

**THE EFFECT OF CACREP ACCREDITATION
ON CREDENTIALING EXAM SCORES**

Doctoral Dissertation Research

Submitted to the
Faculty of Argosy University, Phoenix Campus
College of Psychology and Behavioral Sciences

In Partial Fulfillment of
the Requirements for the Degree of

Doctor of Education

by

Richard Justin Silvey

August, 2013

**THE EFFECT OF CACREP ACCREDITATION
ON CREDENTIALING EXAM SCORES**

Copyright ©2013

Richard Justin Silvey

All rights reserved

**THE EFFECT OF CACREP ACCREDITATION
ON CREDENTIALING EXAM SCORES**

Doctoral Dissertation Research

Submitted to the
Faculty of Argosy University, Phoenix Campus
in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Education

By

Richard Justin Silvey

Argosy University

August, 2013

Dissertation Committee Approval:

David A. Arena,
J.D., Psy.D.

Digitally signed by David A. Arena, J.D., Psy.D.
DN: cn=David A. Arena, J.D., Psy.D., o=Argosy
University Online, ou,
email=darena@argosy.edu, c=US
Date: 2013.09.22 20:37:06 -04'00'

9/27/13

David Arena, Psy.D., J.D., Chair

Date

Gail Reece PhD

Digitally signed by Gail Reece PhD
DN: cn=Gail Reece PhD, o, ou,
email=dr.gailreece@gmail.com, c=US
Date: 2013.09.25 10:50:07 -07'00'

Megan Swisher,
PhD

Digitally signed by Megan Swisher, PhD
DN: cn=Megan Swisher, PhD, o=Argosy
University, ou=COPBS,
email=mswisher@argosy.edu, c=US
Date: 2013.09.27 11:24:54 -05'00'

Gail Reece, Ph.D., Member

Megan Swisher, Ph.D., Graduate
Psychology Program Chair

**THE EFFECT OF CACREP ACCREDITATION
ON CREDENTIALING EXAM SCORES**

Abstract of Doctoral Dissertation Research

Submitted to the
Faculty of Argosy University, Phoenix Campus
College of Psychology and Behavioral Sciences

In Partial Fulfillment of
the Requirements for the Degree of

Doctor of Education

by

Richard Justin Silvey

August, 2013

David Arena, Psy.D.

Gail Reece, Ph.D.

Department: College of Psychology and Behavioral Sciences

ABSTRACT

The age of accountability, evolving from outcome- and standards-based practices, is prevalent in the education, healthcare, and counseling fields. In regards to standards, counselor education is framed by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) for best practices in terms of content knowledge; however the assessment of competence of that knowledge is not easily defined. Furthermore, school counselors are held to the standards of the American School Counselor Association (ASCA) to practice within a certain scope of competence; however, the determination of that level is also not easily or clearly defined. This research sought to investigate credentialing exams and their relationship to competence for school counselors by examining *Praxis II: School Guidance and Counseling* exam results based on accreditation of participants' graduate-level school counseling program. This study found no statistically significant effect between accreditation of the participants' graduate-level school counseling program and results on the *Praxis II* exam. Likewise, no statistically significant relationship between age, gender, ethnicity, or GPA and *Praxis II* results was found. Further research, both quantitative and qualitative, should be conducted to investigate the relationship between accreditation and exam results. Last, alignment between counselor education program objectives, standards, and assessment should be strengthened to gain a better grasp on attaining competence.

ACKNOWLEDGMENTS

As I reflect on the last 27 years of schooling I would be remiss not to acknowledge a few individuals that have offered love and support throughout my endeavors. First, my LORD and Savior, Jesus Christ knew the plans for my life and promised to give me a hope and a future. In my weakness, His strength was made perfect. Second, my wife, Lynda, is the greatest example of a helpmate. She walked in tandem with me throughout this process and I could not have completed this without her. Third, Cooper, my son, taught me the depth of my selfishness and impatience, but loved me despite of it. He has encouraged me to be a better person and pushed me to finish sooner than later, yet has not spoken a word. My parents, Chuck and Cindy, made me believe in myself when I could not. Fifth, my grandparents, Bill and Alice, taught me that “I can’t” is not a phrase that can be used. Sixth, my grandparents, Doug and Charlotte, reminded me to work for the eternal, not the temporal. Seventh, my brother, Ryan, and his family, Andrea, Zachary, Victoria, and Harrison encouraged me to strive to finish. Eighth, my great-granddad, Richard Forrest, modeled a strong work ethic that afforded me the stick-to-itiveness to persevere through this process. My remaining family members and friends offered countless words of encouragement and support. Thank you! My friends, Dr. Schellenberg, Dr. Yocum, Dr. Isaacs, Dr. Holder, and Dr. Rockinson-Szapkiw, gently pushed me when I needed it the most. Last, but certainly not least, I would like to offer a special “Thank you” to my committee chair, Dr. Arena, and my committee member, Dr. Reece. Thank you for believing in me and supporting me through this process.

