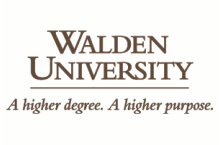

2020

Predictors of Substance Abuse Counselor Self-Efficacy when Working with Dually Diagnosed Clients

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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2020

Abstract

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by

Nievel Marisa Stanisclaus

MA, Hofstra University, 2005

BS, Campbell University, 2002

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Counselor Education and Supervision

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May 2020

Abstract

Previous studies have demonstrated the predictive value of counselor self-efficacy and professional development in mental health counselors, career counselors, school counselors, and other professions. However, there has been a gap in literature regarding substance abuse counselor self-efficacy. The purpose of this quantitative cross-sectional study, guided by Bandura's social cognitive theory, was to determine whether years of work experience, level of education, and possessing a license or certification predicted substance abuse counselor self-efficacy when working with dually diagnosed clients. The research question addressed this purpose. Data were collected using an online survey consisting of the counselor activity self-efficacy scale and a demographic questionnaire. A criterion sample was employed to recruit 47 participants including monolingual and bilingual English-speaking credentialed substance abuse counselors working across the United States. A multiple regression analysis revealed no statistically significant relationship between years of work experience, level of education, possessing a license or certification, and substance abuse counselor self-efficacy when working with dually diagnosed clients. The results point to the need for ongoing exploration of factors contributing to substance abuse counselor self-efficacy. Thus, this research is significant for counselor educators to take steps to improve and impact substance abuse counselor self-efficacy.

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Dedication

This dissertation is dedicated to the loving memory of my grandmothers Christina Stanisclaus and Joyce Brown, both of whom believed in the value of education, educating oneself, and supported their family throughout life's hardship. I thank both these remarkable ladies for their support, words of wisdom, constant prayers, and belief in my goals and educational pursuits. I also thank my family and the many wonderful educators that I have met along the way who ignited my passion for learning and supported me throughout all my goals and life pursuits.

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This work would not have been possible without the support of my dissertation committee members. I am especially grateful to Dr. Kristi Cannon, my dissertation chair, and Dr. Melinda Haley, my committee member and content specialist who never gave up on me and believed every step of the way that I would succeed. I am thankful for the countless revisions and invaluable feedback, as it has taught me a great deal about scientific research, the value of scholarly writing, and believing in myself.

The journey would not be complete without recognizing the amazing love, support, and understanding of my parents Holden and Edwina Brown and my amazing daughter. I am forever indebted, as you have been and continue to be my rock. I am grateful to the remaining cast members of my family from my brothers and sister, to all my aunts and uncles, and friends, who took the time to call, laugh with me, offer words of encouragement, words of wisdom, and whispered prayers; you are truly appreciated.

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Chapter 1: Introduction to the Study

Counselor educators have a duty to protect the public, society, and the consumer and their families from unethical, faulty, destructive, and unsafe counseling practices. Substance abuse counselors have the same responsibilities, as they are entrusted with the responsibility of being gatekeepers (The Association for Addiction Professionals & National Certification Commission for Addiction Professionals, 2011) and are accountable for protecting client self-determination and engaging in professional and personal growth integrity (Coll, Doumas, Trotter, & Freeman, 2013). As government officials, insurance and service providers, clients and their families, and educators continue to call for greater accountability and evidence-based practices among health care professionals and human service workers (Bride, Kintzle, Abraham, & Roman, 2012; Smith, 2013; Sommers-Flanagan, 2015), the substance abuse counseling field is tasked with developing highly trained professionals who can provide services that address and accommodate the needs of individuals who have been dually diagnosed.

Researchers have emphasized the construct of self-efficacy (Bandura, 1977; Greason & Cashwell, 2009; Larson & Daniels, 1998), finding it to be related to various counselor variables and characteristics such as perseverance when clinical impasses occur, interest and desire to perform counseling tasks, and counselor response to clients when in session (Larson & Daniels, 1998; Mullen & Lambie, 2016). As such, it is important to the work of the substance abuse counselor and continued development of the profession to understand the contextual factors that may contribute to the development of substance abuse counselor self-efficacy and its impact on successfully executing job-

related tasks and perception of job roles and job performance. Understanding these contextual factors may lend further support to the advocacy efforts for unified standards in the education and training of substance abuse counselors. Increased understanding may also inform global discussions on identifying paradigms and effective interventions toward developing counselor self-awareness, counselor preparedness to carry out difficult roles and responsibilities, advocacy for effective measures of clinician behavior, and sustained interest in advancing addiction research. This could help counselors achieve more success in the therapeutic relationship.

In the remainder of this chapter, I describe the literature related to self-efficacy, the gap in literature, the theoretical framework and evidence of its relevancy to the present study, and the nature of the study. I also describe the research problem and evidence that the problem is relevant and significant to the profession, the purpose of the study, and the research questions and hypotheses. The chapter also includes the definitions of major concepts and research variables, the assumptions critical to the meaningfulness of the study, the scope and delimitations of the study, the limitations of the study, and the significance of the study. I conclude the chapter with a summary of the main points of the study and introduce the chapter to follow.

Background

Counselor self-efficacy refers to a counselor's belief in his or her ability to carry out or perform specific role related tasks (Larson & Daniels, 1998). Self-efficacy is a primary factor and mechanism in counselor skill development, counseling performance, counseling effectiveness, and personal agency to exerting effort to deal with and rise

above challenging situations (Bandura, 1977; Larson & Daniels, 1998). Further, outcome expectancy refers to the belief that a behavior will or will not produce a desired outcome, and self-efficacy expectancy refers to the individual's belief that he or she will or will not be able to perform a given task (Bandura, 1977), which I focused on in the current study. Self-efficacy expectancy is believed to be the most influential on both the initiation of a behavior and perseverance in the face of possible failure (Maddux & Stanely, 1986).

Researchers have explored the predictive value of counselor self-efficacy in several meaningful ways such as counselor development (Gündüz, 2012), workplace performance (Min, Bei, Yucai, & Xu, 2015), academics (Zimmerman, 2000), and stress management (Luo, Yu-Yueh, & Lai, 2011). However, despite empirical support for counselor self-efficacy in the development of the counseling professional (Larson & Daniels, 1998; Lu & Dollahite, 2010; McCarthy, 2014), I have not found research that has systematically explored the predictors of substance abuse counselor self-efficacy when working with dually diagnosed clients in outpatient substance abuse settings. A review of the literature revealed that researchers studying counselor self-efficacy typically focused on school counselors (Gündüz, 2012), counseling students (Lambie & Vaccaro, 2011), social workers (Letteney, 2010; Pope & Kang, 2011), and psychiatrists (Werner, Stawski, Polakiewicz, & Levav, 2013), with little emphasis on substance abuse counselors. Chandler, Balkin, and Perepiczka (2010) offered one of the first structured studies into perceived counselor self-efficacy of licensed counselors providing substance abuse counseling, but they noted the need for further research in this area. This is an important gap in the existing literature that I addressed with this current study.

Self-efficacy regarding skills and abilities in an individual's profession is important to the development of a professional identity and can be seen in school counselors and mental health counselors where self-efficacy is identified as a predictor of job performance and the use of counseling strategies (Goreczny, Hamilton, Lubinski & Pasquinelli, 2015). This is important to the current study of substance abuse counselor self-efficacy because clients with substance abuse histories can be among some of the most difficult clients to work with, especially when mental health histories or other comorbid diagnoses are present (Perkins & Sprang, 2013). Additionally, the substance abuse counseling profession is noted for high employee turnovers, myths and stigmas about working with individuals with mental health and substance abuse disorders, and higher risk of psychological burnout in counselors. Therefore, my exploration of the predicators of substance abuse counselor self-efficacy is valuable because self-efficacy beliefs influences self-regulation, human functioning, goal setting, the persistence to achieve those goals, and the effectiveness of problem-solving (Bandura, 1977).

Problem Statement

Although there are many studies on self-efficacy in counseling, education, social work, and among mental health treatment providers (Gündüz, 2012; Lambie & Vaccaro, 2011; Letteney, 2010; Pope & Kang, 2011; Werner, Stawski, Polakiewicz, & Levav, 2013), there is a gap in the literature regarding self-efficacy related to substance abuse counselors. After an exhaustive literature review, I did not find research that has systematically explored the predictors of substance abuse counselor self-efficacy when working with dually diagnosed clients in outpatient substance abuse settings. However,

research on self-efficacy is important, as it may play a role in a counselor's perception of the client seeking services, the quality and type of service rendered, and the way the counselor approaches the case (Pope & Kang, 2011). Counselors with perceived low self-efficacy may be at a greater risk for burnout, render services that do not meet the needs of the client, and impact treatment goals and treatment outcomes (Perkins & Sprang, 2013). Low self-efficacy may also leave the counselor, agency, and profession vulnerable to high turnover rates (Young, 2015).

Self-efficacy is also important to study because of the challenges in substance abuse counseling. Individuals with mental health and substance diagnoses present problems that are often complex and challenging to the counselor, and they often face disparities in access to appropriate care and services (Padwa et al., 2013). Additionally, individuals with mental health and substance abuse diagnoses typically have higher rates of service utilization, frequent disengagement from services, medication and treatment noncompliance, and poor treatment outcomes (Moore, 2013). Similarly, research has indicated unique and complex challenges that affect the work of counselors (Perkins & Sprang, 2013). Counselors encounter the demand for measurable outcomes, adherence to administrative guidelines and policies that may be restrictive, and providing short-term treatment with limited resources while attempting to meet the presenting needs of the client (Acker, 2010; Mericle, Alvidrez, & Havassy, 2007). Variation in staff attitudes and their perception of the role they play in responding to clients with mental health and substance abuse diagnoses also adds to the complexity of working with dually diagnosed clients (Howard & Holmshaw, 2010). In light of these challenges and the gap in

literature, results from this study could provide further insight into counselors' beliefs, management, and confidence in the role they play in assessing, referring, educating, and informing dually diagnosed clients.

Purpose of the Study

My purpose for this quantitative cross-sectional research study was to determine whether years of work experience, level of education, and possessing a license or certification predict substance abuse counselor self-efficacy when working with dually diagnosed clients in substance abuse settings. The independent variables were years of work experience, level of education, and possessing a license or certification. The dependent variable was counselor self-efficacy.

Research Question and Hypotheses

A review of literature on substance abuse counselor perceived self-efficacy when working with dual diagnosed clients generated the following research question and hypotheses:

RQ: Is there a relationship between the combination of counselor years of work experience, level of education, and possessing a license or certification and counselor self-efficacy when working with dually diagnosed clients?

$H_0$1: There is no statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license or certification and counselor self-efficacy when working with dually diagnosed clients as measured by Counselor Activity Self-Efficacy Scale (CASES).

H_a1: There is a statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license or certification and counselor self-efficacy when working with dually diagnosed clients as measured by CASES.

Theoretical Framework

I used social cognitive theory as the theoretical framework to guide this study. Based on Bandura's (1977) work formerly known as social learning theory, practitioners have used social cognitive theory to focus on thoughts that occur within the individual that cannot be evaluated and examine behavioral change from three factors that work interactively: environment factors, personal factors, and behavioral factors. Self-efficacy is also included in the conceptualization of social cognitive theory, which relates to a person's ability to carry out or perform specific role related behaviors (Bandura, 1986). Expounding on the process of self-efficacy, Bandura (1986) also noted that self-efficacy judgements influence human behavior through choice behavior, belief in self and personal mastery of tasks, the amount of effort and length of time that would be extended when in a given situation, and affect and neurophysiological reactions to environmental demands.

The tenets of social cognitive theory and the construct of self-efficacy were consistent with the design of the present study, as I explored the substance abuse counselor's perceived beliefs in his or her ability to successfully integrate knowledge, self-responsibility, and counseling ability when faced with the various obstacles and challenges that accompany working with dually diagnosed clients. Additionally, the

tenets of social cognitive theory may account for the vicarious learning that may come from supervision (environmental), cultural competency, and efforts to pursue continuing education and training in evidence-based practices (personal). A concise review of social cognitive theory and the construct self-efficacy is explored in greater detail in Chapter 2 in addition to its relevance and applicability to the present study.

Nature of the Study

I used the quantitative cross-sectional research design to determine whether years of work experience, level of education, and possessing a license or certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients. The cross-sectional approach was appropriate because I was interested in substance abuse counselors, a representative subset of the counseling profession, and I surveyed their perception of the self-efficacy at a single point in time as opposed to multiple points in time (Saxena, Prakash, Acharya, & Nigam, 2013). Additionally, the cross-sectional approach allowed me to study the participants without manipulation of the study environment. For example, clients classified as dually diagnosed were previously diagnosed by agency staff or a referral entity to the outpatient substance abuse treatment location. Additionally, I had no prior knowledge of the case assignment procedures of the participating agencies, addressing and reducing potential researcher bias.

Researchers utilizing the cross-sectional approach are also able to compare different variables at the same time (Saxena et al., 2013). Thus, I was able to explore the independent variables years of work experience, level of education, and possession of a licensure or certification in relation to the dependent variable, substance abuse counselor

self-efficacy when working with dually diagnosed clients. Furthermore, the cross-sectional approach is often linked with questionnaire inquiries (Creswell, 2009), which allowed me to use the CASES to collect data as opposed to developing a new instrument.

Methodology

I used the CASES developed by Lent, Hill, and Hoffman (2003) to collect data. Lent et al. developed the CASES to measure counseling self-efficacy in three broad scales: (a) helping skills self-efficacy scale, (b) session management self-efficacy scale, and (c) counseling challenges self-efficacy scale. The full CASES was used during the data collection phase, as the three categories were applicable to the work of substance abuse counselors. I obtained the total CASES score by adding the scores from the three subscales. Counselors answered 18 questions in the first category, identifying how confident they were in using general counseling skills with most clients. In the second category scale counselors answered 17 questions, identifying how confident they were in doing specific counseling tasks with most clients. Finally, in the third category, counselors answered 24 questions identifying how confident they were in their ability to work with specific client types, issues or scenarios (Lent et al., 2003).

I used criterion sampling to obtain the research sample from the population of monolingual and bilingual English-speaking credentialed substance abuse counselors working in outpatient treatment programs across New York State. I randomly selected outpatient treatment programs from a generated list of all outpatient treatment programs through the New York State Office of Addiction Services and Supports. I contacted program directors, directors of operation, and/or clinical supervisors employed at

outpatient programs across New York State regarding the request to have their program staff participate in the study. The identified program gatekeeper provided program staff with the link to the study survey instrument.

I collected data from two survey instruments, the CASES and a demographic questionnaire. I used a demographic questionnaire to collect descriptive information concerning the research participants' years of work experience, level of education, and whether they possessed state licensure or certification. I also included five questions that allowed participants to identify their age, sex, racial ethnicity, type of license or certification, and region location. I used the data collected from these five questions to describe the participants. I did not include the data collected from these five questions in my data analysis. Participation in the study was voluntary, and only program staff members who consent to participate in the study were able to complete the data collection instruments.

I used Qualtrics online survey platform to collect and store data information from the CASES and demographic questionnaire. I imported data collected from Qualtrics to the Statistical Package for the Social Sciences (SPSS) version 25.0 for statistical analysis. I performed a linear multiple regression analysis to determine whether years of work experience, level of education, and possessing a license or certification predict substance abuse counselor self-efficacy when working with dually diagnosed clients. In Chapter 3, I discuss the sampling procedure, research setting, methodology, data collection, and data analysis in more detail.

Definition of Terms

The following terms are defined in relation to the present study:

Certification: As defined by the National Board of Certified Counselors (n.d.), certification demonstrates to stakeholders such as employers, consumers, the general public, and insurance companies that the individual counselor has met the national standards necessary to hold the designation of counselor as set by the counseling profession. Certification is not license to practice; however, it can assist the counselor in obtaining state licensure depending on the state and its licensure laws.

Counselor self-efficacy: Larson and Daniels (1998) defined counselor self-efficacy as a counselor's belief in his or her ability to carry out or perform specific role related tasks. According to Lent et al. (2006), the operationalization of counselors' beliefs in their ability has occurred in a variety of ways including task or content self-efficacy, which refers to perceived ability to perform specific skills and routine session management tasks, and coping efficacy, which refers to perceived ability to negotiate challenging clinical situations.

Dually diagnosed: Hryb, Kirkhart, and Talbert (2007) described the term *dually diagnosed* as referring to individuals with both mental health and substance abuse disorders. For this study individuals diagnosed as having a dual diagnosis would have been diagnosed by a psychiatrists, mental health/medical professional or social worker, and validated by clinical assessments completed during referral to the outpatient treatment facility they will be attending.

Level of education: The term *level of education* refers to the actual level of education a research participant has achieved. As indicated by the New York State Office of Alcoholism and Substance Abuse (n.d.), a candidate must possess at least a high school diploma or GED to earn the credentialed alcoholism and substance abuse counselor (CASAC) certification. Participants had the opportunity to identify whether they have obtained a college degree, graduate degree, advance graduate degree, and other certification on the demographic questionnaire.

Licensure: Licensing occurs at a state level and describes counselors who are credentialed by a state board of professional practitioners. The individual counselor will need to meet the requirements of the respective licensing boards and successfully pass either a state or national board examination. As per information obtained from the National Board for Certified Counselors (n.d.),

> State license in counseling is literally permission from a particular state to practice counseling or to call oneself a licensed counselor. Some states have a single license and some have a two-tiered system. The names of state licenses vary from state to state. Some examples are LPC, LCPC, LPCC, LMHC, LPCMH, LCMHC, and LPC-MH.

Program gatekeeper: This term in this study refers to an identified program staff within an outpatient substance abuse program such as a clinical director, medical director, director of operation, program director, or clinical supervisor. These individuals were contacted regarding the present study and were responsible for providing staff with a brief overview of the study.

Self-efficacy: Self-efficacy refers to an individual's belief in his or her ability to carry out a course of action necessary to perform a certain task or to control events that may affect his or her life (Bandura, 1989b). Self-efficacy beliefs function as important determinants of human motivation, affect, and the amount of effort and length of time that would be extended when in a given situation (Bandura, 1989a). To assess substance abuse counselor self-efficacy, the CASES developed by Lent et al. (2003) was used. The CASES was designed to measure counseling self-efficacy in three broad scales: (a) helping skills self-efficacy scale, (b) session management self-efficacy scales, and (c) counseling challenges self-efficacy scale. The total CASES score was used to represent substance abuse counselor self-efficacy.

Substance abuse counselor: The term *substance abuse counselor* describes the following professionals: (a) social workers who have earned licensure or certification as a substance abuse counselor, (b) mental health counselors who also have earned licensure or certification as a substance abuse counselor, (c) certified rehabilitation counselors who have also earned licensure or certification as a credentialed substance abuse counselors, (d) licensed or certified counselors who have also earned licensure or certification as a credentialed substance abuse counselors, and (e) psychologists, psychiatrists, nurses, and medical doctors who have also earned licensure or certification as a substance abuse medical professional.

Work experience: Work experience is defined as any experience the participant has gained while working as a substance abuse counselor, a substance abuse professional, or in a substance abuse treatment environment. For this study, I quantified work

experience as having 0 years of experience working in the substance abuse profession to 25 plus years of work experience.

Assumptions

Participation in the study was voluntary, and participants could choose to end their participation at any point in time during the course of the study. However, once the participant consented to participating in the study, the participant bared the responsibility of providing honest and accurate answers on the survey questionnaire. Thus, I assumed that all research participants would respond to the survey in a timely manner and provide responses to the survey questions that accurately reflects the work and perception of each individual. More importantly, due to economic downturn and adjustment of staffing patterns due to possible closing or opening of outpatient treatment programs throughout New York State, I also assumed that the definition of a substance abuse counselor encompasses the current workforce of substance abuse professionals within New York State (Short-Term Occupational Employment Projection, 2016-2018, n.d.).

Finally, the cross-sectional research design is one that is widely used in social science and is cost effective (Frankfort-Nachmias & Nachmias, 2008). In considering the budgetary and time restraints to complete the present research, I assumed that the cross-sectional research design is the best fit model to determine whether years of work experience, level of education, and possessing a licensure or certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients.

Scope and Delimitations

My purpose for this study was to determine whether years of work experience, level of education, and possessing a licensure or certification predict substance abuse counselor self-efficacy when working with dually diagnosed clients. The study setting is outpatient treatment programs throughout New York State. Participants were monolingual or bilingual English speaking and credentialed substance abuse counselors. My interest in credentialed substance abuse counselors arose out of the complexity of the relationship between counselor and client in substance abuse settings and the many different factors that could potentially impact the success of the therapeutic relationship (Moore, 2013; Perkins & Sprang, 2013). Furthermore, the most recent employment statistics revealed that there are approximately 18,650 substance abuse professionals including substance abuse and behavioral disorder counselors and mental health and substance abuse social worker working in treatment programs throughout New York State (Bureau of Labor Statistics, 2016). Although New York's outpatient programs have made significant improvements toward providing services to dually diagnosed individuals, further improvements are needed such as continued improvement in training, continuity of care, and program services (Sacks et al., 2013). My exploration of substance abuse counselor perceived self-efficacy can address this need.

