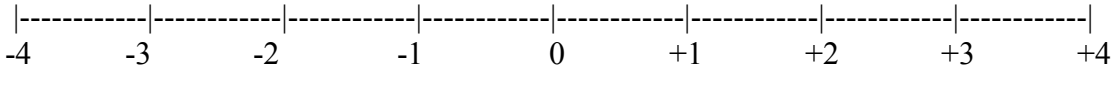
30. I become more irritated than sympathetic when I see someone's tears.



31. I become very involved when I watch a movie.

32. I often find that I can remain cool in spite of the excitement around me.

33. Little children can sometimes cry for no apparent reason.



APPENDIX E: THE SUBSTANCE ABUSE ATTITUDES SURVEY

STUDENT ID# _____

Please indicate your agreement to each statement by checking the appropriate box from "Strongly Agree" to "Strongly Disagree".

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. Alcohol is an effective social relaxant					
2. Cannabis should be legalised					
3. Any drug can be used by a person who is mentally healthy					
4. Almost anyone would turn to drugs if there problems were great enough					
5. Alcohol is a food, not a drug					
6. Physicians are an important source of drugs for most users					
7. Cannabis use leads to mental illness					
8. Heroin is so addicting that no one can recover once he or she becomes an addict					
9. Smoking leads to cannabis use which in turn leads to hard drugs					
10. Clergymen should not drink in public					
11. Alcoholism is associated with weak will					
12. All heroin use leads to addiction					
13. Daily use of one cannabis cigarette is not necessarily harmful					
14. Physicians should					

not smoke in front of their patients					
15. People who use cannabis usually do not respect authority					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
16. The laws governing the use of cannabis and heroin should be the same					
17. Angry confrontation is necessary in the treatment of alcoholics and drug addicts					
18. Use of any hard drug shortens one's life span					
19. Tobacco should not be smoked in rooms where non-smokers are present					
20. Weekend users of drugs will progress to drug abuse					
21. Tobacco smoking should be allowed in secondary schools					
22. Anyone who is clean shaven with short hair probably does not use illegal drugs					
23. Family involvement is a very important part of the treatment of alcohol or drug abusers					
24. Alcohol is so dangerous that it could destroy the youth of the country if it wasn't controlled by law					
25. A physician who has been addicted to opiates should not be					

allowed to practice medicine again					
26. Recreational drug use precedes drug misuse					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
27.Lifelong abstinence is a necessary goal in the treatment of alcoholism					
28. Drug addiction is a treatable illness					
29. Alcoholism is a treatable illness					
30. Street pushers are the initial source of drugs for young people					
31. Personal use of drugs should be legal within the confines of one's own home					
32. People who dress in hippie style clothing usually use psychedelic drugs					
33. A hospital is the best place to treat an alcoholic or drug addict					
34. Group therapy is very important in the treatment of alcoholism or drug addiction					
35. Most alcohol and drug dependent persons are unpleasant to work with as patients					
36. It can be normal for a teenager to experiment with drugs					
37. Once a person becomes drug-free through treatment s/he can never					

become a social user					
38. Unqualified counsellors can provide effective treatment for alcohol or drug abusers					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
39. Long-term outpatient treatment is necessary for the treatment of drug misuse					
40. An alcohol or drug dependent person who has relapsed several times probably cannot be treated					
41. Cannabis use among teenagers can be healthy experimentation					
42. Urine treatment can be an important part of the treatment of drug misuse					
43. Physicians who diagnose alcoholics improve the chances of treatment success					
44. Alcohol and drug abusers should be treated by specialists in the field					
45. The best way for a physician to treat an alcoholic or drug dependent patient is to refer him/her to a good treatment programme					
46. Persons convicted of sale of illicit drugs should not be eligible for probation					
47. Chronic alcoholics who refuse treatment should be legally					

sectioned to long-term treatment					
48. An alcohol- or drug dependent person cannot be helped until s/he has hit "rock-bottom"					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
49. Once an alcohol or drug dependent person is abstinent and off medication no further contact with a physician is necessary					
50. Parents should teach their children to drink alcohol					

APPENDIX F: JOURNAL GUIDELINES FOR BASELINE OBSERVATIONS

Initial Observation of Substance/Behavior Instructions

Once you choose a substance or behavior to abstain from for the abstinence project, you will be asked to document your use or engagement in the substance/behavior for two weeks before beginning the abstinence phase. The goal of this exercise is to understand your use of the identified substance/behavior, your emotional and physical state before use, how use impacts your thoughts and feelings, and situations that may trigger use (i.e., cravings). This is not to identify any "addictions," but rather to identify your normal use of a mood-altering substance/behavior to increase awareness. Please document the following information pertaining to your use/engagement of the substance/behavior each day:

- The number of times you use or engage in the substance/behavior
- Your emotions before engaging/using the substance/behavior, and how you felt immediately after engaging/using the substance/behavior (i.e., stressed, relaxed, bored, angry, sad, happy)
- How you feel physically before engaging/using the substance/behavior, and how you felt physically after using/engaging in the substance/behavior (i.e., anxious, restless)
- Your thoughts before engaging/using the substance/behavior, and any thoughts you had immediately after engaging/using the substance/behavior
- Any social aspects of using/engaging in substance/behavior (i.e., with friends, alone, at work/school)