TABLE OF CONTENTS

ABSTRACT	V
ACKNOWLEDGMENTS.....	VI
TABLE OF CONTENTS	VII
TABLE OF TABLES.....	IX
CHAPTER ONE: INTRODUCTION	1
Strengths and Limitations.....	2
Key Terms.....	2
Summary	4
CHAPTER TWO: REVIEW OF THE LITERATURE.....	5
Purpose of the Study	5
Theoretical Framework	6
Accreditation.....	7
Licensure.....	9
Credentialing Exams	10
Exploring Ethical Professional Competence.....	11
Defining and Applying Competence.....	24
Competence Examples within Counseling.....	27
Teaching Competence.....	28
Assessing Competence.....	28
Blending Accreditation with Competence.....	30
Difficulties of Obtaining CACREP Accreditation	30
Benefits of Obtaining CACREP Accreditation	31
Summary	32
CHAPTER THREE: METHODOLOGY.....	33
Research Design.....	33
Population and Sampling Procedures.....	34
Strengths and Limitations.....	35
Data Collection.....	35
Instrumentation	36
<i>Praxis II</i> : School Guidance and Counseling Exam	36
National Certified School Counselor Examination	38
National Certified Counselor Exam for Licensure and Certification	41
National Board for Professional Teaching Standards.....	42
Procedures and Data Analysis.....	44
CHAPTER FOUR: RESULTS.....	45
Data Collection.....	46
Data Analysis	47

Demographics	48
Research Question 1.....	49
Results for Research Question 1	51
Research Question 2.....	51
Results for Research Question 2	54
Table 7	55
Summary	55
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	57
Summary	57
Conclusions	57
Implications for Practice	57
Recommendations for Research.....	58
REFERENCES	59
APPENDICES	64
APPENDIX A	65
APPENDIX B	68

TABLE OF TABLES

1. Study Variables and Statistical Test Used to Evaluate Two Research Questions	47
2. Participant Demographics	49
3. Descriptive Statistics for Praxis II Scores by Accreditation Status	50
4. Descriptive Statistics for Assessing Normality of Praxis II Scores.....	51
5. Descriptive Statistics for Praxis II Scores and GPA.....	52
6. Descriptive Statistics for Assessing Normality of Praxis II Scores and GPA	53
7. Model Summary Generated from Multiple Regression Analysis of Hypothesis 2	55

CHAPTER ONE: INTRODUCTION

Counseling, at its core, is a subjective field not easily defined or objectified. There is a science and art to counseling; however, quantifying both can be difficult. There are several aspects of counseling that may be more easily measured than others, including content knowledge. Content knowledge could be considered acquiring the basic understanding about a given subject. Competence could be considered pragmatically applying basic knowledge to a given situation. Teaching for competence, rather than content, should be the goal of all counselor-training programs. An issue arises when attempting to determine a certain level of competency within training. Namely, when can a high enough level of competency be determined? In order to attempt to illuminate this question several areas must be addressed. This research will attempt to objectify at least some level of competence by examining the accreditation of a school counseling program that offers a standard of agreed best practice, with credentialing exams, which offers objectivity and quantifiable data. Given this task, the posed research questions are:

RQ1: Does CACREP accreditation affect exam results on credentialing exams, more specifically the *Praxis II: School Guidance and Counseling* exam, for graduate school counseling students?

RQ2: How do accreditation of graduate program, age, gender, ethnicity, and Grade Point Average (GPA) relate to *Praxis II* exam scores?

The subsequent hypotheses are:

- It is hypothesized that CACREP accreditation will have a significant effect on the *Praxis II: School Guidance and Counseling* exam results.

- It is hypothesized that no variable will be significantly correlated.

The purpose of this paper is to examine connections and synthesize research between CACREP accredited programs with non-CACREP accredited school counseling programs.

Strengths and Limitations

There are several strengths to identifying significant variables that may affect results on standardized testing. This study could also introduce several new areas of further research, such as predictive variables of success on credentialing exams. The limitations of this study include the unidentified variables that may also contribute to results on credentialing exams, such as years of experience, the possible inability to determine all demographic data for the population, and the lack of validation of the results based on interviews or survey results of participants.

Key Terms

Accreditation. Accreditation is held in high regard within academia and with higher education. CACREP accreditation may be considered the “gold standard” for school counseling programs. CACREP is an accrediting board that specifically approves counseling preparation programs. If the school counseling program leads to a state license then the program may be held to Department of Education (DOE) guidelines. Since each state governs the institutions of higher education, the minimum requirements for each school counseling program may be different.

Accrediting agencies hold counseling programs to a certain standard and maintain guidelines that attempt to ensure competent, trained professionals. The Commonwealth of Virginia (*8VAC20-22-10 et. seq*) requires all school counseling personnel complete a

course in ethics. Section II.G.1.j of the CACREP (2009) standards states a counselor should have knowledge of the “ethical standards of professional organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling.” This standard implies a professional counselor must be able to apply ethical guidelines set forth by a professional organization. The American School Counseling Association (ASCA) and the American Counseling Association (ACA) both state the professional counselor should practice within their area of competence (ASCA Section E.1.a; ACA Section C.2.b). There seems to be a lack of research regarding the usefulness of accreditation for a program. Accreditation adds credibility to a program by stating certain criteria have been met; however, maintaining a certain criteria and maintaining competence may be considered two different entities.

Licensure. Licensure refers to the credential awarded to a student after successful completion of a state-approved licensure program. For the purpose of this study, master’s level school counseling programs were identified and analyzed. The Virginia Department of Education approves colleges and universities to submit licensure paperwork to license students that have completed an approved program. For the purpose of this study, only CACREP and non-CACREP schools that have been approved to submit for licensure were used. Due to the standard requirements to become a state-approved program, this will standardize the master’s level school counseling programs.