The findings from this study will not be generalizable to all counseling professionals and professionals from other disciplines throughout the United States, as participants represent only substance abuse counselors working in substance abuse treatment settings. Equally important, the findings from this study will not be

generalizable across substance abuse treatment domains, as counselors employed in residential treatment programs, methadone maintenance programs, inpatient treatment programs, crisis services treatment programs, gambling outpatient treatment programs, and detox treatment programs within New York State were not included in this study.

Limitations

Although the cross-sectional research design is popular in social science, it limits the researcher's ability to provide a definite cause-and-effect relationship between research variables, only implying the relationship by describing patterns between variables (Frankfort-Nachmias & Nachmias, 2008). Another key limitation for this study is that though it includes substance abuse counselors with varying degrees, educational backgrounds, and work experience, such variance may influence the manner in which participants self-report on the survey instrument based on perceived expertise (Chandler et al., 2010; Knudsen, Gallon, & Gabriel, 2006) and alliance to specific codes of ethics (Scott, 2000).

Further, to address the potential for bias such as over reporting or underreporting, I had no prior contact with the outpatient treatment programs. I also included a statement regarding confidentiality and informed consent with the e-mail link to the research survey. Additionally, I did not plan on providing any gifts or compensation, though this changed after low recruitment. I also did not make participation mandatory or offer participation as an extension of continued employment, nor was participation used in support of staff training, continued education credits, employee performance appraisals, or salary compensation.

Finally, the number of participants completing the survey may have affected the statistical analysis in determining study relevance and the need for continued research in this area. To achieve statistical significance, it was important for me to allow time to contact participants multiple times to remind them of the survey and to increase the number of facilities contacted if the initial 50 treatment facilities did not provide the needed number of surveys.

Significance

Research exploring counselor self-efficacy is important in the personal and professional development of the counselor and the counseling community because research provides insight into a counselor's introspective abilities and capabilities in self-assessment (Larson & Daniels, 1998). Counselors who perceive themselves as having high self-efficacy are often viewed as more competent, effective, and skilled in adhering to the therapeutic relationship (Larson & Daniels, 1998). Furthermore, counselors with high self-efficacy exhibit greater determination to face challenging experiences and are more likely to focus on the aspects of skill acquisition and performance that are positive and changeable (Flasch, Bloom, & Holladay, 2016; Greason & Cashwell, 2009). Conversely, low counseling self-efficacy has been associated with incompetence and a vulnerability to burnout, indifference, job dissatisfaction, and fatigue (Gündüz, 2012).

I did not find any relevant research studies examining substance abuse counselor perceived self-efficacy when working with dually diagnosed clients in outpatient settings. Consequently, this study may be impactful by determining whether a relationship exists between years of work experience, level of education, possessing a license or

certification, and substance abuse counselor self-efficacy, as these variables may manifest in a counselor's work with clients. For instance, social workers' views of effectiveness may be influenced by having an advanced degree, whereas nonsocial workers (e.g., substance abuse counselors) may view effectiveness from positive feelings toward evidence-based practices (Bride, Kintzle, Abraham, & Roman, 2012). Given these points, the social change impact of the current study extends beyond the practitioner's office and individual client. It extends to family systems, communities, managed care and service providers, organizational systems, government, policy makers, and society.

Further, individuals with a dual diagnosis of mental health and substance abuse often receive less than standard care and are often stigmatized (McKee, 2017; Roussy, Thomacos, Rudd, & Crockett, 2015). Within the substance abuse field there are a barrage of myths, stereotypes, misinformation, and controversy concerning substance abuse and substance treatment (Chasek, Jorgensen, & Maxson, 2012). Service providers and systems of care have also become more aware of the fragmented treatment that individuals with dual diagnoses receive and have begun moving toward the provision of more quality and efficacious services. Greater awareness along with knowledge enhancement can provide better treatment and care and improve outcomes for clients with dual diagnoses (McKee, 2017; Roussy et al., 2015). This study could positively impact further exploration of counselor self-efficacy, expanding the understanding of clinical engagement and a counselor's ability to normalize treatment services and treatment experience. The professional and civic responsibilities of substance abuse counselors working with dually diagnosed clients may also be positively impacted by the

results of the study, as policy makers, lobbyists, manage care providers, and society have stated a need for greater counselor accountability and clinical effectiveness (Sommers-Flanagan, 2015).

Summary

Researchers have suggested a positive relationship between counselor self-efficacy and identity development (Gunduz, 2012) as well counselor preparedness, and increased levels of confidence in counselor trainees engaging in crisis counseling (Sawyer, Peters, & Willis, 2013). Researchers have also explored self-efficacy within school counseling, rehabilitation counseling, psychology, teacher education, and health management. However, I have found no research to date that has explored substance abuse counselor self-efficacy when working with dually diagnosed clients. Thus, the purpose of this study was to determine whether years of work experience, level of education, and possessing a license or certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients.

I used a cross-sectional, quantitative design to study substance abuse counselors working in outpatient treatment programs throughout New York State, a subset of the national counseling profession. To obtain the sample population, I created a data bank of all outpatient programs throughout New York State and randomly selected 50 outpatient programs. Only credentialed substance abuse counselors from the selected programs were invited to participate in the survey. I conducted a linear multiple regression analysis to analyze the data and answer the research question.

Exploring substance abuse counselor self-efficacy may provide insight to the extent to which the counselors believe they have the skills, knowledge, and training necessary to engage clients in the counseling relationship. Results may also reveal the extent to which counselors utilize skills and knowledge to provide quality services to individuals seeking substance abuse counseling treatment. Additionally, results can address the relationship between substance abuse counselor self-efficacy and counselor helping skills, counselor ability to manage sessions, and counselor ability to deal with the challenges that arise when working with dually diagnosed clients (Acker, 2010; Howard & Holmshaw, 2010; Stajkovic & Luthans, 1998).

Further, as researchers exploring self-efficacy have reported on the strong mediating role between self-efficacy and counselor self-determinism and commitment to personal growth (Flasch, Bloom, & Holladay, 2016; Greason & Cashwell, 2009), the results of the current study may support positive social change through understanding factors that positively affect substance abuse counselors' self-efficacy and adding to the scholarly knowledge on counselor self-efficacy. Additionally, counselor educators may use the findings to positively impact policies regarding the training and supervision of substance abuse counselors. Lastly, the results of the study might provide valuable information that could be used in a global discussion surrounding effective measures of counselor self-efficacy, clinician attitudes, and clinician perceptions.

In Chapter 2, I review the literature strategies used to procure relevant scholarly research related to the research problem. I will also examine social cognitive theory, the theoretical lens of the study, and the self-efficacy construct, which is the focal point of

the study. I continue with a literature review related to the key concepts, independent and dependent variables, and methodology of the study. I conclude with a discussion on the studies significance, social change implications, and a transition to Chapter 3.

Chapter 2: Literature Review

Introduction

The therapeutic alliance between counselor and client is a dynamic process and the most important building block to establishing therapeutic effectiveness and effecting change in a client's life (Sotero, Major, Escudero, & Relvas, 2016). Qualities that make a counselor effective may include, but are not limited to, high self-efficacy, empathy, tolerance, respect, compassion, and caring (Fulton, 2016; Palmer & Daniluk, 2007; Viaro, 2009). Self-efficacy can influence peoples' belief in their capability to perform certain tasks, the way they think, feel, and become motivated to act in certain situations (Bandura, 2011). The counselor who sees him or herself as having high self-efficacy is viewed as more competent, effective, and skilled at building the therapeutic relationship (Larson & Daniels, 1998). Moreover, the counselor with high self-efficacy demonstrates a greater propensity to face challenges and is more likely to focus on skill development and behaviors or situations that are changeable (Flasch, Bloom, & Holladay, 2016; Greason & Cashwell, 2009). However, the same effective qualities—high self-efficacy, empathy, compassion, and caring—may also leave the counselor susceptible to negative outcomes such as compassion fatigue and burnout (Merriman, 2015; Young, 2015).

There is also an expectation that counselors possess regard for their clients, are aware of the diverse needs and values of all individuals, provide services that are consistent with fidelity to clients, brings a sense of dignity to the individual, and uphold the standards of the profession (Fulton, 2016; Wronka, 2008). Counselors bring real life experience, a sense of hope, leadership, wisdom, and guidance to individuals in recovery,

their families, and communities (Doukas, 2015). For those recovering from substance abuse, it is important for addiction professionals to take the time to create a safe, comfortable space in which clients feel appreciated and trusting to share their experiences. Counselors who are uncaring, unsympathetic, and displayed an unwillingness to learn have significantly impeded clients' ability to heal and address their addiction (Palmer & Daniluk, 2007).

Engaging clients can be challenging regardless of counselor skill level, counseling setting, disability type, or client history (Miller, Scarborough, Clark, Leonard, & Keziah, 2010). Nevertheless, counselors working with dually diagnosed clients face challenges that are often more complex than when working with clients who have a singular diagnosis of mental health or substance abuse (Mangrum & Spence, 2008; Mericle, Martin, Carise, & Love, 2012). Thus, substance abuse counselor self-efficacy has emerged as an important research topic after preliminary research of workers in helping professions such as mental health, teaching, and school counseling suggested a positive relationship between counselor self-efficacy and training, counseling performance, teaching performance, and perception of job satisfaction and job performance (Murdock, Wendler, & Nilsson, 2003).Therefore, my purpose for this study was to determine whether years of work experience, level of education, and possessing a license or certification predict substance abuse counselor self-efficacy when working with dually diagnosed clients in substance abuse settings. I used a quantitative cross-sectional research design to further exploration of self-efficacy, which could bring awareness to the need for appropriate levels of training and supervision in substance abuse counseling.

In the sections to follow, I review in depth the literature search strategy, the theoretical foundation, and literature relevant to the present study. I also explore the selected research methodology and strategy to collect and analyze data. I also include a discussion on the minimum education standards for substance abuse counseling, work experience of substance abuse counselors, the education and training of substance abuse counselors, professional certification and licensure for substance abuse counselors, and self-efficacy. I conclude the chapter by summarizing the points that connect substance abuse counselor self-efficacy, social cognitive theory, and the positive social change impact of the study, and I provide a transition to Chapter 3.

Literature Search Strategy

Empirical research on the subject of self-efficacy has appeared in peer-reviewed journals spanning the counseling field, including specialties such as rehabilitation counseling, substance abuse counseling, school counseling, and LGBT counseling. Self-efficacy research has also appeared in peer-reviewed journals for medicine, international psychology and psychiatry, education, organizational psychology, nursing, and business management. To procure the most comprehensive studies, I conducted the literature search electronically using Academic Search Complete, PsycINFO, PscyARTICLES, MEDLINE, SocINDEX, Education Research Complete, Google Scholar, Thoreau, and Dissertations and Theses as well as through Walden University library database. I obtained all articles digitally.

I conducted my initial search of literature using the Thoreau search engine, with the search term *social cognitive theory* for the years 1902 through 2016, and this resulted

in over 12,958 articles. I followed up with a secondary search on the Thoreau search engine, utilizing the search phrase *"social cognitive theory and self-efficacy*, and approximately 4,441 articles for the years 1902 through 2016 were returned. I completed a third search using the Thoreau search engine with the same terms but the limiters of full-text and peer-reviewed, which resulted in 3,334 articles for 1902 through 2016.

I continued the review of literature with the search term *self-efficacy* for the years 1754 through 2016 using PsyINFO, which resulted in approximately 8,759 articles. I followed up with a second review using the search terms *self-efficacy and substance abuse*, which resulted in 281 articles for the years 1988 to 2016. The subject matters consisted mostly of self-efficacy and the stages of change, alcohol self-efficacy, abstinence self-efficacy, emotional self-efficacy and alcohol and tobacco use, psychological distress and substance abuse, and motivation and substance abuse. To focus the literature search, I utilized the following main key search words and phrases: *self-efficacy, self-efficacy and substance abuse, perceived self-efficacy, perceived self-efficacy and counseling,* and *counselor self-efficacy*. I provide a more comprehensive list of search words and phrases used to inform this study in Appendix A.

Social Cognitive Theory

I used the social cognitive theory as the theoretical framework to guide and explain the research problem and the results of my study. In the sections to follow, I review the historical roots and tenants of social cognitive theory. Additionally, I discuss empirical evidence supporting the use of social cognitive theory as a research framework and its relevancy to the present study.

Albert Bandura first introduced social cognitive theory as social learning theory during the 1960s. In its earliest form, Bandura (1977) described learning as occurring through observing and modeling behaviors of others. In 1986, Bandura re-conceptualized social learning theory and introduced social cognitive theory as a behavioral counseling theory. From its earliest form of social learning theory to what is known as social cognitive theory, researchers have applied social cognitive theory to education, health, psychology, and business management (Bandura, 1989a).

Many of the early tenets of social learning theory can be found in social cognitive theory; however, unique to social cognitive theory is the dynamic process of triadic reciprocal determinism and self-efficacy (Bandura, 1989b). Triadic reciprocal determinism is learning occurring through the bi-directional influence of behavior, cognition, other personal factors, and the environment. In essence, personal beliefs, expectations, self-perceptions, and thoughts affect the way in which people behave. These personal emotions and cognitions are also shaped by social influences and social environments (Bandura, 1989b). Social interactions and the environment are influenced by personal characteristics, and the socially conferred role and status of the individual. Finally, the behavior of the individual influences the environment and the conditions of those environmental changes influences behavior. Therefore, individuals are viewed as both products and producers of the social environments in which they choose to attend (Bandura, 1989b). It is through the process of triadic reciprocal determinism that human agency, also referred to as personal agency, is experienced (Bandura, 1989a, 2001). Characterized by intentionality, forethought, and self-regulation through self-reactiveness

and self-reflection, personal agency is achieved through the influence of the individual's plans or intentions, belief systems, outcome expectations, and self-motivation that affect choices and courses of action (Bandura, 1989a; 2001). At it is core, personal agency allows the individual some measure of self-directedness as situations and environments change (Bandura, 1989a, 2001).

Operationalizing Social Cognitive Theory

Researchers exploring social cognitive theory have typically focused on efficacy beliefs and the predictive factors of self-efficacy (Bandura & Locke, 2003). However, in recent years, researchers have been expanding research into job performance (Lorente, Salanova, Martinez, & Vera, 2014), addiction treatment (Gullo, Matveeva, Feeney, Young, & Connor, 2017), and job satisfaction (Klassen & Chiu, 2010). The use of social cognitive theory as a theoretical foundation within counseling research is not a new phenomenon. Researchers have used social cognitive theory to explore the affirmative practices of heterosexual therapists working with lesbian and gay clients (Alessi, Dillon, & Kim, 2015), the relationship between emotional intelligence and counselor self-efficacy in counselors-in-training (Easton, Martin, & Wilson, 2008), and sources of change in counselors'-in-training self-efficacy beliefs (Lent et al., 2009; Mullen, Uwamahoro, Blount, & Lambie, 2015).

Findings from these studies have been consistent with the results from studies that span several domains exploring the tenets of social cognitive theory. For example, utilizing semistructured qualitative methods, Lent et al. (2009), assessed the changes in client-specific trainee self-efficacy of 98 master's level counseling trainees working with

clients during their first practicum experience at a mid-Atlantic University. Most participants were women, and all were enrolled in various mental health counseling related graduate programs including rehabilitation counseling, school counseling, school psychology, and college student personnel (Lent et al., 2009). At the end of each practicum session, participants were asked to respond in writing to four questions:

1. Did you experience any change in your confidence in performing your role as a trainee while working with this client during the just completed session?
2. If you did experience a change in confidence, please indicate how big a change it was?
3. If you did experience a change in confidence, please indicate in what direction it was?
4. If you did experience a change in confidence, could you describe briefly, in your own words, what you believe provoked this change in confidence? (Lent et al., 2009)

At the conclusion of the first three sessions with the practicum client, approximately two-thirds of the trainees reported small to medium changes in confidence, but only 5% to 19% of the counselor trainees reported big changes at various sessions (Lent et al., 2009). Approximately 67% to 79% of the counselor trainees who reported a change in trainee self-efficacy perceived the change to have occurred toward Sessions 2-5 (Lent et al., 2009). Several of these findings are consistent with social cognitive theory in regard to personal performance behavior and self-regulation (Lent et al., 2009). Moreover, the findings suggest a possible relationship between experience and counselor self-efficacy,

providing evidence to explore and extend understanding of training and its impact on counselor self-efficacy.

In another study supporting social cognitive theory, Aryee and Chu (2012) explored the antecedents of challenging job experiences at the individual and organizational level. The researchers also explored the relationship between promotability assessment and task performance as outcomes of challenging job experiences and the mediating relationship between task-specific self-efficacy on the previously stated factors. The participants included supervisors and supervisees from six service sector organizations in northeastern China. Using the Multifactor Leadership Questionnaire, a 6-item scale by Elliot and Church (1997), a 7-item scale developed by De Pater et al. (2009), a 10-item scale by Riggs, Warka, Babasa, Betancourt, and Hooker (1994), a 7-item in-role behavior scale by Williams and Anderson (1991), and a 4-item scale by Wayne, Liden, Graf, and Ferris (1997), Aryee and Chu asked each supervisor to rate the performance and promotability of each of their supervisees, and the supervisees were asked to provide data on the remaining study variables.

Results of Aryee and Chu's (2012) study showed that transformational leadership was related to both challenging job experiences ($r = .47$, $p < .01$) and learning orientation ($r = .25$, $p < .01$); challenging job experiences was related to task-specific self-efficacy ($r = .60$, $p < .01$), task performance ($r = .33$, $p < .01$), and promotability assessment ($r = .18$, $p < .01$); and task-specific self-efficacy was related to task performance ($r = .46$, $p < .01$) and promotability assessment ($r = .24$, $p < .01$). Thus, there was a positive relationship between transformational leadership, learning orientation, and challenging job

experiences. Further, although there was a positive relationship between challenging job experiences and the work outcomes of task performance and promotability assessment, the relationships were mediated by task-specific self-efficacy, suggesting that the supervisees' belief in their ability to carry out job related tasks was an antecedent to task performance and promotability (Aryee & Chu, 2012). Based on Aryee and Chu's exploration of the antecedents of challenging job experiences grounded in social cognitive theory in natural work settings, I used this method in the present study.

Rationale for Theory Selection

Researchers have compared social cognitive theory to control theory, expectancy-value theory, environmental determinist theory, motivational theory, and other behavioral therapies (Bandura & Locke, 2003). However, each of these theories are distinct and separate from social cognitive theory. In this section, I briefly explore the core distinctions between control theory, expectancy-value theory, motivational theory, and social cognitive theory.

William T. Powers introduced control theory as perceptual control theory during the 1950s and described behavior as goal oriented and a control (Mansell & Marken, 2015). Perceptual control theorists posit that control is the attainment of goals even when those goals seem unattainable (Mansell & Marken, 2015). Additionally, perceptual control theorists place the understanding and specification of goals inside the individual, whereas self-regulation and cognitive theories are outcome expectancy theories (Mansell & Marken, 2015). Expounding on the essential differences between perceptual control theory and self-efficacy theory, Bandura and Locke (2003) noted that people act in order

to develop knowledge and capabilities and to exercise control over their lives. Bandura and Locke further noted that neither perceived self-efficacy nor goals are reflectors of past performances; however, outcomes influence personal goal setting depending on the level of perceived self-efficacy.

Further, most contemporary motivation theories rose from the cognitive perspective where the individuals are conscious and self-aware about their situation and are able to make choices concerning their behavior (Clinkenbeard, 2012). Thus, motivation is defined as a choice where the individual chooses one goal over another, starts working toward that goal and progresses in said goal. Additionally, motivation in education and psychology is typically defined in a way that includes both personal and environmental factors (Clinkenbeard, 2012).

Expectancy-value theory, a derivative of motivation theory, describes expectancies as peoples' belief in whether they can succeed at a given task, whereas values are peoples' belief in their ability to succeed at a task (Clinkenbeard, 2012). In other words, motivation or motivated behavior occurs because of a person's expectations of a certain goal and the value placed on expected outcome (Bandura & Locke, 2003; Clinkenbeard, 2012). Distinguishing between expectancy-value theory and self-efficacy, Bandura and Locke (2003) noted that people not only act on what they think they can do but also on their belief concerning the behavior. Additionally, people act on their efficacy beliefs not only to maintain motivation and a task-oriented focus but also to manage stress and self-hindering thought patterns, which can be debilitating when faced with distressing situations (Bandura & Locke, 2003).