APPENDIX G: "LETTER TO MY SUBSTANCE/BEHAVIOR" PROTOCOL

Students will participate in the "Letter to My Substance/Behavior" activity (referred to as "the Letter") where they write a minimum of one- to two-page letter to their substance/behavior, written in the first person and addressing the substance/behavior as if it were a person. The students will complete the letter as homework and will address the following areas: (a) How I love and/or consider my addiction to be a "friend"; (b) How my addiction appeals to my senses; (c) How my addiction provides healing for emotional wounds; (d) How my addiction controls me and/or promotes feelings of helplessness; and (e) How my addiction is hated/what it costs me. The researcher will collect these letters and highlight specific phrases that reflect the five areas outlined above, especially the emotions and experiences common to individuals struggling with addiction. The process of highlighting impactful statements is subjective and creative; however, the researcher has experience using this activity with counseling students in a substance abuse course and received positive feedback from students and instructors.

Students will be told that they will not have to read their entire letters aloud to the class and that personal information will not be revealed. In the following class period the students will sit in a circle to simulate a group therapy session and will receive their letters with the highlighted segments. Each student will read one highlighted line aloud to the group one person at a time and one highlight phrase at a time around the circle. Each person will go until they have read all of their highlighted phrases.

When all of the students have finished reading their highlight phrases, the researcher will facilitate the post-event processing outlined by Hagedorn (2011). The processing will be based on the following format:

- Initial *What?* Question: "[Name], would you please describe in general what just happened in the group, beginning with my passing out everyone's letters?" This allows for a step-by-step description of the activity to explain to the group.
- *What?* Processing: What just occurred in the group? What feelings and/or thoughts occurred during the reading of the letters? What did you notice about others in the group? This allows participants to process their feelings and reactions of the activity.
- *So what?* Processing: Given what you've just shared, what does this mean to you? Why did that have a strong impact on you? These questions allow participants to move out of processing of current thoughts and emotions about the activity into a discussion of the personal meaning of the activity.
- *Now what?* Processing: What are you going to do about these new insights and observations? What will you need to change in your life in order to get what you want? How will you know when you accomplish your goal? These questions help the group members move into a higher stage of change.
- Integration of experience and knowledge: What was challenging about writing the Letter? How might clients benefit from this activity? In what ways does this activity relate to ambivalence/readiness for change/resistance? These questions allow students to step back from their personal experiences of the activity to discussing how it relates to addiction and treatment.

APPENDIX H: WEEKLY REFLECTION GUIDELINES

Instructions for Weekly Reflections During Abstinence Phase

After the initial two week observation period of your use/engagement of your identified substance/behavior, you will be asked to abstain from engaging in the substance/behavior for a period of 8 weeks. The goal of this activity is to understand what it is like to give up use of an important mood-altering substance or behavior and the struggles people in treatment for addiction experience. It will also help you become more aware of the relationship you have with mood-altering substances or behaviors. While the goal is to abstain from your chosen substance or behavior, your grade will not be affected by relapsing. If you do relapse, please reflect this in your reflection. For the period that you are abstaining from the substance/behavior, please write a reflection each week following the "bio-psycho-social" factors guidelines below:

- Biological effects: What you experience physically as you abstain from use of substance/behavior
- Psychological effects: What emotions and thoughts you experience, and how your behavior is or might be affected by abstaining
- Social effects: What impact the change has or might have on your relationships with other people in your home, workplace, or social network; how the change does or might influence your social activities; how your personal "diversity" issues might be relevant to your experience (e.g., race, ethnicity, gender, sexual orientation, age, disability, or other factors)

If you do relapse over the course of the abstinence phase, please discuss your thoughts, emotions, behaviors, and social situation that influenced the relapse; also discuss your thoughts, feelings, and behaviors after you relapsed.

APPENDIX I: FINAL REFLECTION GUIDELINES

After the abstinence phase is complete, you will write a 6-7 page double-spaced reflection paper documenting your experience, any insights you gained about yourself, and what this activity taught you about substance use disorders and treatment. The goal of this activity is to reflect on your experience and relate it to what you are learning about yourself and substance abuse counseling. Please address the following in your reflection, in this order:

1. Generally describe what it was like for you to engage in the abstinence project. Was it easy? Difficult? What surprised you about the experience? What was the most challenging part for you? What thoughts or feelings were most prominent for you during this time?
2. What awareness did you gain about yourself and your identified substance/behavior during this activity? What triggers your use? What benefits do you get from using? What benefits do you get from not using? How did your feelings, thoughts, behaviors, and social life change as a result of abstaining?
3. Assess the costs and benefits of pursuing a more permanent change, versus not changing, the substance/behavior you chose for the assignment. Discuss insights you gained regarding the nature of change.
4. Discuss how your experiences provide insights into the nature of substance use disorders, and the challenges of change faced by persons struggling with serious substance abuse issues. How might your experience be different from someone in a substance abuse treatment program?