Competence. Competence within the counseling profession must be addressed at many different levels depending upon the area of desired competence. Epstein and Hundert’s (2002) definition of competence in professional practice, which is, “the habitual and judicious use of communication, knowledge, technical skills, clinical

reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (p. 243). This definition covers both task-oriented competence and principle-oriented competence. Roe’s (2002) “Competence Architecture Model” suggests competence should take place in four key areas, including (a) knowledge, (b) skills, (c) attitudes, and (d) abilities. Competence is not easily defined or understood, but there seems to be guidelines surrounding competence versus incompetence. Procidano, Busch-Rossnagel, Reznikoff, and Geisinger (1995) suggest psychologists have yet to agree on a comprehensive list of core clinical skills needed by all counseling professionals.

Credentialing exams. The dependent variable was scores on various credentialing exams, including the *Praxis II*: School Guidance and Counseling exam, the National Certified School Counselor Examination (NCSCE), the National Certified Counselor exam (NCE), and the National Board for Professional Teaching Standards (NBPTS): School Counseling/Early Childhood through Young Adulthood certification.

Summary

For the purpose of this study, CACREP and non-CACREP and state-approved colleges and universities offering master’s level school counseling programs were identified. The results of the credentialing exams for each type of school were collected via an online survey. The scores were analyzed in order to find differences between the mean results.

CHAPTER TWO: REVIEW OF THE LITERATURE

With increased emphasis on accountability and data-driven counseling programs, accreditation has become a major focus in higher education. Accreditation was the topic in more than 1,300 journal articles from 2002 until 2004 (Wergin, 2005). The Council for Accreditation of Counseling and Related Educational Programs (CACREP) is the gold standard accrediting agency for counselor education programs, including school counseling education programs. In addition to accreditation, counseling within the area of competence is not only an ethical obligation, but also a topic of discussion within counselor education. The majority of the research has emphasized multicultural competence; however, the area of ethical competence should be addressed.

Purpose of the Study

The primary purpose of the study would be to add a specific aspect to the current body of knowledge by examining the relationship between accreditation and credentialing exam results. More specifically, this study will compare results on several credentialing exams, namely the *Praxis II*: School Guidance and Counseling exam, NCSCE, NCE, and NBPTS, between school counselors that graduate from a CACREP accredited program with those that did not. This research proposal will seek to address the effects of CACREP accreditation on competence among school counselors. The posed research questions are:

1. Will CACREP accreditation effect exam results on credentialing exams for graduate school counseling students?
2. How do accreditation of graduate program, age, gender, ethnicity, and Grade Point Average (GPA) relate to *Praxis II* exam scores?

The subsequent hypotheses are:

- It is hypothesized that CACREP accreditation will have a significant effect on credentialing exam results.
- It is hypothesized that no variable will be significantly correlated.

Theoretical Framework

Bandura's (1997) self-efficacy theory is based on the assumption the more capable an individual feels about a given task, the more likely the individual will successfully perform the task. The higher the individual reports on a self-efficacy rating scale the more effort and sustained duration the individual will attempt (Bandura, 1997). This theory can be directly correlated with ethical competence; the more capable a professional counselor feels about counseling knowledge, skill, or disposition the more effort and sustained duration the counselor will attempt.

Teaching for competence must be the primary goal of all professionally oriented psychology programs. Piaget (1969) outlines two different developmental stages: concrete operational and formal operational. During the concrete operational stage, children begin to see the world through a fixed set of lenses; whereas, the formal operational denotes an application of knowledge to a specific situation. Albeit a stretch, Piaget's model could be applied to counselors in that counselors must move from the content to the application of knowledge to the needs of a client. It could be argued there is a dichotomy within the educational setting of counseling: content and competence. Content could be viewed as the concrete of the field, whereas, competence may be viewed as the abstract. Counselors must be able to step into the client's subjective world in order to feel the reality of the client, even though a complete and total understanding is

not possible. Competence implies the use of an individual's better judgment and the application of principles to a given situation.

Accreditation

Accreditation, according to the American Psychological Association (APA), assures that certain programs have established standards and means of assessing improvement through self-study and review (American Psychological Association, 2012). Accreditation may set certain programs apart and increase levels of accountability, perhaps increasing the effectiveness of teaching competence on the subject matter. Accreditation is held in high regard within academia and with higher education. There are several types of accreditation, including: (a) regional, (b) national, and (c) programmatic (Council for Higher Education Accreditation, 2013).

The Council for Higher Education Accreditation (CHEA) recognizes six regional accrediting organizations, including (a) Middle States Association of Colleges and Schools, (b) New England Association of Schools and Colleges, (c) North Central Association of Colleges and Schools, (d) Southern Association of Colleges and Schools, and (e) two variations of Western Association of Schools and Colleges. There are other organizations, such as AdvancED that also recognize regional accrediting bodies. Institutional accreditation is the large umbrella over the larger institution of higher education. For example, the Southern Association of Colleges and Schools (SACS) is a regional agency that accredits institutions from Virginia to Florida. The goal of SACS is to enhance the quality of education throughout higher education in the southeast United States (Southern Association of Colleges and Schools, n.d.). CHEA also recognizes six national organizations, which are faith-based and career related (Council for Higher

Education Accreditation, 2013). Furthermore, out of the approximately 60 recognized programmatic accrediting agencies CHEA recognizes 48 programmatic accrediting organization, including CACREP (Council for Higher Education Accreditation, 2013).