Overall, social cognitive theory rises as the best-fit theory for the present study because social cognitive theorists examine behavioral change from three factors that work interactively: environmental factors, personal factors, and behavioral factors (Bandura, 1977). Bandura (2001) noted that one of his tenants for social cognitive theory suggest the individual does not just plan a desired course of action, but also exercises the ability to give shape to those plans, motivate self into a course of action, and regulate the execution of said plans. Bandura further noted that the individual is self-evaluative, examining actions, motivation, values, and the meaning of life, choosing to act one way over the other. Therefore, by utilizing social cognitive theory, I focus on counselors' judgment of their ability to integrate knowledge, self-responsibility, and counseling ability when faced with the various obstacles, challenges, and stigma that accompany working with dual diagnosed clients (personal and behavioral). Additionally, the tenets of social cognitive theory may account for the vicarious learning that can come from work experience, education and training, licensure or certification, and efforts to pursue continuing education and training in evidence-based practices (environmental).

Self-Efficacy Reviewed

Central to social cognitive theory and the focus of this study is the understanding of personal agency, and the concept of self-efficacy. Self-efficacy as defined by Bandura (1986) is peoples' belief in their capabilities to complete a specified task. Bandura (2001) conceptualized self-efficacy as self-enhancing or self-hindering, because the individual decides what situations to engage in, the amount of effort to exert in the situation, how long to languish in challenging situations, and whether such challenges are

motivational or demoralizing. Bandura (2001) further noted that self-efficacy beliefs influence the type of activities and environments a person may engage in and the direction of he or she may take in life. Morris and Minton (2012), provided further support for Bandura's assertion when reporting findings that students who engaged in didactic crisis preparation during their master's level course (n = 40) reported higher self-efficacy when engaging in crisis counseling situations than those who did not participate in didactic or formal crisis training (n = 130). Morris and Minton further noted that research participants reported the importance of crisis counseling training and sought continuing education training separate from their master's level training to develop skills and competencies in crisis counseling.

Expounding further on the importance of self-efficacy, Bandura (1989a, 1989b, 2001) noted that unless people believed in their ability to control their actions, they had little motivation to act or persevere in difficult situations. These are important points to consider because if trained incorrectly counselors can do great harm (Palmer & Daniluk, 2007; Mullen, Uwamahoro, Blount, & Lambie, 2015). As such, it is critical to understand substance abuse counselors' self-efficacy when working with dually diagnosed clients in outpatient substance abuse settings. Research findings indicate that individuals with dual diagnosis of mental health and substance abuse often terminate sessions more frequently, are stigmatized far greater than their mental health or substance abuse only counterparts, and encounter greater barriers to accessing appropriate care (Mangrum & Spence, 2008; Mericle et al., 2012).

Moreover, substance abuse counseling is a specialty area within the counseling profession and is governed by varying educational and professional standards that can leave the individual seeking to enter the profession overwhelmed with the divergent paths and standards that are available (Miller, Scarborough, Clark, Leonard, & Keziah, 2010). Additionally, due in part to the variation in professional standards, demands of the job, and other extenuating situations, the substance abuse counseling field has a higher than usual turnover rate of staff (Wallace, Lee, & Lee, 2010; Weaver & Wilson, 1997; Young, 2015). Finally, substance counselors often report higher than usual burnout rates among counseling professionals further leading to the importance of exploring and understanding substance abuse counselors' self-efficacy and its impact on the roles, attitudes and work of the substance abuse counselor (Oser, Biebel, Pullen, & Harp, 2013; Wallace, Lee, & Lee, 2010; Weaver & Wilson, 1997).

Sources of Self-Efficacy

Bandura (2001) noted that self-efficacy is the regulatory agent in human behavior through cognitive, motivational, affective, and decisional processes. These processes affect how long the individual persists in a given situation, levels of motivation, emotional well-being and vulnerability to stress and depression, self-enhancing or self-defeating thoughts, and the choices made at crucial decisional points (Bandura, 1977; McCarthy, 2014; O'Sullivan & Strauser, 2009). As per Bandura (1977) two important aspects of self-efficacy arise from self-efficacy theory: efficacy expectations and outcome expectations. Bandura (1977) defined efficacy as an individual's belief that he or she has the power to achieve a desired outcome and outcome expectancy as an individual's belief

that a specific behavior or action will produce a specified outcome. As per O'Sullivan and Strauser (2009), human behavior is therefore the interaction between both efficacy expectation and outcome expectancy. Bandura (1977) noted that efficacy expectancy affect the environment, individual behavior, and the individual's persistence in a given situation. Bandura (2001) and O'Sullivan and Strauser (2009) further noted that the greater an individual's perceived self-efficacy the longer he or she will persist at a given task, whereas an individual with low perceived self-efficacy will be more apt to give up on the task before successful completion.

Work Experience

Leach, Stotlenberg, McNeil, and Eichenfield (1997), explored the relationship between self-efficacy and counselor development utilizing two domains of the Integrated Development Model of Supervision: (a) intervention skills competence and (b) individual difference. Research participants included 142 master's level and doctoral students enrolled in supervised practiced of the master's, doctoral, and doctor of psychology programs at four universities across the United States. Using a demographic questionnaire, the Counseling Self-Estimate (COSE) Inventory, the Supervisee Levels Questionnaire-Revised, and a two-paragraph intake describing either a depressed or sexually abused client, Leach et al. (1997) explored counselor trainees' perception of self-efficacy.

Results of the Leach et al. (1997) study showed a significant relationship between the number of experiential sessions trainees had engaged in and the scores of the Supervisee Levels Questionnaire-Revised, $r = 26$, $p = .001$, and between number of

clients seen and the scores on the Supervisee Levels Questionnaire-Revised, $r = .35$, $p = .001$. Thus, trainees with greater opportunities to meet with clients and practice counseling were considered Level 2 trainees on the Supervisee Levels Questionnaire-Revised. Leach et al. found that Level 2 trainees reported greater self-efficacy than did Level 1 trainees on the five factors of the COSE Inventory, $\Lambda = .594$, F (5, 136) – 18.59, p , .001. The researchers also found a positive relationship between client type (depressed or sexually abused) and the amount of experience with each client, $\Lambda = .822$, F (10, 232) = 2.40, $p < .01$. According to Leach et al., the difficult client behavior factor of the COSE Inventory accounted for the statistical difference, F (2, 120) = 4.61, $p < .012$.

Therefore, experienced counselor trainees or Level 2 trainees were more likely to report having efficacy toward working with difficult client behaviors than counselors-in training at Level 1. Furthermore, counselors-in training at Level 2 were more likely to be aware of their attitudes and values, and the relationship their attitudes and values had on clients, than Level 1 counselor trainees (Leach et al., 1997). Additionally, counselors-in training at Level 2 were more likely to understand the multifaceted nature of counseling and were more likely to be self-aware when interacting with clients than Level 1 counselor trainees (Leach et al., 1997). The results reported by Leach et al. (1997) were consistent with available literature, demonstrating that mastery experience is central to self-efficacy and may be a moderating factor in counselor development. The results of the study provides further support of self-efficacy theory (Bandura 1989a, 2001) and the continued exploration of the relationship between counselor work experience and counselor self-efficacy.

In another study, supporting self-efficacy theory, Hu, Duan, Jiang, and Yu (2015) explored the relationship between mastery experience and Chinese counselors' counseling self-efficacy. Forty three counselors from a large university counseling center in China participated in the study. Participants completed a demographic questionnaire, the CASES, the CASES, Client-Specific, the Working Alliance Inventory-Short, and the Session Evaluation Questionnaire-Form 5. Hu et al. (2015) used a hierarchical linear modeling method to examine the effect of counselor perceived working alliance (Working Alliance Inventory-Short scores) and session impact (Session Evaluation Questionnaire scores) from the previous session on the following session's counseling self-efficacy in working with specific clients scores. Hu et al. also explored counselors' general self-efficacy and demographic variables as predictors of counseling self-efficacy when working with specific clients.

Results of the Hu et al. (2015) study showed that prior to the first counseling session there was no significant relationship between a counselors' sex and average scores of general counselor self-efficacy across clients. However, the average scores of counselors' general counseling self-efficacy across clients was moderately correlated with counselors years of counseling experience, $r = .48$, $n = 39$, $p < .01$. Additionally, counselors who reported goal and task one standard deviation higher than the grand mean demonstrated greater client specific counseling self-efficacy by .18 and .15 points respectively. Moreover, Chinese counselors' general counseling self-efficacy ($\beta = .75$, $p < .001$) significantly predicated their client specific counseling self-efficacy, as

counselors with general counseling self-efficacy one standard deviation higher than the grand mean reported higher client specific counseling self-efficacy by .75 points.

Hu et al. (2015) reported that Chinese counselors' client specific counseling self-efficacy was influenced by how much their clients agreed with them on session goals and tasks as well as their general counseling self-efficacy. Hu et al. also reported that Chinese counselors exhibited greater client specific self-efficacy when they perceived their previous counseling session as deep, felt positive about the session, and exhibited high general counseling self-efficacy. Hu et al. concluded that both the working alliance and session impact assessed at the end of the previous session could be used to measure whether a counselor had a successful experience when in session with a client, further supporting the conceptualization of self-efficacy and the role of mastery experience (Bandura, 1986). The results also lend support to the cross-cultural validity of self-efficacy theory.

Finally, exploring the value of certification in the professional identity development of substance abuse counselors, Simons et al. (2017) found that a large number of research participants reported certification as an important part of their professional identity. Simons et al. also found that participants with a certification may have more years of experience, report more experience conducting individual and family counseling and psychoeducational education groups, in addition to greater exposure working with veterans and consumers with mental health and other trauma disorders. Simons et al. also found that participants with certification may more readily integrate different modalities and methods when working with diverse consumers due to years of

experience. As such, the number of years working in substance abuse counseling could influence substance abuse counselor perceived self-efficacy and work performance.

Education and Training

In 2009 CACREP released revised addiction counseling standards for counselor education master's degree programs, acknowledging the importance of addiction education and to address the concern for standardization of addiction education (Lee, 2014; Miller et al., 2010). The revised standards provided updates to the human growth and development domain, which now includes competency in the knowledge, skills, practice, intervention, prevention and treatment of addiction and addictive behaviors (Lee, 2014). The revised standards also adjusted clinical mental health counseling programs, adding more addiction related requirements for students enrolled and seeking enrollment in clinical mental health programs. Finally, the most important and most significant of the changes, was the creation of requirements for a 60 hour credit addiction counseling program (Lee, 2014). The National Association for Alcoholism and Drug Abuse Counselors (NAADAC) also has a distinct set of standards, eligibility requirements, and certification process for substance abuse counselors nationwide. NAADAC represents well over 85,000 addiction counselors, educators, and other addiction focused healthcare professionals and is focused nationally, certifying counselors who meet the rigor of clinical training, education, knowledge, standards of practice, ethics, and professional development (About NAADAC, n.d; Miller et al., 2010).

Tang et al. (2004) conducted a quantitative research study exploring the relationship between age, prior work experience, number of courses taken, and number of internship hours and counselor self-efficacy. Participants included 116 counselor educator students recruited from six counselor education programs in the Midwestern area of the United States and was separated into two groups according to CACREP-accreditation and non-CACREP accreditation. Participants completed a demographic questionnaire and the Self-Efficacy Inventory to assess general counselor self-efficacy.

Results of the Tang et al. (2004) showed that while there were some significant differences in areas of counseling self-efficacy such as counseling anxiety reactions, clinical interview assessment, counseling adjustment reactions, and counseling affective disorders between CACREP and non-CACREP graduate students, no statistically significant relationship was found between the CACREP accreditation label and student self-efficacy, $\Lambda = .804$, $F(20, 4) = .903$, $p < .585$, when controlling for prior work experience, amount of course work completed, and hours of internship completed. Student's self-efficacy was most closely related to coursework ($r = .59$, $p < .01$), internship hours ($r = .47$, $p < .01$), and clinical instruction ($r = .40$, $p < .01$), providing further support for self-efficacy theory and the positive relationship between past experiences, social support, verbal persuasion, self-efficacy beliefs, and confidence to engage in specific roles and tasks.

Mullen, Uwamahoro, Blount, and Lambie (2015) also explored the self-efficacy changes of counselor trainees and reported findings similar to that of Tang et al. (2004). Mullen et al. (2015) explored the relationship between counseling students' demographic

factors and self-efficacy and the students' self-efficacy change at three key times during their graduate preparation program. Participants included 179 entry level counselor trainees from a CACREP-accredited counselor education program in the southeastern region of the United States. Counselor trainees completed a demographic questionnaire and the Counselor Self-Efficacy Scale at three points during their academic program – student orientation at the beginning of their program, orientation to clinical practicum and supervision, and the final group supervision meeting.

Results of the Mullen et al. (2015) study showed no statistically significant relationship between counselor trainees' age, gender, ethnicity, program track, and trainees' level of self-efficacy at the three data collection points. There was a positive relationship between the effect of time on counselor trainees' scores on the Counselor Self-Efficacy Scale, F (1.3, 242.79) = 404.52, $p < .001$, Partial $\eta^2 = .69$. The 69% variance in trainees' scores on the Counselor Self-Efficacy Scale was attributed to the time each trainee spent in their academic program, as such counselor trainees scored higher on the Counselor Self-Efficacy Scale at each data collection point during their program track (Mullen et al., 2015).

These results were consistent with available literature (Tang et al., 2004) and provided further empirical support for Bandura's (1986) conceptualization of self-efficacy and the importance of mastery experience. The results further support my study and the exploration of the relationship between years of work experience and level of education on substance abuse counselor self-efficacy.

Professional Licensure and Certification as a Substance Abuse Counselor: Minimum Standards

The field of substance abuse counseling is a unique specialty area within the counseling profession that is still growing and developing (Miller, Scarborough, Clark, Leonard, & Keziah, 2010). From the presence of recovering to non-recovering counselors, to degreed and non-degreed counselors, the field's uniqueness also extends to the differences in minimum standards needed to effectively work as a substance abuse counselor from state to state (Crabb & Linton, 2007; Miller et at., 2010; Tang et al., 2004). Currently, there is no uniform set of curriculum standards in the United States regarding the training of substance abuse counselors (Duryea et al., 2013; Miller et al., 2010). Moreover, there are terms used from state to state and within states that can cause confusion for people interested in a career in substance abuse counseling and consumers seeking the services of a substance abuse professional (Miller et al., 2010). For example, substance abuse professionals are recognized as addiction counselors/professionals and/or substance abuse counselors/professionals from state to state and in research literature (Lee, 2014; Miller et al., 2010; Toriello & Benshoff, 2003).

Credentialing also differs from state to state, as the individual who desires a career as a substance abuse counselor can be certified, credentialed, or licensed. For instance, in New York State, professionals who provide services in the form of alcohol and substance abuse counseling are CASACs with a minimum education level of high school or GED Diploma (Alcoholism and Substance Abuse Counselor, n.d.; Credentialing, n.d.). Whereas in Connecticut, alcohol and substance abuse professionals

practice as either a certified alcohol and drug counselor or a licensed alcohol and drug counselor (Alcohol and Drug Counselor Certification Requirements, n.d.). As a last example, the state of Pennsylvania also has its own unique credentialing system, with five certification levels for substance abuse counselors each requiring different levels of education: (a) associate addiction counselors at the high school diploma or GED level, (b) certified associate addiction counselor for the non-degreed professional, (c) certified alcohol and drug counselor at a bachelor's degree level, (d) certified advance alcohol and drug counselor at a master's degree level, and (e) certified criminal justice addiction professional at a bachelor's degree level (Certification, Pennsylvania Board Certification, n.d.).

Page and Bailey (1995) reported on the state of certification in substance abuse counseling and noted the interest of mental health counselors, school counselors, counselors who work in criminal justice, and counselors who work in private practice in seeking addiction-counseling certification. Greer and Kuehn (2009) commented on the necessity of the profession to develop national standards in academic content and skills training of substance abuse counselors. Greer and Kuehn noted that standardization would define the education process of substance abuse counselors and lead to professional recognition. Duryea et al. (2013) noted that while the inclusion of addiction specific content in the 2009 CACREP Accreditation Standards reflected the knowledge and acceptance of addiction as an integral part of counselor preparation, work still needs to be done to fully integrate addiction into counselor education as a core competency. Duryea et al. further noted that the challenge to integrating addiction into counselor

education is heightened by the four organizations attempting to govern the qualifications of substance abuse counselors: CACREP, Substance Abuse and Mental Health Services Administration, the NAADAC, and the International Certification and Reciprocity Consortium. The Addiction Technology Transfer Center Network also provides as a resource, a list of organizations that offer either credential or licensed addiction counselors programs (Certification Information, n.d.). These organizations provide certification and/or licensure to psychologists, psychiatrists, medical doctors, social workers, counselors, and nurses.

The American Academy of Health Care Providers in the Addictive Disorders is one such organization with membership in 48 states and seven other countries, and members are comprised of psychologists, psychiatrists, medical doctors, social workers, counselors, and nurses (Certification, n.d.). The Academy currently offers the Certified Addiction Specialist (CAS) credential as a clinical certification to health care professionals in the addictive disorder field, which includes five specialty areas: alcohol addiction, drug addiction, eating disorders, sex addiction, and gambling addiction (Certification, n.d.). Interested individuals must be providing addiction treatment under the direction of a qualified clinical supervisor and can hold a master's degree or doctorate in mental health related fields, be non-degreed or hold a degree in a non-mental health related field (Minimum Eligibility Requirements-CAS, n.d.). However, the hours of providing supervised direct care varies depending under which category the individual certificant falls (Minimum Eligibility Requirements-CAS, n.d.).

The American Society of Addiction Medicine is another resource organization that provides continuing education and professional membership to physicians, clinicians, and associated professionals practicing in addiction medicine. The most recognized certification is that of an addiction specialists who is a physician certified by the American Board of Addiction Medicine and/or a psychiatrist certified by the American Board of Psychiatry and Neurology. Additionally, the addiction specialist is one who demonstrates knowledge, experience, and skills necessary to provide quality and individualized prevention, screening, intervention, and treatment for substance use and addiction, in addition, to the recognition and treatment of the psychological and physical aspects of addiction (What is an addiction specialist?, n.d.).

To address the need to provide quality services, the substance counselor must develop knowledge, skill, competence, and an attitude that reflects acceptance, openness and empathy toward the individual client (NAADAC, 2011). These varying educational and credential standards have caused many to call for a uniform set of standards in substance abuse counseling (Lee, 2014; Miller et al., 2010). In 2009, members of the Council for Accreditation of Counseling and Related Educational Programs (CACREP) took on a leadership role in this area, creating educational standards for the education of students in addiction counseling; however, this occurs at the master's level (Lee, 2014; Miller et al., 2010). Unfortunately, many states are currently left to write their own regulations for the credentialing of substance abuse counselors, which often does not translate into requiring a master's degree, creates a hodgepodge of rules, and provides

little clarity for those seeking to begin a career in substance abuse counseling (Duryea et al., 2013; Greer & Kuehn, 2009; Miller et al., 2010).

Counselor Self-Efficacy

Researchers have highlighted the influence of self-efficacy in various areas such as counselor training (Ikonomopoulos, Vela, Smith, & Dell´Aquila, 2016; Tang et al., 2004), counselor development (Mullen, Uwamaboro, Blount, & Lambie, 2015), and career decision making (Duffy, Douglass, & Autin, 2015), however the predictive nature of self-efficacy still remains unclear (Chandler et al., 2011; Kozina et al., 2010).

For example, Kozina, Grabovari, De Stefano, and Drapeau (2010) examined changes in self-efficacy beliefs of 20 first year counselor trainees enrolled in their practicum course experience. Participants completed a demographic questionnaire and the COSE Inventory and were assessed at two points during their practicum course with eight weeks between the two assessments. Prior to the first assessment, participants received training in micro skills and interview techniques, theories of counseling and psychotherapy, case conceptualization, and ethics. Participants also received 39 hours of practicum instruction, 39 hours of group supervision, and 14 hours of direct client contact. By the second assessment, research participants received an additional 24 hours in both practicum instruction and group supervision and 16 hours of direct client contact. At the end of the two assessment periods, research participants completed 63 hours in both practicum instruction and group supervision and 30 hours of direct client contact (Kozina et al., 2010).

At the conclusion of the two assessment periods, 75% of trainees demonstrated an increase in the total scores on the COSE Inventory and 25% demonstrated a decrease in total scores on the COSE. Thus, the findings suggest a positive relationship between experience and self-efficacy and are consistent with the ideology behind the practicum experience which is to gain theoretical knowledge and practice microskills (Kozina et al., 2010; Mullen et al., 2015; Tang et al., 2004). Furthermore, the results of the Kozina et al. (2010) study support my study and the exploration levels of education and substance abuse counselor self-efficacy.