Many consider CACREP to be the gold standard for counselor education programs. CACREP accreditation is considered a specialized credential because the focus is on a specific program. CACREP is an accrediting board that specifically approves counseling related preparation programs, such as professional counseling, school counseling, and community and mental health counseling. For the purpose of this study the independent variable was the accreditation of the master's level school counseling program. Programs were divided into two groups: CACREP accredited programs and non-CACREP accredited programs.

Licensure is many times related to accreditation, but should be considered separate. State license is tied to the Department of Education (DOE) guidelines. Since each state governs the institutions of higher education, the minimum requirements for each school counseling program may be different.

Accrediting agencies hold counseling programs to a certain standard and maintain guidelines that attempt to ensure competent, trained professionals. The Commonwealth of Virginia (8VAC20-22-10 *et. seq*) requires that all school counseling personnel complete a course in ethics. Section II.G.1.j of the CACREP (2009) standards states a counselor should have knowledge of the “ethical standards of professional organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling.” This standard implies a professional counselor must be able to apply ethical guidelines set forth by a professional organization. The ASCA and the

ACA both state the professional counselor should practice within their area of competence (ASCA Section E.1.a; ACA Section C.2.b). There seems to be a lack of research regarding the usefulness of accreditation for a program. Accreditation adds credibility to a program by stating certain criteria have been met; however, maintaining a certain criteria and maintaining competence may be considered two different entities.

Licensure

Licensure is another important aspect of the professional counseling field. There are several different types of licensure to consider; however, two are especially important in regards to CACREP and non-CACREP programs including Licensed Professional Counselor (LPC), and state licensure for School Counselors. Both types of licensure are governed by the state in which the counselor is attempting to gain licensure. For example, the Virginia Board of Counseling grants licensure to the following professions include (a) LPC, (b) Certified Substance Abuse Counselors, (c) Certified Substance Abuse Counseling Assistants, (d) Certified Rehabilitation Providers, (e) Marriage and Family Therapists, and (f) Licensed Substance Abuse Treatment Practitioners. The regulations and standards differ from one profession to another. Second, state licensure for School Counselors is regulated by the state's Department of Education. Each state has a set of standards and requirements for the professional to complete before licensure is granted. It is important to note CACREP accreditation is not necessarily tied to licensure; however, some states may have less rigorous standards for students that hold a CACREP-accredited degree. Within the Commonwealth of Virginia there are 38 colleges and universities who have been recognized as approved educator preparation programs (Virginia Department of Education, 2012). Obtaining state licensure may be

the ultimate goal of the aspiring counselor and CACREP accreditation may not be.

Licensure refers to the credential awarded to a student after successful completion of a state-approved licensure program. For the purpose of this study, master's level school counseling programs were identified and analyzed. Only CACREP and non-CACREP schools are recognized as approved programs by their respective states were used. Due to the standard requirements to become a state-approved program, this may standardize the master's level school counseling programs.

Credentialing Exams

The *Praxis II: School Guidance and Counseling* exam has been used in several studies, including examining online and traditional graduate programs in Alabama and examining the credibility of social work versus school psychology (Altshuler & Webb, 2009) and school counseling (Cobb, 2010). Altshuler and Webb (2009) also noted the differing licensure requirements by state, indicating only 20 states require passing *Praxis II* scores and 17 have no licensure test requirement. The *Praxis II: School Guidance and Counseling* exam was selected due to the nature of the test seeking to determine mastery of subject matter and skills (Educational Testing Service, 2010).

The NCSCE and NCE were addressed several times by Milsom and Akos (2007). They summarized data from credentialing exams, namely the NCE and NCSCE, of school counselors as compared to the accreditation of their graduate program.

The NBPTS: School Counseling/Early Childhood through Young Adulthood certification was also addressed by Milsom and Akos (2007). The authors indicate the growth in acceptance of the certification from counselors despite its controversial beginnings from a teacher specific organization. One aspect has created this acceptance

is based on the fact many states and school divisions offer stipends for obtaining the NBPTS credential; whereas, fewer, yet some, offer salary increases for other credentialing exams. Additional comments about the NBPTS by the authors are related to the fact that the NBPTS does not require as strict requirements to qualify to apply for the certification as other credentialing exams.

Exploring Ethical Professional Competence

Professional competence has become a prevalent topic within the circles of academia within the past several years. The common question is, “Can competence be defined and objectively assessed?” Models and scales have been developed to attempt assessment, but no universal measure has been developed. One difficulty has been defining competence, much less determining when competence has been met.

Professional competence is one of the major topics addressed by the professional organizations that set the code of ethics and standards of practice for the counseling field at large. Even though professional counselors are expected to obtain competence in their specialty, the terms and topics counselors are to master have no universal definition or boundary. The specific duration of training has not been outlined. Researchers have not succinctly determined if competence can objectively be established or assessed.

Ethically, it seems issues in the breadth and depth of competence begin to emerge.

Section C of the American Counseling Association (ACA) Code of Ethics (2005) addresses the professional responsibilities of the professional counselor. Outlined throughout the section are the following considerations, including (a) knowledge of standards, (b) professional competence, (c) advertising and soliciting clients, professional qualifications, (d) nondiscrimination, (e) public responsibility, and (f) responsibility to

other professionals. The fact ACA devoted an entire section to the professional responsibility of a professional counselor speaks volumes about the importance of the topic. The focus of this paper is on professional competence and how it relates to graduate-level counselor preparation programs. This paper will operate under one premise: “The goal of graduate training in professionally oriented psychology programs is the development of competent professionals” (Procidano, Busch-Rossnagel, & Geisinger, 1995, p. 426).

When observing the teaching practices of counselor education programs a dichotomy begins to unfold: competence versus incompetence. First, “professional competence is a complex, multidimensional construct...” (Procidano, et al., 1995, p. 426). To aid in narrowing down competence, one may start with the synonyms (a) ability, (b) skill, (c) proficiency, and (d) expertise. In a study to define and assess professional competence within the medical field, Epstein and Hundert (2002) state, “we propose that professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (p. 226). In this definition competence is viewed as more than simply attaining knowledge, but also addresses judgment, attitude and dispositions. Second, “the question that most needs to be addressed when assessing applicants’ suitability for counselor training is what the essential requisites at the start of training or for training to be started are, and what qualities, attitudes, beliefs and abilities can be developed through training” (Wheeler, 2002, p. 432). What must be present in order for training to commence? Which skills can

be taught and which must be present beforehand? These questions introduce the age-old debate of nature versus nurture. Can this debate be brought into the counseling arena?

The most agreed upon definition of competence seems to be “received formal education, training and supervised experience in a given area.” There are several issues that are tied to this definition. First, exposure alone to formal education and training does not equate to intelligence. Second, knowledge and wisdom are two different ways of thinking. Knowledge may be defined as “accumulation of facts”, whereas wisdom may be “the application of principles”. Last, supervised experience is not an objective measure to determine competence. Each supervisor will rate counseling practices differently, observe and look for different things, and may impose personal values on the supervisee.

Roe (2002) developed the “Competence Architectural Model” to describe the levels of competence. In the model, Roe (2002) outlines three pillars that hold up competence, including (a) knowledge, (b) skills, and (c) attitudes. Based on Roe’s (2002) research, competence should take place in at least three key areas that are (a) counseling skills, (b) professional knowledge, and (c) general dispositions. First, when addressing counseling skills, “Shaw and Dobson (1988)...have identified four skill areas that are characteristic of competent therapists: use of a theoretical framework to guide interactions, clinical memory, skillful use of interventions, and knowledge of when to employ these interventions” (Procidano, et al., 1995, p. 426). A professional counselor has the ethical responsibility to be competent in theory and practical application. Many graduate-level courses are designed to offer rote memorization of landmark theories and allow role-play dyads and triads of aspiring professional counselors to practice such

theories and techniques. Does memorization and role-playing translate into competent counseling?

Professional knowledge must be addressed as a key area of competence.

“Included in this area are the ethics, professional values, and psychological health of the student” (Bourg, 1986, p. 83). In order to be successful, a counselor must be well versed in their respective codes of ethical practices. An ethical dilemma begins to emerge: counselor education programs should be producing competent counselors, competent counselors have the ethical responsibility to be practicing within their area of competence, and the assessment of competence has not been clearly defined by the professional organizations, licensing boards, or institutions of higher education. The American Counseling Association (ACA), the Association for Counselor Education and Supervision (ACES) and the American Psychological Association (APA) all require that a counselor practice within their area of competence (ACA: Section C, ACES Codes 3.04 and 3.05, APA: Standard 2), yet neither the professional organizations nor the institutions of higher education offer clear guidelines on how to measure competence.

An area a counselor must obtain some level of competence should be in general dispositions. “From the opinion of colleagues the competent therapist is generally a good person, intelligent, creative, sincere, energetic, warm towards others, responsible and of sound judgment” (Wheeler, 2002, p. 430). In addition to general dispositions, each theory emphasizes certain traits that a counselor must possess in order to successfully engage the client. For example, Carl Rogers (1957) “identifies genuineness, empathy and positive regard as being essential to the relationship and, by implication, potential therapists must have the predisposition to be able to offer these condition” (p. 95). When

discussing dispositions many counselors would agree the following traits should be apparent in the counseling relationship (a) empathy, (b) genuineness, (c) trustworthiness, and (d) warmth, along with many others.

Part V.B.2 of the Regulations Governing the Practice of Professional Counseling issued by the Virginia Board of Counseling (2010) states that persons licensed by the board shall: “Practice only within the boundaries of their competence, based on their education, training, supervised experience and appropriate professional experience and represent their education training and experience accurately to clients”. According to the Virginia Board of Counseling (2010) the following courses are minimum requirements for an aspiring licensed professional counselor: (a) professional identity, function and ethics, (b) theories of counseling & psychotherapy, (c) counseling & psychotherapy techniques, (d) human growth and development, (e) group counseling and psychotherapy, theories and techniques, (f) career counseling and development theories and techniques, (g) appraisal, evaluation and diagnostic procedures, (h) abnormal behavior and psychopathology, (i) multicultural counseling, theories and techniques, (j) research, (k) diagnosis and treatment of addictive disorders, (l) marriage and family systems theory, and (m) supervised internship of 600 hours to include 240 hours of face-to-face direct client contact. Even though these minimum standards address education, training, supervised experience and appropriate professional experience, the competence level is not defined.