Ikonomopoulos, Vela, Smith, and Dell´Aquila (2016) also examined the changes in self-efficacy in counseling students and found that counselor trainees' direct counseling experience with clients to be the most helpful in improving trainees' counselor self-efficacy during the practicum experience. Participant also reported that obtaining feedback from their clients, seeing client progress, processing cases during triadic supervision, and case conceptualization during group supervision were also helpful and important to their development as a counselor (Ikonomopoulos et al., 2016). These findings supports Bandura's (1986) conceptualization of self-efficacy, the role direct mastery experiences play in motivating and building confidence in the individual, and supports the multicultural lens of the CASES and its appropriateness to use among cultural and ethnic groups.

In another research study, Chandler et al. (2011) offered one of the first structured studies exploring the perceived self-efficacy of licensed counselors providing substance abuse counseling and noted the need for further research in this area. Chandler et al.

utilized a demographic questionnaire and the Substance Abuse Treatment Self Efficacy Scale to collect data on the perceived self-efficacy of licensed counselors providing substance abuse counseling. Nine hundred and ninety nine professional members of the American Counseling Association were contacted to participate in the study and 102 professional members completed the research instrument.

Chandler et al. (2011) found no statistical relationship between the amount of substance abuse related courses taken in graduate school, practicum, and internship hours spent counseling substance abuse clients, number of continuing education courses completed and the number of clients with a primary diagnosed treated by licensed counselors and counselor self-efficacy F (4, 97) = 0.47, p = .756. The average total score on the Substance Abuse Treatment Self Efficacy Scale for participants was 3.83 indicating high self-efficacy. Additionally, scores on the subscales indicated participants' high levels of confidence when providing substance abuse services in the following areas: assessment and treatment planning (3.70), case management (3.78), individual counseling (3.96), group counseling (3.57), and ethics (4.16). Chandler et al. found that regardless of the number of training courses completed, counselors reported high levels of confidence when providing services to clients with substance abuse histories which could be the result of the core general knowledge typically addressed in counseling programs or the years of experience and confidence felt after what counselors perceived as successful treatment. Based on these results, Chandler et al. (2011) recommended further exploration of relationship between licensed counselor self-efficacy and the provision of

substance abuse services to clients providing further support for the exploration of the predicators of substance abuse counseling self-efficacy.

Influencing Substance Abuse Counselor Self-Efficacy

The above research findings highlight the variability in the predictive nature of self-efficacy, nevertheless, Cacioppo and Patrick (2008) noted that whether positively or negatively, people adapt their concept of self and behavior according to the social environments in which they function. As such, self-efficacy and social learning could very well be the root of such changes (Veale, Gilbert, Wheatley, & Naismith, 2015). Therefore, examining the extent to which years of work experience, level of education, and possession of a license or certification predict substance abuse counselor self-efficacy may provide critical insights into the persistence of substance abuse counselors and to advance knowledge in this area.

Knudsen, Gallon, and Gabriel (2006), commented on the heterogeneous nature of the academic and professional backgrounds of substance abuse professionals. Knudsen et al. (2003) noted that substance abuse counselors differed in age, academic degree, and years of experience, and reason for pursuing a career in substance abuse counseling. Examining the substance abuse counseling workforce, Rieckmann, Farentinos, Tillotson, Kocarnik, and McCarty (2011) found that most providers who reported having a professional licensure (n = 730) were also licensed alcohol and drug abuse counselors (n = 259, 39%) or social workers (n = 180, 25%). While, others reported completing the requirements for licensure as professional counselor (n = 123, 17%), psychologists (n = 34, 5%), nurses (n = 34, 5%), licensed marriage and family therapists (n = 16, 2%), or

physicians (*n* = 7, 1%). This is noteworthy, because the addiction counseling profession continues to be burdened by centuries old barriers even in the face of increased understanding of addiction and addictive behaviors and continued development of evidence based practices (Duryea & Calleja, 2013).

Researchers have also found that the variability in training and the substance abuse counselor's level of competence contributes to the challenge of advancing new knowledge into practice and ultimately the workforce (Duryea & Calleja, 2013). Furthermore, the lack of a nationally recognized license and the inability of the profession to attract new talent significantly impact the profession (Duryea & Calleja, 2013). Simons, Haas, Massella, Young, and Toth (2017) found that while substance abuse counselors are expected to be knowledgeable and proficient in assessing treatment outcomes, due to the variability in education, training, and certification/licensure standards concerns have been raised regarding substance abuse counselor preparedness, professional development, and professional identity development. As a result, educators have recommended that all counselors regardless of specialization, receive training in substance abuse (Corbin, Gottdiener, Sirikantraporn, Armstrong, & Probber, 2013; Lee, 2004).

Individuals with a history of mental health and substance abuse present a unique set of challenges for counselors, as they are often dealing with the effects of substance abuse and mental illness both physically and emotionally. As noted by Mericle, Martin, Carise, and Love (2012), individuals with a history of mental health substance abuse often present with increased histories of homelessness, incarceration, HIV, diabetes, other

health related problems, victimization, poor treatment outcomes, and fragmented care. Additionally, whether by client omission, counselor or programmatic issues, many of the needs and concerns of individuals with a mental health and substance abuse history often go unmet (Mangrum & Spence, 2008; Mericle et al., 2012).

According to Mericle et al. (2012) client underreporting of symptoms is one source of error in assessments conducted. There is also a client's minimization of the effects of symptoms, the minimization of the need for services, and a counselor's inability to recognize symptoms of disorders based on a client's presenting concerns. Mericle et al. found that approximately 30% total clients with a psychiatric symptom entering substance abuse treatment underrated the need for mental health services. Additionally, no clients overrated the need for mental health services when they reported no psychiatric symptoms. Counselors were, however found to overrate and underrate the psychiatric symptoms. According to research results, counselors underrated 32% of clients who reported psychiatric symptoms even though 36% of those clients reported the need for mental health services (Mericle et al., 2012). Counselor overrating was less frequent; however, counselors did overrate the need for mental health services for 4% of clients who reported no psychiatric symptoms. These results point to the importance of accurate assessment and the need for counselors to possess competent clinical assessment skills, self-awareness, and efficacious counseling attitude in light of recent changes to managed care and the call for greater inclusion of evidence-base practices in substance abuse treatment programs (Mangrum & Spence, 2008; Mericle et al., 2012).

Self-efficacy is an individual's belief in his her abilities to carry out a particular task and has a defining role in the initiation and maintenance of human behavior (Bandura, 2001). Consiglio, Borgogni, Di Tecco, and Schaufeli (2016) found that self-efficacy beliefs allows a person to approach their job with effort, persist in the face of difficulties, and be more engaged in their work, providing further evidence in support of self-efficacy theory (Bandura, 2011). Therefore, I seek to understand the relationship between years of work experience, level of education, and possessing a license or certification, and substance abuse counselor self-efficacy. I hypothesize that (1) substance abuse counselors' years of work experience, level of education, and possessing a license or certification will not predict substance abuse counselor self-efficacy when working with dually diagnosed clients and all beta values will be equal to zero; (2) substance abuse counselors' years of work experience, level of education, and possessing a license or certification will predict substance abuse counselor self-efficacy when working with dually diagnosed clients and at least one beta value will be significantly different from zero.

Analysis of Research Methodology and Methods

For this study, I used a quantitative cross-sectional research design to determine if years of work experience, level of education, and possessing a license or certification predicts substance abuse counselor self-efficacy when working with dual diagnosed clients. Williams, Wissing, Rothmann, and Temane (2010) conducted a cross-sectional research study exploring the effects of general self-efficacy and work context (job demands and job resources) on psychological outcomes (psychological well-being and

work engagement) and the possible relationship between self-efficacy and work context on psychological outcomes. Utilizing a criterion sampling method, 458 employees of a governmental agency in the North West Providence of Africa was chosen to participate in this study. Participants reported completing the 12th grade or higher and was asked to a demographic questionnaire , the Generalized Self-Efficacy Scale, the Job Demands-Resources Scale, the Utrecht Work Engagement Scale, the Satisfaction with Life Scale, and the Affectometer-2 Short-form (Williams, et al., 2010).

Results of the Williams et al. (2010) study showed that work context and self-efficacy was related to satisfaction with life, F (6, 452) = 30.76, $p < 0.01$, $R^2 = 0.29$, positive affect, F (6, 452) = 45.84, $p < 0.01$, $R^2 = 0.44$, negative affect, F (6, 452) = 14.52, $p < 0.01$, $R^2 = 0.16$, vigor, F (6, 452) = 32.97, $p < 0.01$, $R^2 = 0.30$, and dedication, F (6, 452) = 39.07, $p < 0.01$, $R^2 = 0.34$. Thus, an individual's psychological well-being is positively influenced by work context factors and self-efficacy.

In another research study, Goreczny et al. (2015) explored counseling self-efficacy across four groups of students: 21 undergraduate students enrolled in an abnormal behavior course, 31 students enrolled in a first semester graduate level course, 16 counseling psychology students enrolled in their first clinical experience, and 29 counseling psychology students enrolled in their second and final clinical experience. Participants completed an experience questionnaire that asked about previous experience working with individuals and groups in counseling sessions; the CASES, the COSE Inventory, the Subjective Happiness Scale assessing for global happiness, the Satisfaction

with Life Scale assessing for overall satisfaction with life, and the Rosenberg Self-Esteem Scale which assesses for the individual's appraisal of self-worth.

Results of the Goreczny et al. (2015) study showed there was a positive relationship between years of experience in the field and self-efficacy. There was also a positive relationship between self-efficacy, self-esteem, life satisfaction, and general happiness across all student levels, multivariate F (42, 241) = 1.502, p = .032. Univariate ANOVAs and Tukey's post hoc tests showed a curvilinear relationship for all measures of counselor self-efficacy instead of a direct linear relationship. As such, self-efficacy was higher in students at the undergraduate level than for first-time graduate students providing further evidence in support of a positive relationship between advanced training and counselor self-efficacy and the concept of mastery experience in self-efficacy theory (Goreczny et al., 2015).

Summary and Conclusion

Bandura (1986) described self-efficacy as an individual's belief in his or her capabilities to complete a given task and believed it played an important role in human agency and human behavior (Bandura, 2001). A review of existing literature revealed that researchers have utilized social cognitive theory as a theoretical foundation in research, with over 4, 441 articles for the years 1902 through 2016 exploring the construct of self-efficacy. However, I have found no research that has systematically explored predictors of substance abuse counselor perceived self-efficacy when working with dual diagnosed clients.

Research indicates that counselor trainees who had more coursework, more internship hours and more related work experience perceived themselves as more competent in performing specific counseling skills (Tang et al., 2004) providing evidence supporting self-efficacy theory and the notion that experience and engagement in specific behaviors or tasks influences the development of self-efficacy beliefs. Although, Chandler et al. (2011) found no statistical relationship between the amounts of training received in substance abuse counseling, the number of substance abuse courses taken, the percentage of clients with a substance abuse history served, and the number of continuing education completed; evidence was found social cognitive theory and the tenants of self-efficacy. Chandler et al. noted that counselors reported high self-efficacy in treating individuals with substance abuse histories based on prior experience, thus lending support for my study and the exploration of the relationship between work experience and substance abuse counselor self-efficacy.

The individual providing substance abuse treatment is important to the consumer as well as health and mental healthcare providers, insurance companies, the global counseling profession, and the global community at large (Smith, 2013). As counselors establish themselves in the substance abuse field, self-efficacy becomes very important in counselors determining their capabilities and ability to assume the various roles of a substance abuse counselor working with dual diagnosed clients (Chandler et al., 2011; Tang et al., 2004). Bandura (1989a) noted the individual is neither autonomous nor a mechanical conduit of environmental influences, but rather a causal agent to his or her own motivation and behavior in the triadic reciprocal process of social cognitive theory.

As such, substance abuse counselors must be motivated to engage and perform competently while working with dually diagnosed clients (Bandura, 1989a, 2001).

Given the heterogeneous nature of substance abuse counselors' years of work experience, level of education, and possession a licensure and/or certification, it is important that substance abuse counselors be aware of their personal values, biases, expectations, therapeutic role, and attitude when providing care to dual diagnosed individuals. A failure to do so can potentially lead to counselor ineffectiveness and the rending of services that fail to address the needs of the individual client and society at large (American Counseling Association, 2014; Mericle et al., 2012). With this in mind, understanding how contextual factors contribute to, or impact self-efficacy, is important and can help in addressing the continuing challenges counselors face when engaging clients. It can also help in providing insight to how counselors protect their own well-being and avoid professional depersonalization, and perceive and execute job related tasks, and roles, while providing client care. In the chapter to follow, I expound on the research methodology, the research questions, research hypotheses, and how this study advances the understanding of factors influencing self-efficacy.

Chapter 3: Research Method

Introduction

Regardless of the setting—outpatient, inpatient, or residential—substance abuse treatment is often a combination of personal gains in modifying behavior and periods of abstinence, relapses, personal and family problems, and interpersonal conflict with peers and counselors (Duffy & Baldwin, 2013; Lawson, Lambert, & Gressard, 2011). As a result, researchers are continuously seeking to understand the factors that lead to successful recovery and client outcomes (Duffy & Baldwin, 2013). Researchers have reported on and explored factors such as the counselor's recovery status and credibility when engaging clients in treatment (Toriello & Strohmer, 2004), the counselor's background and its relationship to completing clinical tasks (Knudsen, Gallon, & Gabriel, 2006), and the counselor's attitude toward evidence based practices (Smith, 2013). However, there is limited research available on substance abuse counselor self-efficacy.

To advance knowledge and offer practical solutions for the development of substance abuse counselor self-efficacy, factors that influence self-efficacy among this unique group of counselors must be identified. Therefore, my purpose for this nonexperimental, quantitative, cross-sectional study was to determine whether years of work experience, level of education, and possessing a license or certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients in substance abuse settings. In this chapter, I discuss the research design and rationale for the study, followed by defining my target population, an explanation of my sampling procedures, and the instrumentations used for data collection. I also restate my research

questions, discuss my recruitment procedures, data collection, data analysis strategies, research validity, and ethical considerations. I conclude the chapter with a summary that highlights the study design procedures and an introduction to Chapter 4.

Research Design and Rationale

In this nonexperimental, quantitative study, I used the cross-sectional research design to determine whether years of work experience, level of education, and possessing a license or certification (independent variables) predicts substance abuse counselor self-efficacy (dependent variable) when working with dual diagnosed clients. The rationale for this design was that substance abuse counselors are a representative subset of the counseling profession, and I surveyed the perception of counselors' self-efficacy at a single point in time as opposed to multiple points in time (Saxena, Prakash, Acharya, & Nigam, 2013). More importantly, researchers have used the cross-sectional research design when collecting data on knowledge and attitudes to the explore relationships between variables even when variables cannot be manipulated (Connelly, 2016, Saxena et al., 2013). Therefore, I was able to explore the relationships between the research variables without manipulating a single study environment or research variable.

Researchers have also reported on some disadvantages to using the cross-sectional research design such as the data not reflecting changes in participants' responses over time; varied response rates on survey questionnaires when requesting completed surveys, as the individual may not be able to complete the survey at the specified time or may require the assistance of a secondary party to answer the questions; and the data being self-reported rather than observed (Connelly, 2016). Some of these challenges were

apparent during the data collection phase and will be discussed later in this chapter and in Chapters 4 and 5.

Surveyed substance abuse counselors received a link via e-mail invitation to complete online the demographic questionnaire and the CASES for data collection. Qualtrics, the online survey manager used in this study, stored all responses to the survey confidentially and provided a number to each completed survey. I did not request or require personal or identifying information for the purpose of this study. After the participants completed the survey, I used multiple regression analyses of the statistical information to describe the relationship between the variables.

Population

The target population for this study was substance abuse counselors practicing and working in outpatient treatment programs throughout New York State. However, due to slow participant response rates, the target population was modified to include substance abuse counselors practicing and working in outpatient treatment programs across New York State and substance abuse counselors licensed or trained to provide substance abuse counseling services across the United States. Participants had to be licensed or trained to provide substance abuse counseling services in their state or district due to the variation in state requirements and licensing laws (Duryea et al., 2013). Counselors providing substance abuse counseling services in New York State were held to the requirements of state law and credentialing practices. To provide substance abuse counseling in New York State, counselors must obtain the certification of CASAC. The

credentialing body that regulates the CASAC designation in New York State is the New York State Office of Addiction Services and Supports (CASAC Requirements, n.d.).

Sampling and Sampling Procedure

To obtain the research sample, I used the criterion sampling method. Criterion sampling involves selecting participants from the larger population because they meet predetermined characteristics (Palinkas et al., 2013). Although the criterion sampling method is generally used in qualitative studies, it is similar to random probability sampling where everyone meets the criteria for inclusion in the population (Palinkas et al., 2013). The inclusion criteria used for this study included (a) being 18 years or older to participate in the study, (b) being licensed or trained to provide substance abuse counseling services in their state or district, (c) working with dually diagnosed clients, and (d) English speaking. The sample included substance counselor professionals such as (a) social workers who have earned licensure or certification as a substance abuse counselor, (b) mental health counselors who also have earned licensure or certification as a substance abuse counselor, (c) certified rehabilitation counselors who are credentialed substance abuse counselors, (d) licensed or certified counselors who are credentialed substance abuse counselors, and (e) psychologists, psychiatrists, nurses, and medical doctors who have also earned licensure or certification as a substance abuse medical professional.

I obtained the mailing address and contact information for each outpatient program throughout the New York State region by accessing The New York State Office of Addiction Services and Supports Treatment Provider Directory via the office website

(https://www.oasas.ny.gov/treatment/directory.cfm). The Treatment Provider Directory is accessible to the public and offers a complete listing of all New York State funded treatment programs. I was also able to reach a diverse number of individuals who identified as substance abuse counseling professionals through two professional associations, a Listserv, and three online platforms where substance abuse counselors of various backgrounds and qualifications may have held membership to share ideas, research, network regarding counseling issues, advertise, and recruit participants to participate in research. I sent the survey request to the designated program gatekeepers, the two professional associations, Listserv, and online platforms, which included the survey link and invitation for substance abuse counseling professionals to participate in the study.

To compute the sample size, effect size, and power of analysis, I used the G*Power 3.1 Calculator. I used a multiple regression random predicator models test and a prior power analysis that computed the sample size given an observed effect size, power, and significance. Random predicator models are similar to observational studies where participants and the associated predicator values are sampled from the population of interest, whereas fixed-predictor models are associated with experimental research where the researcher assigns to the research participants, the known predictor values (Faul et al., 2009). Further, the choice to use the fixed predictor model or the random predictor model affects the power of the test but made no difference in the test of significance or the estimation of regression weights (Faul et al., 2009). Therefore, I determined that with three predictor variables and using an observed effect size (R^2) of

0.3, $\alpha = 0.05$, statistical power of 0.80, two tails, a sample size of $N = 38$, upper critical $R^2 = 0.237$, lower critical $R^2 = 0.006$, and actual power of 0.80 was appropriate for my study. To assess the effect of the dependent variable and the three independent variables, I used SPSS software to conduct multiple regression analyses.

Instrumentation and Operationalization of Constructs

I used the CASES, a preexisting survey instrument, as my data collection tool. I obtained permission to use the CASES survey instrument by contacting the developer Dr. Robert Lent. A sample of the CASES can be found in Appendix C and permission to use the CASES can be found in Appendix B. The CASES, developed by Lent, Hill, and Hoffman (2003), was designed to measure self-efficacy in relation to counseling activities and was based on research conducted by Hill and O'Brien (1999) and their helping skills model. Lent et al. (2003) developed the CASES using 345 students enrolled in helping skills training classes at the advance undergraduate, master's level practicum, and doctoral studies. The students reported an average of 3.03 years of counseling-related experience and represented various counseling or psychology graduate level majors including: career counseling (2%), rehabilitation counseling (5%), school counseling (8%), college student personnel (8%), community counseling (9%), school psychology (3%), and counseling psychology (19%). Of the 345 student participants, 46% were undergraduate psychology majors, and 97% of those students were college seniors.

Lent et al. (2003) designed the CASES to measure self-efficacy in three broad scales: (a) helping skill self-efficacy, (b) session management self-efficacy, and (c) counseling challenges self-efficacy. Lent et al. broke down the scales through factor

analysis to include subscales. The helping skill self-efficacy subscale contains three subscales: (a) exploration stage skills which focuses on the counselor's communication competencies and competency to develop a counseling relationship; (b) insight stage skills, which focuses on the counselor's ability to challenge a client to gain understanding of his or her problems; and (c) action stage skills, which focuses on the counselor's ability to illicit change in the client (Lent et al., 2003). The session management self-efficacy subscale also contains one subscale focused on the counselor's ability to facilitate the process of therapy sessions. Additionally, the counseling challenges self-efficacy subscale contains two subscales: (a) relationship conflict, which focuses on the counselor's ability to effectively develop treatment plans and help the client resolve his or her issues and (b) client distress, which focuses on the counselor's ability to effectively work with difficult clients (Lent et al., 2003). The total score for the CASES Scale is 369 when combining all three subscales and all items were rated on a 10-point scale with 0 being *no confidence* and 9 *complete confidence*.