The Virginia Board of Counseling states three specific areas that qualify to each competence, including (a) education, (b) training, and (c) experience. One consideration arises: does the term “experience” cover both supervised experience and personal

experience? Personal experience should be considered an adequate teacher because the individual is able to personalize and internalize the situation; however, no assessor is present to determine if the individual handled the situation appropriately and since the individual was personally involved did the individual have clouded judgment. Also, a counselor may have many Lesbian, Gay, Bisexual, and Transgender (LGBT) friends, but does that entitle the counselor to work within the LGBT culture? It seems if the counselor is honest about training, including the difference between supervised experiences versus personal experience with the client, then the client can agree to continue with the counseling relationship.

Many institutions of higher education have set up standards and minimum requirements for admission into graduate-level programs and graduation from their programs; however, an objective measure has not been established for a baseline of competence. “Good assessment is a form of learning and should provide guidance and support to address learning needs” (Epstein & Hundert, 2002, p. 229). “Assessment of health care providers competencies occurs throughout the continuum of training and practice. Patients and clients, clinical experts, supervisors, and other health care providers informally evaluate these individuals every day” (Bashook, 2005, p. 563). Bashook (2005) includes assessment for areas including (a) assessment of knowledge, (b) assessment of decision-making, (c) assessment of practice performance and personal attributes, and (d) assessment of skills and tasks. Bashook (2005) concludes the best practices for assessment should include defining the content and competencies that should be assessed and providing evidence that the method of assessment is valid, reliable, feasible, and credible; these are all important areas to consider when discussing

the assessment of a concept as subjective as competent counseling. Epstein and Hundert (2002) conclude in their study to objectively assess competence:

In addition to assessments of basic skills, new formats that assess clinical reasoning, expert judgment, management of ambiguity, professionalism, time management, learning strategies, and teamwork promise a multidimensional assessment while maintaining adequate reliability and validity. Institutional support, reflection, and mentoring must accompany the development of assessment programs. (p. 226)

Many graduate-level counseling training programs include a capstone, supervised internship. Internships may be one way to assess integration of counseling skills, professional knowledge, and general dispositions into the counseling setting. During an internship a counselor should be observed and mentored to ensure the counselor-in-training is adapting well to the “real-world” counseling setting. “The primary purpose of clinical supervision is to enhance the competence and increase the counseling skills of the counselor who is being supervised” (Herlihy, Gray, & McCollum, 2002, p. 56). In addition, “Supervision can provide opportunities for continuing clinical-skill development, ongoing consultation regarding legal and ethical issues, and a professional support system that can mitigate against stress and burnout” (Herlihy, et al., 2002, p. 55). Supervision offers the counselor-in-training time to receive real-time feedback from clients and post-observation meetings with supervisors. Do counselors leave supervised training better prepared? A reasonable question would be, “If the objective of a graduate psychology program is to develop competent counselors, then are they?”

Legal statutes may be jeopardized if a counselor is not competent. For example, according to the Rape, Abuse, and Incest National Network (RAINN), all 50 states have mandatory reporting laws in place for both children and the elderly. If a professional counselor was not current on all state laws and did not report suspected abuse or neglect

because of incompetence, the counselor may be held liable. Another legal competency would include reporting suspected self-harm or the harming of another. A professional counselor also has the ethical responsibility to be competent in theory and practical application. Many graduate-level courses are designed to offer rote memorization of landmark theories and allow role-play dyads and triads of aspiring professional counselors to practice such theories and techniques. Does memorization and role-playing translate into competent counseling?

Another area of legal concern comes from ACA (2005) code A.12.e which states: “Counselors ensure that the use of technology does not violate the laws of any local, state, national, or international entity and observe all relevant statutes.” This code implies that a counselor must be competent enough in the laws of the local, state, national, or international entity to know if the technology that is being used is in violation. If counselors are to be competent then why is there no counseling law class required for master’s level counselors?

Roe (2002) summarizes, “that developing and maintaining the professional qualifications of European psychologists is not merely issue of standardizing educational input or performance output” (p. 201), but rather he concludes, “that psychologists devote more research to their own professional role and work activities, before taking efforts toward standardization too far” (p. 201). This idea suggests that continued personal growth would eliminate the need to assess competence because each individual will be devoted to gaining knowledge, improving skills, and developing dispositions.

When looking at assessment of aspiring professional counselors each state-approved institution of higher education must report to the respective state that each

counseling candidate has met certain standards. These standards vary from state-to-state. Universal standards may not be the answer; however, a uniform approach would allow continuity between counselor education programs. Other concerns when attempting to assess competence, as with any other assessment, are (a) validity of the assessment, (b) reliability of the assessment, (c) test biases, and (d) standardization of the assessment.

There are several areas of concern when dealing with competence. First, when examining professional counselor comfort with sexual misconduct “only 9 percent of psychologists and 10 percent of social workers surveyed in these national studies reported that their formal training on the topic in graduate school and internships had been adequate. A majority of psychologists and social workers reported receiving no training about attraction” (Pope & Vasquez, 2007, p. 184). Based on these statistics, there seems to be a disconnect between education, training, and supervised experience and obtaining the level of competence that is required within the counseling relationship.

First, if “the goal of graduate training in professionally oriented psychology programs is the development of competent professionals” (Procidano, et al., 1995, p. 426) then how will a program or professional know when mastery has been attained? When examining the overall goal of a professionally oriented psychology program the problem of determining competence arises. The issues that are involved are far reaching into the counseling field at large. If competence was not addressed in the ethical guidelines and standards of practice then professional counselors could enter into a counseling relationship with an individual that may be experiencing an issue that the counselor has no training to work with. For example, a substance abuse counselor could agree to work with a couple going through a divorce. According to the Virginia Board of Counseling

(2010), a certified substance abuse counselor is not required to have taken a class specializing in marriage and family. The counselor may be trained to work with groups, but may miss an important detail while working within the marriage and family domain. The professional counselor must obtain consultation in order to maintain insight into competence. A supervisor or colleague should be able to objectively assess whether a referral is necessary. Probable courses of action may be to refer to another specialist or additional course work, training, and experience in order to maintain a high level of care of the client. Perhaps one way to approach this issue is to acknowledge the difference between “competence” and “incompetence”. Surely a doctor would be deemed incompetent if he began to determine a broken leg by first examining an unrelated part of the body. In short, the face validity of the practice must make sense.

Second, professional counseling competence is subjective, by nature, but the guidelines outlined by the American Counselor Association (ACA) and the Virginia Board of Counseling are strict in their wording. The Virginia Board of Counseling (2010) states that persons licensed by the board shall: “Practice only within the boundaries of their competence, based on their education, training, supervised experience and appropriate professional experience and represent their education training and experience accurately to clients.” An issue arises based on this standard: do education, training, and supervised experience in the practicing specialty equal competence? If so, how much education, training, and supervised experience are necessary? This is a concern for the field because if a client approaches a counselor with gender or sexual identity issues and the counselor had attended one lecture on gender identity, would the counselor be considered competent? An ethical dilemma begins to emerge. Counselor

education programs should be producing competent counselors; competent counselors have the ethical responsibility to be practicing within their area of competence, however, the assessment of competence has not been clearly defined by the professional organizations, licensing boards, or institutions of higher education.

Another ethical issue comes from the ethical code set by the Virginia Board of Counseling (2010). The code states a professional counselor shall, “represent their education training and experience accurately to clients” another issue must be addressed. Would a counselor, who had experienced financial difficulty, be more vulnerable to practice outside of their competence area? A counselor could state to a client, “I have had training in working with cognitive behavioral techniques,” while the truth could be they had attended one lecture for three hours. This is a slippery slope in the area of competence. One trait that a professional counselor must possess is honesty. Informed consent is the opportunity to disclose to clients the counselor’s education, training, and supervised experience. Legally, the counselor will be held liable for misconduct. One course of action could be to set stipulations on counseling fraud and require a course in counseling for all professionally oriented psychology programs.

Next, a professional counselor has the ethical responsibility to be competent in theory and practical application. Does memorization and role-playing translate into competent counseling? In the counseling relationship a client will not know if a theory is executed in a textbook manner. This is where training must move from content to competence. Instead of precisely following each step of a theoretical process, a counselor must obtain the skill to apply the theory to the situation. Having worked in graduate education for the past several years, I have observed many graduate-level

students are simply looking for the requirements to earn an “A” in a particular class, when professors are interested more in the learning process and the practical application of the material to a given situation. Perhaps a counselor should develop a measure of objectively monitoring the progress and outcome of the client as an evaluation of the counselor’s competence. For example, if a goal has been established between a client and counselor and the goal is met through the intervention of the counselor, can a level of competence be credited to the counselor?

A final area must be addressed. After reviewing the assessment of competence, another question emerges, “What are the best ways to develop competence?” Professionally oriented psychology programs use a number of different assessments when determining if a counselor-in-training has met the requirements for graduation. A few examples may include (a) practicum experience with a trained professional, (b) formal assessments, including comprehensive exams, (c) informal assessments, including interviews, (d) portfolio assessment, (e) supervised internship, and/or (f) reflection on program standards. Out of these different assessments, is there a certain one that can ensure competence? Are there other assessments that should or could be used? One solution to this dilemma is to focus less on the assessment process and look at evaluating competence from a standpoint of personal responsibility. Perhaps professional counselors should stop looking at competence as an end-point of training, but rather view competence as a journey that has no ending. Perhaps true competence is never achieved, but rather through education, training, and supervised experience we are given the tools to research and grow personally and professionally throughout a career and lifetime. Professional counselors have the duty to practice within their level of competence.

Competence is determined by education, training, and supervised experience. The fact that competence has no universal definition or level of objective measure counselors are expected to have merited some level of expertise in their area of practice.

Second, when looking at measuring a level of competence the ambiguity of teaching skills and dispositions begins to blur when a level of competence has been met. The question could be posed, “Can all counseling skills or counselor dispositions be taught?” If the answer is “Yes”, then how do we know when mastery has been met? If the answer is “No”, then counselors must be born, not made. It seems reasonable to believe many counseling skills and fewer dispositions can be taught. Professionally oriented psychology programs attempt to teach and practice counseling skills by requiring a course in counseling techniques. Sheer exposure to this information may aid the novice counselor in becoming more aware of the counseling relationship; however, due to the role-playing model and many made up problems the reality of therapy may be lost in translation. Many counselors would agree a scripted role-play is going to feel differently than when clients state the same issue. One objective measure of competence is a copy of a college and graduate school transcript, certificates from past trainings, topics covered during education and trainings, and letters from supervisors stating number of hours worked in a setting with a certain type of client. Counselors must maintain a high regard for documentation within the counseling relationship and professional practice.