For the purpose of this study, participants completed all three scales and the total CASES score was used in data analysis. On the first scale, helping skill self-efficacy, participants identified how confident they were in using general counseling skills with most clients (Lent et al., 2003). Fifteen component helping–counseling skills typical of pre-practicum training were used to define this subscale such as "attending (orient yourself physically to the client," "open questions (ask questions that help the client clarify or explore their thoughts)," and "listening (capture and understand the message the clients communicate)" (Lent et al., 2003)

On the second scale, session management self-efficacy, participants identified how confident they were in doing specific counseling tasks with most clients (Lent et al., 2003). This scale consists of 10 items, such as "help your client to talk about his or her concerns at a 'deep' level" and "respond with the best helping skill, depending on what your client needs at a given moment." This scale differs from the previous scale in that it was created to illicit a response to counseling session scenarios rather than assessing ability to perform a particular helping skill (Lent et al., 2003, p.98).

Finally, the third scale, counseling challenges self-efficacy, consists of 16 items. Participants identified how confident they were in working with clients who are "clinically depressed," "differs from you in a major way or ways (e.g. race, ethnicity, gender, age, social economic status)," and "you find sexually attractive" (Lent et al., 2003). Conceptually, the three domains represent counselor skill levels with the first two domains representing pre-practicum and practicum helping skills and the third domain representing advance counseling skills.

The internal reliability estimates for each subscale ranged from .79 (exploration skills) to .94 (session management and client distress), with a CASES total score alpha coefficient of .97, and medium to large intercorrelations between the subscale ranging from .44 (exploration skills and client distress) to .72 (client distress and relationship conflict, session management and exploration skills, session management and insight skills; Lent et al., 2003). Lent et al. (2003) also used the COSE Inventory developed by Larson et al. (1992) to explore the convergent validity of the CASES. Lent et al. reported a correlation between scales on the CASES and COSE Inventory, which captured similar

information such as the COSE Inventory Process and CASES Session Management, r = .67 and COSE Inventory Difficult Client Behaviors and CASES Client Distress, r = .61. Additionally, the total score of the CASES correlated highly with that of the total score of the COSE Inventory (r = .76). Based on reported findings, Lent et al. concluded that although the CASES and COSE Inventory contained items that were different, conceptually both the CASES and COSE Inventory were similar as both instruments reflected common dimensions of helping behaviors. Lent et al. concluded that such results provided early support for the convergent validity of the CASES relative to the discriminant validity of the COSE Inventory.

Research continues to support the reliability and internal consistency of the CASES, as researchers have continued to use the scale to explore counselor self-efficacy and factors impacting counselor growth and development. For example, Kissil et al. (2013) utilized the CASES to explore the relationship between acculturation, language proficiency, and self-efficacy in immigrant counselors and mental health professionals practicing in the United States. Kissil et al. reported similar reliabilities for the CASES subscales as Lent et al. (2003). Kissil et al. reported a CASES total score mean, standard deviation, and Cronbach alpha of M = 7.4, SD = 1.02, α = .95. The reliabilities for CASES subscales were: insight skills (M = 7.34, SD = 1.36, α = 0.82), exploration skills (M =8.13, SD = 0.94, α = 0.88), action skills (M =7.17, SD = 1.84, α = 0.76), session management self-efficacy (M = 7.90, SD = .96, α = .94), relationship conflict (M = 6.89, SD = 1.39, α = 0.92), and client distress (M = 7.12, SD = 1.30, α = .88; Kissil et al.,

2013). The reliability for these scales are all comparable to the scores reported by the original developers of the CASES (Lent et al., 2003).

Bagheri, Jaafar, and Baba (2011) also explored the quality of the items and the reliability of the CASES from a Malaysian context. Participants consisted of 30 final year undergraduate students in the guidance and counseling program in a Malaysian public university. The students completed the CASES survey at the end of their courses, a demographic questionnaire, and responded to a question regarding whether they had experience in counseling. Bagheri et al. reported statistical analyses similar to Kissil et al. (2013) and consistent with the survey developers, Lent et al. (2003). The reliability estimates for the scales were: helping skill self-efficacy (α = .93), session management self-efficacy (α = .95), counseling challenges self-efficacy (α = .97), and a CASES total α = .98 (Bagheri et al., 2011).

Demographic questionnaire. I also used a demographic questionnaire to describe the participants (see Appendix D). The demographic questionnaire consisted of eight questions, three of which I designed to collect data to use in my data analysis and five of which I designed to gather descriptive information. The three questions I designed to use for data analysis asked participants to identify: (a) years of work experience, (b) level of education, (c) and whether they were licensed or certified to practice in their state or district. The five questions I designed to collect descriptive information asked participants to identify their: (a) age, (b) sex, (c) race/ethnicity, (d) type of licensure or certification, and (e) the region of the country in which they work.

I quantified years of work experience by the amount of years the counselor had been working in the field and response choices were limited to (a) 0 to 10 years, (b) 11 to 15 years, (c) 16 to 20 years, (d) 21 to 25 years, and (e) 25 years and over. For level of education, participants were asked to indicate the highest level of education they completed. Response choices were limited to: (a) High School Diploma, (b) GED, (c) Associates Degree, (d) Bachelor's Degree, (e) Master's Degree, (f) PhD, and (g) Other. Finally, participants were asked to identify whether they were licensed or certified to practice in their state or district. The response choices were limited to (a) yes, (b) maybe, and (c) no.

Operationalization of variables. In this study, I defined counselor self-efficacy as a counselor's belief in his or her ability to carry out or perform specific role related tasks (Bandura, 1977) and I measured perceived counselor self-efficacy using the CASES. Participants were directed to complete a demographic questionnaire that collected descriptive information concerning counselor years of work experience, level of education, and whether they possessed a license or certification. Research participants were not required to enter their name or employer on the survey. The data collected from the demographic questionnaire and CASES survey was coded for input in the SPSS version 25.0. The operational definitions and codes for each independent variable and the dependent variable are listed in Table 1.

Table 1

Operational Definition of Independent and Dependent Variables

Variables	Operational Definitions and Codes
Independent Variables	
Work Experience	Number of years working in the field of substance abuse counseling. 0 = no data reported, 1 = 0-10 years, 2 = 11-15 years, 3 = 16-20 years, 4 = 21 to 25 years, 5 = 25 years and over
Level of Education	Having a high school diploma, college, graduate degree, or postgraduate degree. What the highest level of education completed? 0 = no data reported, 1 = High School, 2 = GED, 3 = Associates Degree, 4 = Bachelor's Degree, 5 = Master's Degree, 6 = PhD, 7 = Other
Licensed/Certified	Participants were asked whether they were possessed licensure or certification. 1 = Yes, 2 = Maybe, 3 = No
Dependent Variable	
Counselor Self-Efficacy	Participants completed the Counselor Self-Efficacy Scale which contained three subscales to determine perceived counselor self-efficacy. All items were rated on a 10-point scale with 0 being no confidence and 9 complete confidence. A total score was obtained by combining all three subscales. The maximum Total Score was 369 and the minimum score was 0. Counselor self-efficacy will be represented as Total CASES Score in data analysis.

Recruitment Procedures

I received approval from the Walden University Institutional Review Board (IRB) before obtaining the mailing address and contact information of the outpatient treatment programs located in New York State. The Walden University IRB approval number for this study is 01-14-18-0266872. I utilized The New York State Office of Addiction Services and Support Treatment Provider Directory found on the New York State Office of Addiction Services and Support website to obtain the mailing address and contact information of all outpatient treatment programs located throughout New York State. I organized my provider search using the following categories: (a) program type; (b)

program location; (c) provider name/type; and (d) format. For the purpose of this study, I used the following search criteria: (a) program type - chemical dependence treatment programs; (b) program location - statewide; (c) provider name/type - outpatient services; and (d) format - spreadsheet. A Microsoft Excel Spreadsheet containing the program name, designated program contact, and address of 489 outpatient treatment programs was produced.

To begin the recruitment process, I randomly selected 50 outpatient treatment programs from the list of 489 outpatient treatment programs using the RAND() function command in Microsoft Excel. I contacted the program gatekeepers of the 50 selected programs using the email address listed in the treatment director. Each program gatekeeper received a recruitment email inviting them to participate in the present study. The recruitment email included a brief description of the research study, the inclusion criteria for research participants, information regarding payment, and the survey link. Each program gatekeeper was asked to forward the research survey link to all credentialed substance abuse counselors presently working at their facility who met the inclusion criteria for their consideration and participation in the study.

Following the approved data collection steps, I sent each of the 50 program gatekeepers a follow-up recruitment letter two weeks after sending the initial email thanking them for their participation in my research study and a gentle reminder to forward the survey link to all substance abuse counselors presently working at their facility who met the research inclusion criteria. After the initial email and follow-up email was sent, three surveys were recorded and reported by Qualtrics, the online survey

manager I used for this study. This prompted me to return to the Microsoft Excel Spreadsheet containing the list of all outpatient treatment programs across New York State to randomly select a second set of 50 treatment programs to be contacted. The second list of 50 treatment programs was contacted using the same methods as the initial 50 treatment programs. I emailed the identified program gatekeepers the recruitment email inviting them to participate in the research study by forwarding to all substance abuse counselors working at their facilities and who met the research inclusion criteria, the research survey link. I followed-up my initial email after two weeks, by sending to each program gatekeeper the follow-up recruitment email reminding them to forward the survey link to all substance abuse counselors who met the inclusion criteria.

Recruiting substance abuse counselors to participate in the present study was dependent on my ability to contact the designated program gatekeeper who was responsible for disseminating the research study information and survey link to all substance abuse counselors who met the inclusion criteria at their facilities. While this method of recruitment has been successful in some research studies (Greason et al., 2009; Lorente et al., 2014), it proved to be a challenge for this particular research study. After eight weeks of data collection, only four surveys were recorded and reported as completed by Qualtrics. Given the low rate of participant response, I requested and received approval from the Walden University IRB to amend my target population and recruitment procedures. During the first round of participant recruitment, I targeted substance abuse counselors licensed to practice and work in outpatient treatment programs across New York State. I requested and received approval to change my focus

from substance abuse counselors working in New York State only to counselors licensed or trained to provide substance abuse counseling services throughout the United States. The number of subjects needed to complete data collection did not change (N = 38). I also requested and received approval to extend my recruiting strategies, adding: (a) the use of a recruitment flyer to recruit research participants; (b) the use an online counseling platform where substance abuse counselors may have held membership to disseminate and recruit research participants; and (c) use of a professional association to disseminate my recruitment email to its membership listing.

Thus, I continued recruiting research participants as follows: (a) I randomly selected a third set 50 outpatient treatment programs using the Rand() command in Microsoft Excel and emailed the identified program gatekeeper the Recruitment email which included the survey link to be forwarded to all substance abuse counselors who met the inclusion criteria; (b) within two weeks of that initial email, I followed-up by sending to each designated program gatekeeper the follow-up recruitment email reminding the gatekeepers to forward the survey link to all substance abuse counselors who met the research inclusion criteria; (c) I posted my recruitment flyer on the online counseling platform inviting all credentialed/licensed substance abuse counseling professionals to participate in the research study; (d) I completed and submitted the research request form to the professional association requesting my research survey link be sent to the membership; and (e) within two weeks of my initial post on the online counseling platform, I posted a follow-up post of my recruitment flyer inviting all substance abuse counseling professionals to participate in the research study.

After nine months of data collection and two participant recruitment procedural changes, 30 surveys were completed. Hence, I requested and received permission from Walden University IRB to adjust my recruitment strategy a third and final time. During the first and second participant recruitment phases, participation in the research study was voluntary and participants were informed that there would be no compensation provided by the researcher or the participating program gatekeeper. During this procedural update, I requested and received permission to use: (a) a listserv to recruit potential research participants; (b) to use a local professional association to send my research information to its membership; (d) to use the online platforms LinkedIn and Facebook of a local professional association where substance abuse counselors may have held membership to post my recruitment flyer; and (d) to add a monetary compensation in the form a charitable donation to the National Center on Addiction and Substance Abuse based on the amount of surveys completed.

Participation in the research study continued to be on a voluntary basis and participants were not compensated for participating in the research study. However during this round of participant recruitment, participants who agreed to participate in the research study and completed the research survey were informed that I was making a $1.00 monetary contribution for every completed survey to the National Center on Addiction and Substance Abuse to further addiction research and the advancement of advocacy in ending the stigma of addiction. Previous recruitment steps continued with the addition of the three new steps. As such, I randomly selected a fourth set 50 outpatient treatment programs using the Rand() command in Microsoft Excel and

emailed the identified program gatekeepers the recruitment email which included the survey link to be forwarded to all substance abuse counselors who met the inclusion criteria. Two weeks later, I followed-up the initial email sending each program gatekeeper the follow-up recruitment email reminding them to forward the survey link to all substance abuse counselors who met the research inclusion criteria. I posted my recruitment flyer across the online platforms where substance abuse counselors may have held membership, and sent my recruitment email to the professional associations to distribute to their membership.

I submitted my first call for research participants on the chosen listserv, inviting all substance abuse counseling professionals who met the inclusion criteria to participate in the research study after receiving approval from the listserv moderator. Two weeks later, I posted a follow-up call for research participants on the listserv and reposted my recruitment flyer across the online platforms where substance abuse counselors may have held membership. Three weeks later I posted a final call for research participants on the listserv, inviting all substance abuse counseling professionals who met the inclusion criteria to participate in the research study. Two weeks later I submitted a final call for research participants on the listserv bring my recruitment period to a close. After 13 months of data collection, a total of 47 survey responses were collected and reported by Qualtrics, the online survey manager.

Data Collection

The primary purpose of this research study was to determine if years of work experience, level of education, and possessing a license or certification predicts substance

abuse counselor self-efficacy when working with dual diagnosed clients. Prior to receiving approval from Walden University IRB, I transferred the demographic questionnaire and the CASES survey to Qualtrics, the online survey manager used for this study. Once I received the approval notification to move to the final stage of my study, I transferred the approved informed consent document and the thank you note to Qualtrics. I recruited participants by sending to program gatekeepers employed at outpatient treatment programs across New York a recruitment email. The recruitment email provided background information on the research study, the specific inclusion criteria required for participation, payment, and the research survey link. Program gatekeepers were asked to forward the research study link to all substance abuse counselors who met the inclusion criteria for participation in the research study. Participants were also recruited through email invitations sent by leadership of two professional associations, a listserv, and three online platforms where substance abuse counselors may have held membership and allowed for the recruitment of participants to participate in research.

For the participants who accessed the Qualtrics survey link, the informed consent form was presented outlining the purpose of the study and the inclusion criteria for research participants. The informed consent also addressed the risk and benefits of the study, the voluntary nature of the study, study procedures, privacy, and payment. Potential participants were provided with the contact information for the primary student investigator and the research participant advocate at Walden University, if there were questions concerning their participation in the study. Potential participants were informed

that participation in the research study was voluntary and that each research participant was free to accept or reject the invitation to participate in the study. Additionally, potential participants were informed that they were able to stop at any time during the completion of the survey and exit the study. Potential participants who chose to participate in the study after reading the informed consent document were able to indicate their consent electronically. Those who consented to participate in the research study were presented with the demographic questionnaire and the CASES. Those who did not consent to participating in the study were presented with the "Thank You Note" thanking them for their time and ending the survey. The thank you noted provided the contact information of the student investigator and the Walden University research participant advocate in case participants had any questions about the study.

The overall research survey contained 19 questions and took approximately 20 minutes to complete. To ensure anonymity, no personal information or identification were required or collected. Participants were only required to complete the demographic questionnaire and survey instrument once. Once the survey was completed, participants received a completion confirmation and was presented with a thank you note, thanking them for their participation in the research study, were provided with local wellness resources if wellness concerns arose, and the contact information for the primary student investigator and the Walden University research participant advocate if questions or concerns arose regarding their participation in the research study.

Data Analysis

I used Qualtrics, a free online survey and questionnaire tool to collect and store data for this research study. The informed consent document, demographic questionnaire and CASES were formatted into usable documents on Qualtrics online platform. Once data collection ended, I exported the raw data for analysis to the SPSS version 25.0.

Frankfort-Nachmias and Nachmias (2008) noted the importance of data editing and cleaning in ensuring reliability and reduction of inconsistencies. Prior to commencing data analysis, I reviewed all of the responses on the demographic survey and CASES for missing entries and to ensure that all questions were answered correctly. I discovered that three of the survey entries were incomplete and I would not be able to code the missing values using the operational codes identified earlier in the chapter. As a result these three surveys were removed from the data file. I also removed two more survey entries because the participants did not consent to take part in the research survey. Upon further review of the raw data I removed four more survey entries due to participants completing only the demographic questionnaire. An additional four survey entries were removed because participants did not complete the full CASES. I also reviewed the raw data collected from the demographic questionnaire and the CASES to confirm variable coding and verify all data was entered correctly into the data file to be exported into SPSS 25.0 to detect any outliers (Leys, Ley, Klein, Bernard, & Licata, 2013).

No inconsistencies were discovered due to recording error in SPSS 25.0 or product malfunctioning (Broeck, Cunningham, Eeckels, & Herbst, 2005; Leys, Ley, Klein, Bernard, & Licata, 2013). However, four of the survey entries did not have a

response to the question “Are you licensed or trained to provide substance abuse counseling services in your state or district?” and were coded appropriately (Leys, Ley, Klein, Bernard, & Licata, 2013). I coded three of survey entries as having a licensure or certification due to the response to the question “What professional certification/licensure do you currently possess?” Each survey participant reported having the designation CASAC. This designation is the certification granted to individuals who seek to provide substance abuse counseling services in New York (CASAC Requirements, n.d.). I coded the fourth survey response as “no” due to the professional licensure/certification held and based on the responses of two other survey responses. The survey entry indicated that the respondent possessed a certified rehabilitation counselor certificate and a licensed mental health counselor (LMHC) license. This response was similar to that of another survey entry in which the respondent reported possessing a certified rehabilitation counselor certificate and a LMHC license, as well as not being licensed or certified to provide substance abuse counseling. At the conclusion of the review of the raw data, 34 survey entries were used to complete statistical analysis of the research questions.

Three predictor variables were emphasized and analyzed with the results of the total CASES score for multiple regression and two way interaction: years of work experience, level of education, and possessing a license or certification. Descriptive statistics such as means, percentages, frequencies, central tendencies, variances, standard deviations, and averages was also calculated to describe the respondents to the research survey.

Research question. The research question that guided this research study was:

RQ: Is there a relationship between the combination of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients

$H_{a0:}$ There is no statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients as measured by CASES?

$H_{a1:}$ There is a statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients as measured by CASES.

Interpreting results. To prepare for data analysis and to answer the research question, I first checked for normality of distribution, variance, linearity of variables, and skewness of the variables. I used a multiple regression analysis to examine the relationship between the dependent variable, substance abuse counselor self-efficacy and the independent variables, years of work experience, level of education, and possessing a license or certification. I also used the correlation table produced by the multiple regression analysis to determine the degree to which years of work experience, level of education, and possessing a license or certification, predicted substance abuse counselor self-efficacy.

Because I chose a statistical significance of .05 for all statistical analyses, I considered a significant relationship existed if all p-values of the standardized coefficient

were less than .05 (Banerjee, Chitnis, Jadhav, Bhawalkar, & Chaudhury, 2009; Chang, 2017; Veazie, 2015). This would result in me rejecting the null hypothesis, there is no statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients as measured by CASES and accepting the alternative hypothesis (Banerjee et al., 2009; Chang, 2017; Veazie, 2015). Alternatively, if all p-values of the standardized coefficient are greater than .05, the null hypothesis will not be rejected and the alternative hypothesis will not be accepted (Banerjee et al., 2009; Chang, 2017; Veazie, 2015). I will consider a positive relationship exists between the independent variables and dependent variable if the standardized coefficient is positive and a negative relationship exists if the standardized coefficient values are negative (Banerjee, et al., 2009; Chang, 2017; Veazie, 2015).

Threats to Validity

The threat to internal validity inherent for this study was selection threat. Selection threat refers to the different kinds of research participants in comparison groups and is controlled for by randomization (Threats to Internal and External Validity, n.d.). Researchers typically discuss selection threat when utilizing experimental and comparison groups in research. Selection threat is a concern in the present study because research participants are monolingual English and bilingual English speaking substance abuse counselors working in treatment programs across the United States. Due to the selection and inclusion criteria of the study, the findings of the study will not be generalizable to all counseling professionals and professionals from other disciplines

throughout the United States. Future researchers can replicate this study by exploring substance abuse counselor self-efficacy nationally, including all treatment types.

The treat of statistical regression to internal validity refers to a researcher selecting research participants based on the most extreme scores or characteristics (Threats to Internal and External Validity, n.d.). The threat to statistical regression was reduced since participation in the study was voluntary and identifying information such as name, date of birth, place of employment, and salary was not required nor was it known to the student researcher (Threats to Internal and External Validity, n.d.). Threats to internal validity not present in this study are history and maturation, observer effects, mortality, testing, instrumentation, and compensation (Threats to Internal and External Validity, n.d.).

Threats to external validity that exists in the present study are selection bias, setting threats, and historical effects (Creswell, 2009). In research, selection bias is said to have occurred when the research sample is not representative of the population the researcher intended to make generalizations about and is reduced when a researcher uses an experimental or quasi-experimental research design due to the random assignment of research participants to research groups (Threats to Internal and External Validity, n.d.). The current study design is a nonexperimental cross-sectional which limits my ability to provide a definite cause-and-effect relationship between research variables. Additionally, there is a possibility that the experiences of substance abuse counselors working in outpatient treatment programs could vary from substance abuse counselors working in methadone maintenance programs, inpatient treatment programs, residential treatment

programs, detox units, and medication free treatment programs. Moreover, the selection procedure of obtaining the sample through the program director seamed feasible based on prior research, however, the individuals who volunteer to participate in the study may be markedly different from those who do not (Chandler et al., 2011; Goreczny et al., 2015; Greason et al., 2009). As such future longitudinal research comparing substance abuse counselor self-efficacy in the various treatment settings may be appropriate.

Historical effects refer to occurrences in the environment that affect the conditions of a research study, changing the expected outcomes. In the present study history effects such as substance abuse counselors varying degrees, educational backgrounds, work experience, whether they possessed a license/certification, and alliance to specific codes of conduct (Scott, 2000), may influence the manner in which research participants self-report on the survey instrument (Chandler et al., 2010; Knudsen, Gallon, & Gabriel, 2006). To address this concern, I utilized an established instrument that has been used in various studies with study participants possessing similar characteristics as this study (Goreczny et al., 2015; Greason et al., 2009; Lent et al., 2003). Additionally, the CASES is proven to be an effective measure of counselor self-efficacy (Goreczny et al., 2015; Greason et al., 2009; Kissil et al., 2013; Lent et al., 2003). Finally, the amount of completed surveys returned may also affect the statistical analysis in determining study relevance and the need for continued research in this area.

Ethical Procedures

To protect the ethical integrity of this study, I had no prior contact or relationship with the outpatient treatment programs that were randomly chosen to participate in this

study. Additionally, I did not participate in nor had knowledge of the classification of clients as dually diagnosed as this was completed by treatment agency staff or the referral entity to the outpatient treatment program before the start of this study.

Protecting the participant. I obtained approval from Walden University's Institutional Review Board (IRB) before disseminating my call for participants. I also completed training on protecting human participants in research by the NIH Office of Extramural Research (See Appendix E). More importantly, the research population selected for this study is not considered among the populations categorized as a vulnerable population.

Participants who volunteered to participant in the study were provided with the study link by the program gatekeeper. Participants were informed that participation was voluntary and was not an extension of their current employment. Participants who accessed the research link first reviewed the informed consent. Participants were informed that while there were no associated risks with participating in the study, the possibility remained that they may have an emotional response to the questions on the demographic questionnaire and CASES. As such, participants were informed that they can stop and exit the study at any point in time. Participants were offered the free and confidential resource, NYC Well where trained individuals are available 24/7 to provide information and connect individuals to ongoing support. Participants were also advised to seek private mental health and counseling support should any thoughts or feelings become persistent and concerning.

To protect research participants' anonymity, I did not require the identification of

research participants' name, date of birth, social security number, employer, or employee identification number. Additionally, the treatment programs contacted will not be identified nor will they be included in data analysis and research results.

To protect the individual's autonomy, participants were informed that participation in the study was voluntary. There were no payments or gifts provided by the student researcher to participants for participation in this study. Participants were informed that the student researcher would be making a onetime donation to the National Center on Addiction and Substance Abuse for every completed survey.

Treatment of data and dissemination. I used Qualtrics, a free online survey manager to disseminate the demographic questionnaire and the Counseling Activity Self-Efficacy Scale (CASES) to all prospective research participants. I formatted both demographic questionnaire and CASES from Microsoft Word documents to a usable online document. Utilizing Qualtrics allowed me to transfer data directly to a Microsoft Excel Spreadsheet which allowed for direct upload into SSPS reducing data transfer time and errors. All applications and data will be accessed and stored on a password protected computer. Additionally, I will store a copy of the survey instrument, demographic questionnaire, research results and data collected in a locked file cabinet for a period of five years. At the conclusion of the five year period, I will shred all data collected. Lastly, upon completion of the survey instrument, participants received a thank you note, thanking participants for their willingness to participate in this study along with restating the purpose of the study. Participants were also provided with student researcher's contact information should they desire further information or have interest in the results

of the study.

Summary

The purpose of this non-experimental quantitative study was to determine if years of work experience, level of education, and possessing a license or certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients in substance abuse settings. In this chapter, I provided a rationale for the use of a cross-sectional research design such as cross-sectional research studies are flexible, relatively quick to conduct, inexpensive, and allow for the collection of data at one point in time as compared to longitudinal studies (Connelly, 2016; Saxena et al., 2013). I explained the recruitment, data collection, and data analysis processes. The target population is substance abuse counselors working in treatment programs across the United States. I used a criterion sampling method with an inclusion criterion of participants needing to be credentialed alcohol and substance abuse counselor and monolingual English speaking or bilingual English speaking to obtain the research sample.

To collect data, I used a demographic questionnaire and the CASES. I used Qualtrics a free online survey platform to distribute the consent form, demographic questionnaire, and CASES survey to research participants. I used the Statistical Package for the Social Science (SPSS) software to store, code, and analyze study data. From the data collected, descriptive analysis describing the research participants and the strength of the relationship between years of work experience, level of education, possessing a license/certification, and counselor self-efficacy will be conducted. I will provide a comprehensive and detailed review of the results in Chapter 4.

Chapter 4: Results

Introduction

Researchers have explored counselor self-efficacy in several meaningful ways such as job satisfaction, counseling performance, and job performance (Murdock, Wendler, & Nilsson, 2005). The purpose of this study was to determine whether years of work experience, level of education, and possessing a license/certification predicts substance abuse counselor self-efficacy when working with dually diagnosed clients. The research question used to guide this study was "Is there a relationship between the combination of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients?"

This chapter includes a summarization of the results of the research study, the data collection steps and response rates, data preparation, and demographic and descriptive characteristics. I discuss the results of the statistical analyses carried out to test the research hypotheses and all statistical assumptions. Finally, I conclude the chapter by summarizing my research findings and answers to the research questions and including an introduction to Chapter 5.

Data Collection

Upon receiving approval from Walden University IRB, implementation and data collection occurred over a period of 13 months. Initially, the estimated time frame for data collection was six months, which was within the 1 year IRB-approved timeline. However, due to insufficient participation from the initial recruitment method, data

collection extended past the initial approved IRB timeline. As such, I submitted an application to the Walden University IRB requesting permission to extend my data collection. I submitted the application in advance of the initial approval expiration date and received approval to extend my data collection for 1 more year.

My initial target population when I began data collection was substance abuse counselors licensed to practice and working in outpatient treatment programs across New York State. After 4 weeks of launching my original recruitment methods, only four participant survey responses were returned. Due to insufficient response rates, I decided to change my focus from substance abuse counselors licensed to practice and working across New York State to substance abuse counselors licensed or trained to provide substance abuse counseling services throughout the United States. I also decided to add three additional recruitment steps: (a) the use of a recruitment flyer to recruit research participants, (b) the use of an online counseling platform where substance abuse counselors may have held membership, and (c) the use of a professional association to disseminate my recruitment e-mail to its membership listing. To implement these changes, I submitted a "Request for Change Form" and an updated IRB application detailing these changes and additional recruitment steps. The request for subsequent changes was approved, and I continued data collection using the additional steps in addition to the original recruitment steps.

I randomly selected a third set of 50 outpatient treatment programs using the Rand() command in Microsoft Excel and e-mailed the identified program gatekeeper the recruitment e-mail, which included the survey link to forward to all substance abuse

counselors who met the inclusion criteria. Within 2 weeks of that initial e-mail, I followed up by sending to each designated program gatekeeper the follow-up recruitment e-mail reminding the gatekeepers to forward the survey link to all substance abuse counselors who met the research inclusion criteria. I also posted my recruitment flyer on the online counseling platform, inviting all credentialed/licensed substance abuse counseling professionals to participate in the research study. I completed and submitted a research request form required by the professional association, requesting the association send my research survey link to their membership. Within 2 weeks of my initial post on the online counseling platform, I posted a follow-up recruitment flyer inviting all substance abuse counseling professionals to participate in the study.

Following these data collection procedural changes, 30 surveys were completed after 9 months, falling short of the required 45 research participants needed to complete data collection. As a result of the continued insufficient response rate, I decided to amend my procedural and recruitment steps to garner interest and meet the required number of participants. During the first and second participant recruitment phases, participation in the study was voluntary, and participants were informed that there would be no compensation provided by me or the participating program gatekeeper. But I decided to implement a charitable donation of $1.00 for every survey completed to the National Center on Addiction and Substance Abuse. I also decided to use a listserv, two online platforms, and a local professional association to recruit potential research participants. I contacted each counseling forum for permission to use their platforms and upon receiving

approval, I submitted a request for change form and amended IRB application to Walden University IRB detailing the new recruitment steps in addition to all previous steps.

I received approval from the Walden University IRB to initiate all of the proposed changes to my data collection strategies. Hence, I was able to select a fourth set of 50 outpatient treatment programs using the Rand() command in Microsoft Excel and sent to the identified program gatekeepers the recruitment e-mail, which included the survey link to be forwarded to all substance abuse counselors who met the inclusion criteria. Two weeks later, I followed up the initial e-mail, sending each program gatekeeper the follow-up recruitment e-mail reminding them to forward the survey link to all substance abuse counselors who met the research inclusion criteria. I also posted my recruitment flyer across the selected online platforms inviting all credentialed/licensed substance abuse counseling professionals to participate in the study. I also submitted a request to the two professional associations, requesting each association send my research survey link to their membership.

Finally, I submitted my first call for participants on the listserv, inviting all substance abuse counseling professionals who met the inclusion criteria to participate in the study after receiving approval from the listserv moderator. Two weeks later, I posted a follow-up call for participants on the listserv and reposted my recruitment flyer across the online platforms where substance abuse counselors may have held membership. Three weeks later, I posted a final call for research participants on the listserv, inviting all substance abuse counseling professionals who met the inclusion criteria to participate in the study. Two weeks later I submitted a final call for research participants on the listserv

bring my recruitment period to a close. After 13 months of data collection, a total of 47 participants attempted the survey.

Data Preparation

The original recruitment methods I used targeted substance abuse counselors licensed to practice and working in substance abuse treatment programs in outpatient treatment programs across New York State; however, only four survey responses were returned. After I requested to change the targeted population to all substance abuse counselors licensed or trained to provide substance abuse counseling services in their state or district across the United States and to the use a recruitment flyer to recruit participants through an online counseling platform and one professional association, 26 survey responses were returned. After I implemented a monetary donation to the National Center on Addiction and Substance Abuse for every survey response returned and utilized a listserv, two online platforms where substance abuse counselors may have held membership, and one local professional association to recruit potential participants, 17 survey responses were returned. I needed to obtain 45 survey responses to complete data collection. After I revised and added several steps to the initial recruitment procedures, 47 survey responses were returned.

Once the data collection period ended, I downloaded the responses collected through Qualtrics into a Microsoft Excel Spreadsheet to prepare for transfer into SPSS. To prepare the downloaded file for data analysis, I first reviewed the information downloaded from Qualtrics for any errors and cleaned the data prior to data analysis. I began the cleaning process by removing all surveys in which the participant did not

provide consent to participate in the study as well as those in which the participant provided consent but did not complete the demographic questionnaire or CASES survey. This resulted in the removal of five survey entries. Next, I reviewed for any responses in which excessive data was missing. This resulted in eight survey entries being removed: four respondents completed the demographic questionnaire but did not complete the research survey; two respondents completed the demographic questionnaire and Part I of the CASES survey only; and two respondents completed the demographic questionnaire and Part I and Part II of the CASES survey only. This resulted in a final sample size of 34 cases. Among all remaining participant responses, only five cases had one missing value on the demographic questionnaire, and none of the included cases had a missing value on the CASES. I used the following three predictor variables to analyze the results of the CASES: years of work experience, level of education, and possessing a licensure or certification.

Demographic and Descriptive Statistics

Although substance abuse counselors of all ethnic backgrounds throughout the United States were invited to participate to this study, the initial population I sampled was substance abuse counselors licensed to practice and working in outpatient treatment programs throughout New York State. I obtained four survey responses during the initial recruitment phase of the research study. I obtained 43 survey responses after changing the population focus to include substance abuse counselors licensed or trained to practice substance abuse counseling in their state or district across the United States. In total 47

participants responded to the survey, I removed 13 cases, and I completed data analysis with the remaining 34 cases.

In Table 2, I present the frequencies and percentages for substance abuse counselor characteristics. Of the 34 participants, most were female (70.6%). Most participants fit the 30 to 49 age range and 50 to 64 age range, with each containing 14 participants (41.2%). When asked to report their race or ethnicity, most identified as Caucasian (70.6%), and only one participant identified as Other (2.9%). Participants' work experience ranged from 0 to 25+ years. Participants reporting work experience of 0 to 10 years (n = 10 or 29.4%) were the most common, followed by participants reporting work experience of 25 years and over (n = 9 or 26.5%). Regarding the highest level of education achieved, 67.6% of participants responded having a master's degree (n = 23), and 8.8% responded as having Other (n = 3). Additionally, most participants (29, 85.3%) reported having either state licensure or certification to work as a substance abuse counselor in their state or district. However, to better define whether research participants possessed a licensure or certification and to ensure better distribution of the variable, I redefined the categorical choices as follows: (a) possessed state licensure and certification, (b) possessed state licensure with no certification, and (c) not state licensed. Based on participant input, I determined that only 18 participants reported having both state licensure and certification (52.9%). Table 3 presents the frequency distribution of the possession of licensure or certification based on the redefinition of the category.

Table 2

Frequencies and Percentages for Research Participant's Characteristics

Characteristics	*N*	%
Gender		
Male	10	29.4
Female	24	70.6
Age		
18 – 29 years	1	2.9
30 – 49 years	14	41.2
50 – 64 years	14	41.2
65 and older	5	14.7
Race/Ethnicity		
Black/African American	7	20.6
Caucasian	24	70.6
Hispanic/Latin American	2	5.9
Asian American	0	0
Native American	0	0
Middle Eastern	0	0
Mixed Race	0	0
Other	1	2.9
Work Experience		
0 – 10 years	10	29.4
11 – 15 years	6	17.6
16 – 20 years	8	23.5
21 – 25 years	1	2.9
25 years and over	9	26.5
Level of Education		
High School Diploma	0	0
GED	0	0
Associates Degree	0	0
Bachelor's Degree	1	2.9
Master's Degree	23	67.6
PhD	7	20.6
Other	3	8.8
Licensure/Certification		
Yes	29	85.3
May Be	2	5.9
No	3	8.8

Table 3

Frequency Distribution of the Predictor Variable Possessing a License or Certification after Redefinition

	N	%
State Licensure & Certification	18	52.9
State Licensure with No Certification	11	32.4
Not State Licensed	5	14.7

Participants also reported on the type of licensure or certification they held in their state or district on the demographic questionnaire. The most common licensure or certification held by participants was certified rehabilitation counselor at *n* = 17 or 50%, followed by licensed professional counselors at *n* = 14 or 41.2%. Seven individuals reported being a LMHCs (20.6%), and eight individuals reported being a national certified counselor (23.5%). Three individuals reported being a licensed clinical social worker (8.8%), and four individuals reported having a doctor of philosophy (PhD, 11.8%). One participant reported being a certified peer counselor, licensed master social worker, and licensed marriage and family therapist at 2.9% respectively. Table 4 further illustrates the frequencies of participants by licensure or certification.

In regard to the region of the country respondents resided, most participants resided in the Southern region at *n* = 18 or 52.9%, followed by Northeastern region at *n* = 6 or 17.6% (See Table 4 for the complete listing of region of the country where research participants resided). Based on participant data, the Northeast, South, West, and Midwest regions were represented, meeting the population requirement of the study. Furthermore, as per data released by the United States Bureau of Labor Statistics (2019), there are approximately 304,500 substance abuse, behavioral disorder, and mental health

counselors working throughout the United States. According to 2018 employment statistics released by the U.S. Bureau of Labor Statistics, California has the highest employment level for substance abuse, behavioral disorder, and mental health counselors, followed by Pennsylvania, Massachusetts, and New York. Based on the descriptive analysis of participants' responses, my sample population is representative of the substance abuse counseling workforce throughout the Unites States. However, there are limitations to the generalization of the research results, as it is the demographic composition of substance abuse counseling workforce throughout the United States is unknown in addition to not knowing whether all subgroups under the substance abuse counseling specialty was included in this study (i.e., counselors working in inpatient settings, counselors working in methadone maintenance clinics; or counselors working in detox facilities).

Table 4

Frequency of the Type of License or Certification Held by Research Participants

Type of Licensure/Certification	*N*	%
Credentialed Alcohol and Substance Abuse Counselor (CASAC)	13	38.2
Certified Rehabilitation Counselor (CRC)	17	50.0
Licensed Mental Health Counselor (LMHC)	7	20.6
Licensed Practical Counselor (LPC)	14	41.2
National Certified Counselor (NCC)	8	23.5
Social Worker (SW)	0	0
Licensed Master's Social Worker (LMSW)	1	2.9
Licensed Clinical Social Worker (LCSW)	3	8.8
Certified Peer Counselor (CPC)	1	2.9
Registered Nurse (RN)	0	0
Licensed Practical Nurse (LPN)	0	0
Licensed Marriage and Family Therapist (LMFT)	1	2.9
Doctor of Medicine (MD)	0	0
Doctor of Philosophy (PhD)	4	11.8
Other	12	35.3

Table 5

Descriptive Statistics of Region of the Country where Research Participants Resided

Region	*N*	%
North East	6	17.6
South	18	52.9
Mid-West	3	8.8
West	2	5.9
No Answer	4	11.8
North America	1	2.9

Results

Prior to conducting a multiple regression analysis to address the research question, I completed an examination of the overall mean scores for the research variables. The maximum score participants could achieve on the CASES survey was 369 and the minimum score was 0. High scores on the CASES survey indicate high perception of counseling self-efficacy, while low scores indicate low perception of counseling self-efficacy. For the total sample, the minimum score on the CASES survey was 176, the maximum score was 361, the overall mean score was 317.21, and the standard deviation was 41.58. The descriptive analysis of participants' total score on the CASES survey revealed a large standard deviation which means there was a lot of variance in the total score on the CASES survey among research participants. Table 5 presents descriptive statistics of the dependent and independent variables for the research participants.

For years of work experience, most participants reported work experience of 0 to 10 years at $n = 10$ or 29.4%, followed very closely by participants who reported work experience of 25 years or more at $n = 9$ or 26.5% and 16 to 20 years at $n = 8$ or 23.5%. For level of education, the most frequently reported degree earned by participants was a

master's degree at *n* = 23 or 67.6 %. Finally, reporting on whether they had licensure or certification, the majority of participants reported possessing both state licensure and certification to provide substance abuse counseling at *n* = 18 or 52.9%. Figure 1 shows the distribution of years of work experience, level of education, possession of a license/certification after redefinition, and the CASES score among research participants.

Table 6

Descriptive Statistics for the Independent and Dependent Variable

		Mean				Skewness		Kurtosis	
Variable	*N*	M	SEM	*SD*	Variance	Stat.	*SE*	Stat.	*SE*
Independent Variables									
Years of Work Experience	34	2.79	.260	1.572	2.41	.312	.403	-1.382	.788
Level of Education	34	5.35	.119	.691	.478	1.152	.403	1.009	.788
Licensure/ Certification	34	1.62	.127	.739	.546	.764	.403	-.722	.788
Dependent Variable									
Total Scores of CASES	34	317.21	7.130	41.56	1728.593	-1.921	.403	3.720	.788

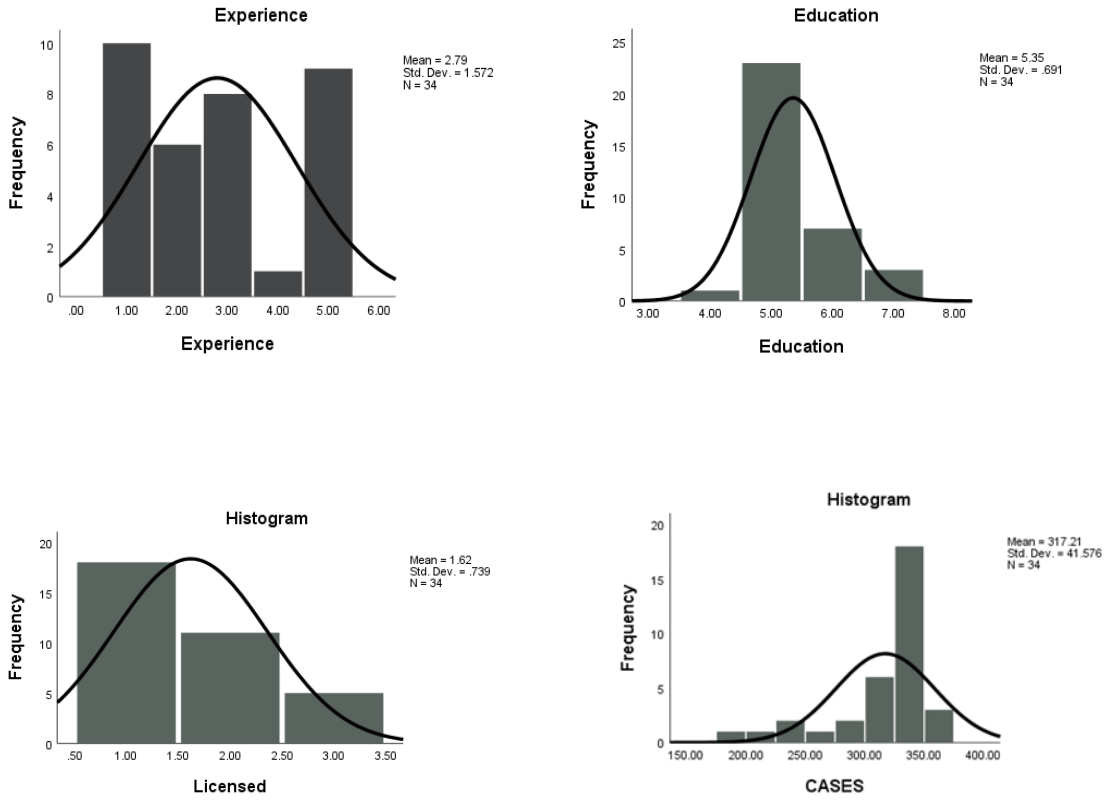

Figure 1. Histogram displaying the distribution of predictor and dependent variables.

I also checked for normality of distribution, skewness, and linearity. Based on the descriptive statistics found in Table 6, I determined that independent variables level of education and possessing a licensure or certification was slightly skewed, and the dependent variable total score of the CASES was kurtotic. Overall the probability plots for the independent variables, level of education (See Figure 3), and possessing a licensure or certification (See Figure 4) demonstrated that some deviation from normality was evidence in the data collected. The probability plot for the dependent variable, total score of the CASES (see Figure 5) was most significant with a large standard deviation, and skewness and kurtosis value (see Table 6). As such, I decided to transform the values

for level of education, possessing a licensure or certificate, and the total score of the CASES score in order to meet the assumption of normality prior to conducting the multiple regression analysis. I used the formula SQR(X) to transform the values of the independent variables, level of education and possession of a licensure or certification and the dependent variable, total score of the CASES. I did not transform the independent variable years of work because the variable appeared to be slightly skewed and achieved a normal distribution curve as demonstrated in histogram and the P-plot found in Figure 2. The histogram found in Figure 6 shows the distribution of the independent variable, level of education after one transformation using the function SQR(X). I attempted to achieve a normal distribution curve by transforming the independent variable, possession of licensure or certification using the function SQR(X). After six attempts of transforming the variable, the histogram found in Figure 7 is what I achieved, demonstrating the best fit distribution curve of the variable. The histogram found in Figure 8 shows the distribution of the dependent variable, total score of the CASES after one transformation using the function SQR(X).

Finally, I used a scatterplot to assess the relationship between the independent and dependent variables and found a non-linear relationship between years of work experience and total score on the CASES (see Figure 9). Similarly, I found a non-linear relationship between level of education and total score on the CASES (see Figure 10), and no linearity between possessing a licensure or certification and total score on the CASES (see Figure 11). I also used the Pearson Correlation table produced by running a linear regression to determine if there was any significant relationship between the

independent variables and the dependent variable (see Table 7). I also checked to see if there was any multicollinearity between the independent variables. I found no relationship between the independent variables and the dependent variable, additionally the independent variables were not collinear (see Table 8).

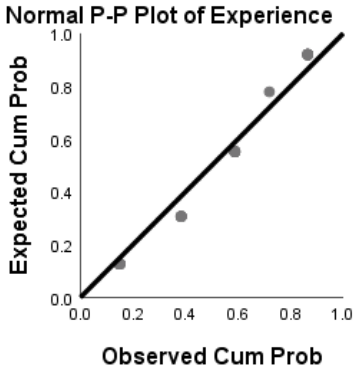

Figure 2. Normal cumulative probability plot for years of work experience.

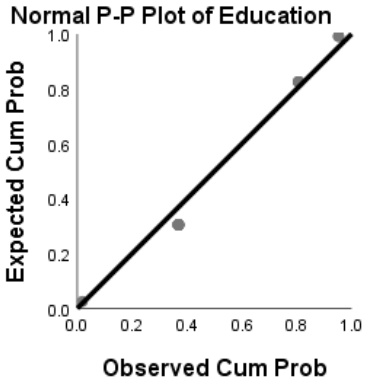

Figure 3. Normal cumulative probability plot for level of education.

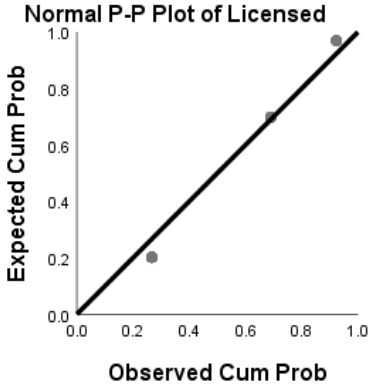

Figure 4. Normal cumulative probability plot for possessing a license or certification.

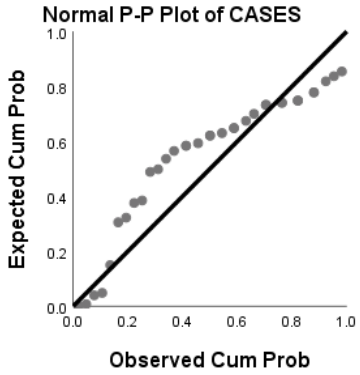

Figure 5. Normal cumulative probability plot for total score of CASES.

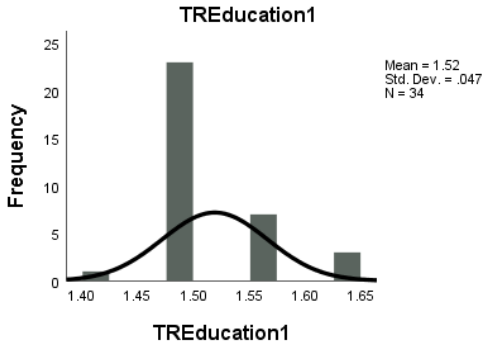

Figure 6. Histogram of predictor variable level of education after one transformation.

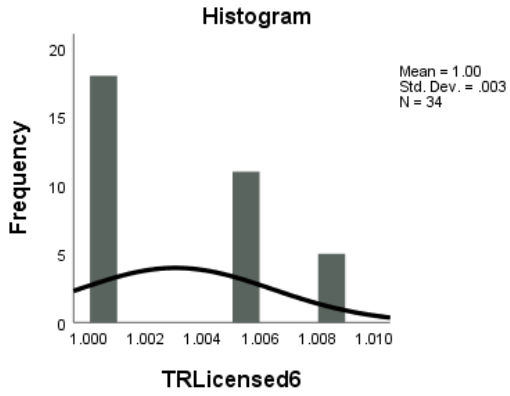

Figure 7. Histogram of predictor variable possessing a license or certification after six transformations.

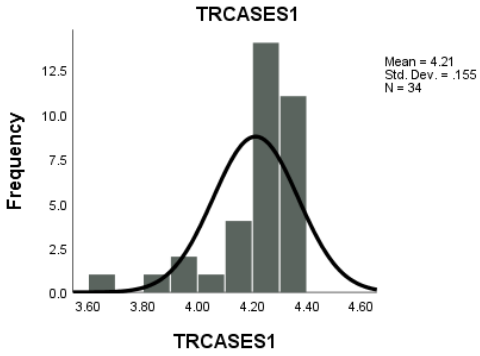

Figure 8. Histogram of dependent variable total score of CASES after one transformation.

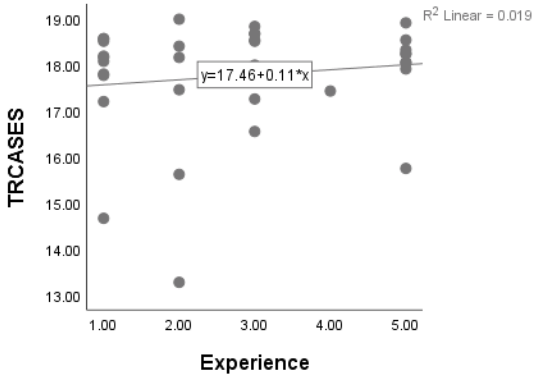

Figure 9. Scatterplot showing no relationship between years of work experience and total score of CASES.

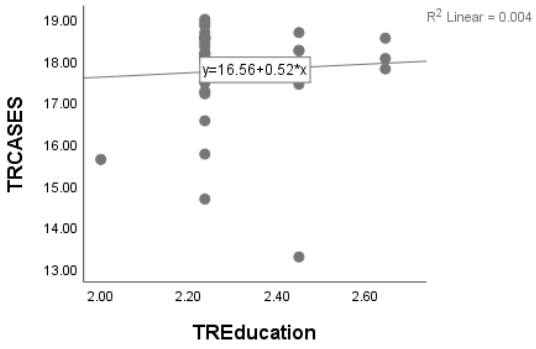

Figure 10. Scatterplot showing no relationship between level of education and total score of CASES.

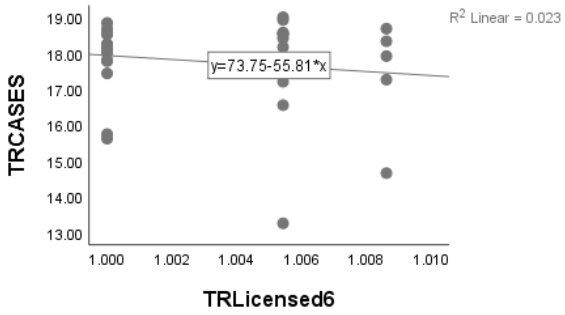

Figure 11. Scatterplot showing no relationship between possessing a license or certification and total score of CASES.

Multiple linear regression. I conducted a multiple regression to answer the research question, is there a relationship between the combination of counselor years of work experience, level of education, and possessing a license or certification and counselor self-efficacy when working with dually diagnosed clients? The dependent variable was counselor self-efficacy as measured by the total score of the CASES and the independent variables were years of work experience, level of education, and possessing a licensure or certification. I reviewed the model summary of the regression analysis (See Table 9) and found no statistically significant relationship between years of work experience, level of education, possessing a licensure or certification, and counselor self-efficacy, $F(3, 30) = 0.451$, $p < .718$, $r^2 = .043$, adj. $r^2 = -.053$. I chose on alpha level of .05 to determine statistical significance for this study. The R^2 value of .043 indicated that .4% of variation in counselor self-efficacy could be explained by the model and years of work experience, level of education, and possessing a licensure or certification. This means that close to 96% of variation was still unknown and other variables accounted for the variance. In Table 9, I present the summary of the multiple regression analysis. I did

not reject the null hypothesis; there was no statistically significant relationship between counselor years of work experience, level of education, possessing a licensure or certification, and substance abuse counselor self-efficacy when working with dually diagnosed clients as measured by scores on the CASES. No further analyses of the relationships between the dependent and independent variables were needed due to the lack of statistical significance reported on the regression analysis.

Table 7

Pearson Correlations Table within the Regression Analysis

		TRCASES	Experience	TREducation	TRLicensed6
Pearson Correlation	TRACES	1.000	.136	.060	-.152
	Experience	.136	1.000	.213	.033
	TREducation	.060	.213	-.276	-.276
	TRLicensed6	-.152	.221	.368	1.000
Sig (1-tailed)	TRCASES	.	.221	.368	.196
	Experience	.221	.	.114	.427
	TREducation	.368	.114	.	.057
	TRLicensed6	.196	.427	.057	.
N		34	34	34	34

Table 8

Summary of Model Coefficients for Predicting Counselor Self-Efficacy

		Unstandard. Coefficients		Stand. Coef			80% CI B		Correlations		Collinearity Statistics	
Model		B	SE B	β	t	p	LL	UL	r	Par	Tole.	VIF
1	(Con)	77.005	70.131		1.098	.281	-26.60	180.615				
	Expe.	.116	.147	.145	.789	.436	-.101	.333	.136	.143	.946	1.057
	TREd	-.129	1.654	-.015	-.078	.938	-2.572	2.314	.060	-.014	.874	1.144
	TRLic	-59.085	68.763	-.160	-.859	.397	-160.673	42.504	-.152	-.155	.915	1.093

Table 9

Model Summary of Multiple Regression Analysis

								Change Statistics			
SS	df	MS	R	R^2	Adj. R^2	SE	R^2 Chg.	F Chg.	Df1	Df2	Sig F Chg.
2.253	3	.751	.208[a]	.043	-.053	1.290	.043	.451	3	30	.718[b]
49.942	30	1.665									
52.195	33										

a. Dependent Variable: Total Score of Cases
b. Predictors: (Constant), Years of Work Experience, Licensure/Certification, Level of Education

Summary

A total of 47 substance abuse counselors responded to the call to participate in this research survey. After removing 13 cases due to significantly high percentage of missing data, the resulting research sample was $N = 34$. Descriptive statistical analysis indicates that participants' racial and ethnic composition was reflective of Caucasians, African Americans, and Hispanic/Latin Americans. Substance abuse counselors were also representative of individuals living across the United States with majority of individuals reporting residing in the southern states. The majority of research participants reported having a master's degree and the majority were certified rehabilitation counselors.

The research question I used to explore the relationship between counselor years of work experience, level of education, possessing a license/certification, and counselor self-efficacy was: is there a relationship between the combination of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients?

I used a multiple linear regression analysis to explore the relationship between counselor years of work experience, level of education, possessing a license/certification, and substance abuse counselor self-efficacy. To explore the relationship between each independent variable and the dependent variable, I reviewed the standardized and unstandardized coefficients values produced by the regression analysis. The results indicate when counselor self-efficacy was predicted, years of work experience was not a significant predictor, β = .145, as was level of education, β = -.015, and possessing a license/certification, β = -.160. The regression analysis indicated there was no statistically significant relationship between years of work experience, level of education, and possessing a licensure of certification, $F(3, 30) = 0.451$, $p < .718$, $R^2 = .043$, $R^2_{Adjusted} = -.053$. As a result, I did not reject the null hypothesis, there is no statistically significant relationship between a model of counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients as measured by CASES. Overall, I did not find any statistically significant relationship or correlations for any of the variables.

Because statistical analysis of the dependent and independent variables revealed statistically non-significant relationships between the variables, caution is needed when explaining the relationship between years of work experience, level of education, possessing a licensure and certification, and counselor self-efficacy. In Chapter 5, I discuss in greater detail the lack of relationship between counselor years of work experience, level of education, possessing a licensure and certification, and substance abuse counselor self-efficacy. I will discuss further the statistical findings reported in

Chapter 4, the limitations and implications of the study for counseling professionals, the social change impact of the study, and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative, cross-sectional study was to determine whether years of work experience, level of education, and possessing a license/certification predict substance abuse counselor self-efficacy when working with dually diagnosed clients in substance abuse settings. Counselor self-efficacy is a counselor's belief in his or her ability to carry out or perform specific role related tasks (Larson & Daniels, 1998). In the field of substance abuse counseling, understanding counselor self-efficacy and the factors that may influence self-efficacy is important because of the challenges and resistance counselors can face when working with individuals who have both substance use and mental health disorders concurrently (Padwa et al., 2013; Perkins et al., 2015). Therefore, I used the total score on the CASES survey to examine counselor self-efficacy. I also used a demographic questionnaire to capture participant characteristics such as age range, education level, licensure/certification type, and whether the individual was licensed or certified to practice substance abuse counseling in their state or district.

I conducted a multiple linear regression to explore the relationship between years of work experience, level of education, possessing a license/certification, and substance abuse counselor self-efficacy. The results showed no statistically significant relationship between years of work experience, level of education, possessing a license/certification, and substance abuse counseling. In this chapter, I will discuss the interpretation of the research findings, followed by limitations of the research study, and conclude with recommendations for future research and the social change implications of the study.

Interpretation of Findings

I used the following question to guide data collection and data analysis: Is there a relationship between counselor years of work experience, level of education, and possessing a license/certification and counselor self-efficacy when working with dually diagnosed clients? I used multiple regression analysis as the statistical analysis.

Years of Work Experience

For the purpose of this study, work experience was defined as any experience gained while working as a substance abuse counseling, substance abuse professional, or in a substance abuse setting. Literature suggests a strong relationship exists between experience and counselor self-efficacy. For example, Simons et al. (2017) found evidence suggesting that due to years of work experience and possession of certification, their participants were more adaptable to integrating different modalities into their counseling sessions when working with clients. Leach et al. (1997) explored the self-efficacy tendencies of counselors in training toward clients with difficult behaviors and also concluded that counselors who reported greater work experience were more likely to report higher self-efficacy, be more self-aware, and have a better understanding of the counseling relationship as compared to counselors with limited experience in the field. Additionally, Gorecenzy et al. (2015) explored counselor self-efficacy and anxiety among psychology students at different training levels and found statistically significant correlations between several of the subscales of the CASES (as well as the CASES total score) with self-reported years of counseling experience.

Despite previous research findings, findings from this study indicated that years of work experience did not predict counselor self-efficacy, $\beta = .145$, $t(33) = .789$, *ns*. The number of participants reporting 0 to 10 years of work experience ($n = 10$, 29.4%) was not significantly greater than participants reporting 25 years and over ($n = 9$, 26.5%), and 16 to 20 years of work experience ($n = 8$, 23.5%). As such, it can be implied that counselors with the least amount of experience working in the substance abuse field reported confidence levels similar to counselors with several years of work experience when answering questions such as "How confident are you in your ability to use helping skills effectively when counseling most clients?"

The differing findings could be the result of the individuals' perception how successful they perceive their experience in with working dually diagnosed individuals. It is possible that the category of individuals reporting 0-10 years of work experience could have been comprised of professionals entering the field right after completing graduate level training, obtaining their licensure/certification, or career changers who possessed the same determination as those with several years of experience to face the challenges of working with dually diagnosed clients, acquire new skills, and make a positive impact. It is also possible that the individuals' experience in and outside of the counseling setting could have influenced their perception of the impact they may have on a client's life and their willingness to continue facing the challenges of working with dually diagnosed clients. Moreover, due to having several years of experience working in the field, many individuals may perceive themselves as being at their peak of their career and having enough knowledge and skills necessary to be successful in counseling dually diagnosed

clients, so there may not have been a significant difference in response between those entering the working force.

Level of Education

I defined the participants' level of education as having a high school diploma, GED, an associate's degree, a bachelor's degree, a master's degree, or a PhD. The results of this study showed that level of education did not predict counselor self-efficacy, β = -.015, $t(33)$ = -.078, *ns*. These findings are inconsistent with previous research where a positive relationship was found between level of education, counselor effectiveness, and counselor self-efficacy (Bride et al., 2012; Kozina et al., 2010; Morris & Minton, 2010).

Bride et al. (2012) found that social workers' perception of effectiveness, acceptability, and the use of evidence-based practices for the treatment of substance use disorders were associated with having an advanced degree, whereas nonsocial workers' perception of effectiveness, acceptability, and the use of evidence-based practices for the treatment of substance abuse disorders were associated with positive feelings toward evidence-based practices. However, the results of this study were different because in Bride et al.'s study the level of education was measured as a dichotomous variable in which participants were identified as either having no master's degree or had a higher education level as opposed to the multilevel categories used to define education level in the current study. Moreover, 67% of the substance treatment programs contacted by Bride et al. agreed to take part in the study, which resulted in 1,140 questionnaires—a contrast to low response rates I received during data collection. Findings may also be different because the sample population in Bride et al.'s study was compromised of

mostly social workers, whereas most of the individuals participating in the present study were certificated rehabilitation counselors, representing markedly different courses of study and training requirements.

In another study, Morris and Minton (2012) found that students who had engaged in crisis preparation coursework during their master's level course reported higher self-efficacy when engaging in crisis counseling situations than those who did not participate in didactic or formal crisis training. Morris and Minton also found that participants extended their training in crisis counseling beyond their master's level training, noting the importance of continued education, skill development, and competencies in crisis counseling. Additionally, after completing two research assessment periods of didactic training and supervision, Kozina et al. (2010) found significant increases in self-efficacy beliefs of the counselor trainees. The researchers noted that the reported increase in trainees' self-efficacy were consistent with the purpose of the practicum experience which was to gain theoretical knowledge and practice microskills. Kozina et al. further noted that increased counselor self-efficacy could be the outcome of efficacious training supporting the notion that training enhances a student's counseling self-efficacy. Nevertheless, Kozina et al. noted the need for more rigorous exploration to delineate the relationship between training and supervision on counselor self-efficacy.

The findings from the current study differ from the findings reported by Kozina et al. (2010) and Morris et al. (2012) because I focused on individuals possessing a high school degree and higher and who were either licensed or certified to provide substance abuse counseling. Additionally, years of work experience and level of education are often

used as professional characteristics (Bride et al., 2012), and participants were required to have had experience working with dually diagnosed clients, so they may have already perceived themselves as having high self-efficacy and being successful in rending counseling services to dually diagnosed clients. In contrast, Kozina et al. and Morris et al. examined self-efficacy changes in master's level students engaged in practicum learning experiences, supporting the tenets of self-efficacy theory that state that an individual's self-efficacy increases as they complete tasks they consider to be successful.

Finally, the minimum educational requirement to become a substance abuse counseling professional is the possession of a high school diploma, as can be found in the licensure/certification requirements of states like New York, Georgia, and North Carolina, whereas the expectation of the field is that the individual possess at least a master's degree (Lee, 2014; Miller et al., 2010). This is evident in the current study where the demographic statistics indicated zero participants reported having a GED, high school diploma, or associates degree; one participant reported having a bachelor's degree; 23 participants reported having a master's degree; seven reported having a PhD; and three reported having other levels of education. The small number of individuals participating in the present study could count for why there were a significantly higher number of individuals reporting having a master's degree than any other educational level. Additionally, inability to discern a difference between the levels of education may have impacted the statistical significance of level of education on counselor self-efficacy. A larger population sample could improve the probability of there being greater

representation among the levels of education and potentially impact the statistically relationship between level of education and counselor self-efficacy.

Licensure/Certification

There is an expectation among counseling professionals, the public, and service providers that counselors demonstrate compassion, integrity, empathy, cultural awareness, positive regard; provide efficacious service; and uphold the standards of the profession (Fulton, 2016; Wronka, 2008). Substance abuse counselors are included in this expectation, and licensure and certification are often used to demonstrate the professional has developed the competencies, knowledge, skill sets, and attitude necessary to provide efficacious service (NAADAC, 2011). However, the results of this study showed that possessing a licensure or certification did not predict counselor self-efficacy, β = -.160, $t(33)$ = -.859, *ns*. As mentioned, these results could be due to the small number of people who participated in the study, which could have affected the variance seen between those possessing licensure/certification and those having no licensure or certification. In the present study, 18 individuals reported having a licensure and certification (52.9%), 11 participant reported having state licensure and no certification (32.4%), and five individuals reported having no state license (14.7%), making it difficult to confidently determine the predictability of possessing a license/certification specific to counselor self-efficacy. A larger population sample may have captured a more diversified and representative sample of those either possessing or not possessing state licensure or certification.

Despite finding no statistically significant relationship between possessing a license/certification and counselor self-efficacy, most participants (5.9%) possessed a license/certification, which matches the expectation that those practicing in the field possess the credentials necessary to ethically meet the needs of those requesting services (Fulton, 2016; NAADAC, 2011; Wronka, 2008). The large number of participants who reported possessing a license/certification is reflective of prior studies that highlight possessing a license/certification as important to the field of substance abuse counseling. For example, Simons et al. (2017) explored the value of certification in the professional identity development of substance abuse counselors and found certification played an important part in defining professional identity and the length of time an individual would progress in their chosen field. Simons et al. also found that participants with certification reported more years of work experience, more experience working in group counseling, and more experience working with individuals with comorbid disorders.

Social Cognitive Theory

I used social cognitive theory and the tenets of self-efficacy theory to guide this study. Overall, social cognitive theory is used to examine behavioral change from the bi-directional influence of environmental factors, personal factors, and behavioral factors (Bandura, 1977). This study showed no statistically significant relationship between the predictor variables: years of work experience, level of education, possessing a license/certification, and the dependent variable: counselor self-efficacy. However, the study supported the tenets of social cognitive theory and self-efficacy. As per Bandura (2001), the individual does not just plan a desired course of action but also exercises the

ability to give shape to those plans, motivate themself into a course of action, and regulate the execution of said plans.

Most participants in this study reported having a license or certification to practice substance abuse counseling, earning a master's degree as their highest level of education, and having at least 10 years of work experience; therefore, most participants were able to successfully execute and achieve the goals and plans they designed. The theory also reinforces the notion that the individual is self-evaluative; can examine actions, motivation, values, and the meaning of life; and can choose to act one way over the other to ensure goal attainment (Bandura, 1986). In other words, the individual who believes in his or her ability to make changes is more likely to make necessary changes in life than the individual who does not believe in his or her ability (Bandura, 1986).

Finally, while this study did not examine the motivation level and decision-making processes of each research participant- 67.6% of the research participants possessed a master's degree; 85.3 % possessed licensure or certification; and 26.5% reported 25 years and over of work experience. This highlights the concept of self-directedness and personal agency within social cognitive theory, where the individual develops a goal, makes decisions and puts forth the effort to accomplish the goal (Bandura, 2001).

Limitations of Study

The findings of this study must be viewed within limitations that impact its generalization to the population. My assumption was that individuals responding to the call for participants would respond to the study in a timely manner and provide responses

that accurately reflected their perception of self and the work they do. The response to the call for participants was very slow and was completed over a 13 month period after several modifications to my data collection. I explained the time needed to complete the research survey and provided a sample of the questions asked on the CASES. Some participants may not have factored the time needed to complete the research survey in their schedule. It is also possible that participants could have provided the most socially desirable responses to the survey questions.

The sample size of this study is another significant limitation that must be considered within the constraints of the results. I achieved a return response of 47 completed surveys which does not adequately represent the substance abuse counseling workforce comprising of approximately 304,500 individuals currently employed as a substance abuse, behavioral disorder, and mental health counselors across the United States (United States Bureau of Labor Statistics, 2019). There was an overrepresentation of individuals possessing high levels of education, license, and certification with minimal variance across the variables based on the sample generated. As a result, the low number of participants not only weakened the strength of my data analysis, there was also no variance or difference among variables. Additionally, after I reviewed and cleaned the data collected, 13 cases were removed and the final sample I used for data analysis was $n = 34$. As a result, I did not achieve my projected sample size which impacted the statistical significance of the study and generalizability. A larger sample may be needed to demonstrate a statistical relationship among the variables and provide generalizability of the results found.

Finally, the substance abuse counseling field in the United States does not have a uniformed curriculum and is governed by varying educational and professional standards. Additionally, each state has its own requirements that the individual must meet in order to become a substance counseling professional (Duryea et al., 2013; Miller et al., 2010). For instance, in New York State to practice substance abuse counseling, one must meet and fulfill the requirements to become a CASAC. Similarly, in New Jersey an individual has the option to become a licensed alcohol and drug counselor or a certified alcohol and drug counselor. Whereas in Pennsylvania one can earn the designation of: (a) associate addiction counselors at the high school diploma or GED level; (b) certified associate addiction counselor for the non-degreed professional; (c) certified alcohol and drug counselor at a bachelor's degree level; (d) certified advance alcohol and drug counselor at a master's degree level; and (e) certified criminal justice addiction professional at a bachelor's degree level (Certification, Pennsylvania Board Certification, n.d.). As such, the delimitation requiring individuals to be licensed or certified in their state or district may have significantly limited the number individuals being able to participate in the present study.

Recommendations

Based on the results of this study, I present in the sections to follow, practical suggestions and actions that can be made by future researchers and counselor educators as exploration into counselor self-efficacy continues. The first recommendation stems from the sample population. A larger sample of substance abuse counselors working

across the United States may include individuals at all work experiences, license or certification status, and education levels, lending to a more generalizable research study.

The second recommendation is to expand and explore other potential factors that may impact substance abuse counselor self-efficacy. Data from this study suggested that substance abuse counselors possess varying work experiences, degrees, and licensure/certification, therefore it may be beneficial for future studies to analyze and explore components of the substance abuse counselor's experience that may impact counselor self-efficacy and that can be enhanced or improved.

A third recommendation is to restructure the demographic questionnaire to reflect more realistically the training experiences or requirements of substance abuse counselors. The results of this study indicated that possessing a license/certification had no statistically significant relationship on counselor self-efficacy. For this study, the delimitation was monolingual English or bilingual English-speaking participants who are credentialed substance abuse counselors. As such, I expected all individuals participating in the research study to be licensed or credentialed substance abuse counselors. Unfortunately, this created a sample response in which the majority of the sample either possessed state licensure or both state license and certification (n = 29) and only five individuals reporting having no license, creating a distribution curve that was not normal. A more suitable approach may have been a categorical response question that asked: (a) Are you licensed only, (b) Are you certified only, (c) Are you licensed and certified, (d) Are you pending state licensure, (e) Are you pending certification, and (f) Are you both unlicensed and uncertified. This approach may have allowed for a more robust

exploration of the association between possessing a license/certification and counselor self-efficacy.

Additionally, the question “what region of the country do you presently work” was intended to capture the research participants’ location; however, it does not provide specific enough information about state locale. I recommend that researchers reconstruct this question in future studies so that participants can report more accurately their specific state of residence, give the variation in state license and certification requirements. This will also lend to a more generalizable research study. I also recommend that researchers in future studies inquire about whether the specific state requires a participant to be licensed or certified as this could improve the understanding of factors contributing to the substance abuse counselor professional development and perceived self-efficacy.

Finally, I examined substance abuse counselor self-efficacy as measured by the CASES which was divided into three subscales: (a) helping skills self-efficacy; (b) session management self-efficacy; and (c) counseling challenges self-efficacy. To represent the self-efficacy score of each participant, I used the total score of the CASES which was the sum of scores on the three subscales. Due to the small sample of individuals participating in the research study, there were huge variances in the values causing the dependent variable to be skewed and kurtotic. A larger sample size representing the diversified field of substance abuse counseling in future research studies would improve the ability to capture variance and potential statistical significance of the research variables. Additionally, future researchers could choose to explore the effects the identified independent variables may have on each subscale of the CASES survey.

For instance, future research studies may explore whether years of work experience, level of education, and possessing a license/certification impacts helping skills self-efficacy. This may lead to a more robust and impactful discussion of factors that impact counselor self-efficacy.

Implications

The purpose of this study was to determine whether years of work experience, level of education, and possessing a license/certification predicted counselor self-efficacy. Findings indicated no significance regarding the predictors of years of work experience, level of education, and possessing a license/certification, and the dependent variable of counselor self-efficacy. This is useful, because currently the substance abuse counseling field is comprised of professionals who possess varying degrees, licensure/certification, and varying experiences that is often used to inform their decision making, practice, professional development, and conceptualization of the client.

As noted by Cacioppo and Patrick (2008), the social situations in which an individual may find himself or herself can positively or negatively impact the concept of self and choice behavior. Moreover, self-efficacy beliefs play a critical role in the manner in which an individual approaches and engages in his or her job (Consiglio et al., 2016). Therefore, one can purport that the belief in self, the ability to integrate education, experience, skill development, the decision to become licensed or certified, and other environmental factors may influence substance abuse counselor self-efficacy, the ability to address and rise above the obstacles of working with dually diagnosed clients, and the development of a substance counseling professional identity.

Counselor self-efficacy is an important factor as counselors establish themselves, influencing their assumption of the various roles and duties of becoming a substance abuse counseling professional (Chandler et al., 2001; Tang et al., 2004). Therefore, counselor educators and institutions have the opportunity to use the results of this study to further shape, enhance, and develop the substance abuse counseling workforce, whether it is through the use of direct supervision or mentoring, through the use of exposure and experiential learning experiences in the field, or through increased coursework in substance abuse counseling to discuss those factors that may influence or potentially impact substance abuse counselor self-efficacy.

Conclusion

This study sought to explore the relationship between years of work experience, level of education, possessing a license or certification and counselor self-efficacy. I used The CASES survey to measure counselor self-efficacy and a demographic questionnaire to collect demographic information. To better understand the relationship between my predictor variables: years of work experience, level of education, and possessing a license/certification, and the independent variable, self-efficacy, I conducted a multiple regression analysis of the data collected. The results of the analysis found no statistically significant relationships between years of work experience, level of education, possessing a license/ certification, and counselor self-efficacy. Many factors could have contributed to the nonsignificant findings, such as participant self-reporting bias, the lack of variability in the education and license/certification status of the substance abuse

counseling professional, and recruitment difficulties in achieving the needed research sample.

Based on the results of this study, continued exploration of the relationship between work experience, level of education, possessing a license/certification and counselor self-efficacy is recommended. It is also recommended that future research study validate the findings of this study. Due to the lack of variation in level of education and licensure/certification status of participants, the understanding of substance abuse counselor self-efficacy was severely impacted. The data does, however, support and validate the tenets of self-efficacy, because 67.6% of the research participants possessed a master's degree; 85.3 % possessed licensure or certification; and 26.5% reported having 25 years and over of work experience demonstrating the high level of decision latitude, motivation, belief in self and willingness to strive toward attainment of goals within the individual. I am optimistic that this study can be expanded to explore other possible factors influencing substance abuse counselor-self-efficacy.

Additionally, a larger more diversified sample of substance abuse counselors would further explore self-efficacy and yield more generalizable results. Finally, implications from this study presents a potential for positive social change as it creates a pathway to discuss ways in which counselor self-efficacy can be developed or strengthened. The outcome is to provide counselors who are experienced and efficaciously trained which is important not only to the consumer but also to employers, communities, the global counselor profession, health and mental providers, and practitioners working in the field (Smith, 2013).

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Appendix A: Full Search Terms

The following key search words and phrases were used to obtained the most relevant literature for the current study: counselor awareness, counselor effectiveness, counselor preparedness, counselor self-efficacy, dual diagnosis, mental health counseling, perceived self-efficacy and counseling, perceived self-efficacy, self-efficacy, self-efficacy and substance abuse counseling, substance counseling, social cognitive theory, substance abuse counselor education, substance abuse counselor and education, substance abuse counselor work experience, substance abuse counselor training, counselor self-efficacy and dual diagnosed clients, substance abuse counselor and dual diagnosis, substance abuse and mental health, dual diagnosis and substance abuse, dual diagnosis and mental health, dual diagnosis and counseling, dual diagnosed clients and counseling, counselor self-efficacy and burn out, stress management, historical perspective of substance abuse counseling, historical perspective of mental health counseling, counselor attitude, substance abuse counselor and dual diagnosed clients, substance abuse counselor and experience, substance abuse counselor and counselor education, substance abuse counselor and education, substance abuse counselor and certification.

Appendix B: CASES Permission Letter

6/10/201

Thanks for the kind words. See the attachments.

Best wishes,

Bob Lent, Ph.D.

From: On Fri, Jun 9, 2017 at 6:39 PM, Nievel Stanisclaus

Dear Dr. Lent,

My name is Nievel Stanisclaus, I am a doctoral student at Walden University completing my doctoral degree in Counselor Education and Supervision. I am designing a quantitative non-experimental cross-sectional research design to explore substance abuse counselor self-efficacy when working with dual diagnosed clients. I have reviewed various counselor self-efficacy scales and came across the Counselor Activity Self-Efficacy Scale. I am writing to ask permission to use the Counselor Activity Self-Efficacy Scale to support my study.

The work you have done has left an indelible impression on my mind, and I commend you for the contributions you have made in research, the profession at large, and in the classroom. I would be happy to answer any questions or concerns you may have regarding my study. I can be reached via email……. at or by phone at…..Thank you for your time and consideration.

With warm regards,

Nievel Stanisclaus

Appendix C: Sample of Counselor Activity Self-Efficacy Scale

WEB FORM K
COUNSELOR ACTIVITY SELF-EFFICACY SCALES

General Instructions: The following questionnaire consists of three parts. Each part asks about your beliefs about your ability to perform various counselor behaviors or to deal with particular issues in counseling. Please provide your honest, candid responses that reflect your beliefs about your current capabilities, rather than how you would like to be seen or how you might look in the future. There are no right or wrong answers to the following questions. Using a dark pen or pencil, please circle the number that best reflects your response to each question.

Part I.

Instructions: Please indicate how confident you are in your ability to use each of the following helping skills effectively, over the next week, in counseling most clients.

No Confidence			Some Confidence				Complete Confidence			
0	1	2	3	4	5	6	7	8	9	

How confident are you that you could use these general skills effectively with most clients over the next week?

1.	**Attending** (orient yourself physically toward the client)	0	1	2	3	4	5	6	7	8	9
2.	**Listening** (capture and understand the messages that clients communicate).	0	1	2	3	4	5	6	7	8	9
3.	**Restatements** (repeat or rephrase what the client has said, in a way that is succinct, concrete, and clear).	0	1	2	3	4	5	6	7	8	9
4.	**Open questions** (ask questions that help clients to clarify or explore their thoughts or feelings).	0	1	2	3	4	5	6	7	8	9
5.	**Reflection of feelings** (repeat or rephrase the client's statements with an emphasis on his or her feelings).	0	1	2	3	4	5	6	7	8	9
6.	**Self-disclosure for exploration** (reveal personal information about your history, credentials, or feelings).	0	1	2	3	4	5	6	7	8	9
7.	**Intentional silence** (use silence to allow clients to get in touch with their thoughts or feelings).	0	1	2	3	4	5	6	7	8	9
8.	**Challenges** (point out discrepancies, contradictions, defenses, or irrational beliefs of which the client is unaware or that he or she is unwilling or unable to change).	0	1	2	3	4	5	6	7	8	9
9.	**Interpretations** (make statements that go beyond what the client has overtly stated and that give the client a new way of seeing his or her behavior, thoughts, or feelings).	0	1	2	3	4	5	6	7	8	9

Appendix D: Demographic Questionnaire

Please answer all questions as they describe:

1. What is your gender? Please choose one:
   a. Female
   b. Male
   c. Transgender
   d. Prefer Not To Answer
2. What is your age?
   a. 18-29 years old
   b. 30-49 years old
   c. 50-64 years old
   d. 65 years and older
3. What is your primary ethnic identity:
   a. Black/African American
   b. Asian American
   c. Caucasian
   d. Hispanic/Latin American
   e. Middle Eastern
   f. Native American
   g. Mixed Race
   h. Other
4. What is your highest level of education?
   a. High School Diploma
   b. GED
   c. Associate's Degree
   d. Bachelor's Degree
   e. Master's Degree
   f. PhD
   g. Other
5. Are you licensed or trained to provide substance abuse counseling services in your state or district?
   a. Yes
   b. Maybe
   c. No
6. What professional certification/licensure do you currently possess?
   a. Credentialed Alcohol and Substance Abuse Counselor (CASAC)
   b. Certified Rehabilitation Counselor (CRC)
   c. Licensed Mental Health Counselor (LMHC)
   d. Licensed Practical Counselor (LPC)
   e. National Certified Counselor (NCC)
   f. License Master's Social Worker (LMSW)
   g. License Clinical Social Worker (LCSW)
   h. Social Worker (SW)

i. Certified Peer Counselor
j. Registered Nurse (RN)
k. Licensed Practical Nurse (LPN)
l. Licensed Marriage and Family Therapist (LMFT)
m. Doctor of Medicine (MD)
n. Doctor of Philosophy (PhD)
o. Other

7. How many years of have you been working in the field?
    a. 0-10 years
    b. 11-15 years
    c. 16-20 years
    d. 21-25 years
    e. 25 years and over
8. What region of the country do you currently work?
9. Are you licensed or trained to provide substance abuse counseling services in your state or district?
    a. Yes
    b. Maybe
    c. No