Last, the greatest test of competence may be practical application of principles and skills learned through education, training and supervised experience. The application of competence begins the abstract. It seems that human beings are wired for rules. A person may feel that they could best operate when the guidelines and boundaries have

been clearly defined. However, in the counseling relationship the parameters have not been set. A few rules may have been discussed through informed consent, but the application of those rules is still ambiguous. It could be argued the relationship should not be viewed as a robotic or static line of code, but rather a fluid, evolving relationship full of different avenues to reach a set goal.

Defining and Applying Competence

Competence is a multifaceted domain within the context of learning. Epstein and Hundert (2002) defined “competence” as “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (p. 243). For the purpose of this study, this definition will be limited to what the counselor-in-training knows, content-oriented competence, and how the counselor-in-training will apply the knowledge to a given situation, task-oriented competence. Content-oriented competence refers to the knowledge of content within specific areas of counseling. For example, a professional counselor has an ethical obligation to be considered competent within the areas of group counseling, multicultural counseling, theories, and techniques. Task-oriented competence refers to the application of competence to a specific situation. For example, the professional counselor must competently apply ethical guidelines to a specific situation.

Roe’s (2002) “Competence Architecture Model” suggests there are two different areas of competence including competence in relation to a certain type of work, task-oriented competence, and competence in integrating knowledge, skill, and attitude, integration-oriented competence. First, task-oriented competence conveys the idea that a

professional has met set criteria and can perform a certain task. For example, a competent doctor must be able to perform an outpatient surgery. The second, integration-oriented competence, assumes the professional can maintain a level of competence in a given situation. For example, a professional doctor knows and operates under the Health Insurance Portability and Accountability Act (HIPAA) guidelines. Even though these two tasks are completely separate, there must still be a certain level of competence within both areas.

Professional knowledge must be addressed as a key area of competence.

“Included in this area are the ethics, professional values, and psychological health of the student” (Bourg, 1986, p. 83). In order to be successful, a counselor must be well versed in their respective codes of ethical practices. An ethical dilemma begins to emerge: counselor education programs should be producing competent counselors, competent counselors have the ethical responsibility to be practicing within their area of competence, and the assessment of competence has not been clearly defined by the professional organizations, licensing boards, or institutions of higher education. The American Counseling Association (ACA), the Association for Counselor Education and Supervision (ACES) and the American Psychological Association (APA) all require a counselor practice within their area of competence (ACA: Section C, ACES Codes 3.04 and 3.05, APA: Standard 2), yet neither the professional organizations nor the institutions of higher education offer clear guidelines on how to measure competence.

Second, the professional counselor must be competent in their skills and abilities. Procidano, et al. (1995) suggested all counseling professionals need an all-inclusive list of fundamental clinical skills. The list and use of clinical skills may vary based on the

theoretical framework used to the specific needs of the client. Nolan (1978) outlines a list of group leadership skills, including, (a) active listening, (b) restating, (c) clarifying, (d) summarizing, (e) questioning, (f) interpreting, (g) confronting, (h) reflecting, (i) reflecting feelings, (j) supporting, (k) empathizing, (l) facilitating, (m) initiating, (n) goal setting, (o) evaluating, (p) giving feedback, (q) suggesting, (r) protecting, (s) disclosing oneself, (t) modeling, (u) linking, (v) blocking, and (w) terminating. Each of these group leadership skills could be directly related to individual counseling as well, as many are present in specific theoretical approaches and individual counseling styles.

Third, the professional counselor must obtain some level of competence in their attitude and general dispositions. Dispositions may be the most difficult of the four areas of competence due to the subjective nature of personality. “From the opinion of colleagues the competent therapist is generally a good person, intelligent, creative, sincere, energetic, warm towards others, responsible and of sound judgment” (Wheeler, 2002, p. 430). Teaching these qualities should be the goal of counselor education programs; however, the andragogy of these attitudes and general dispositions may vary from program to program.

In addition to general dispositions, each theory emphasizes certain traits that a counselor must possess in order to successfully engage the client. For example, Carl Rogers (1957) “identifies genuineness, empathy and positive regard as being essential to the relationship and, by implication, potential therapists must have the predisposition to be able to offer these conditions” (p. 95). When discussing dispositions many counselors would agree the following traits should be apparent in the counseling relationship: (a) empathy, (b) genuineness, (c) trustworthiness, and (d) warmth, along with many others.

Last, the professional counselor must be competent in their abilities. Even though competence is not easily defined or understood there seems to be a clear difference between competence and incompetence. Each of these areas should be addressed in counselor education and may be increase the increase the effectiveness of counseling; however, there is no research to support or discredit this notion.

Competence Examples within Counseling

Moore-Thomas and Day-Vines (2010) added significant value to the topic of competence within the school counseling setting by adding an important area that school counselors must possess a certain level of competence: multiculturalism. The 21st century K-12 setting has become increasingly diverse than in generations past. “ ... counselor educators must explore ways that school counselors in training can experience and process rich school-family-community partnership engagement within school counseling practicums and internships” (Moore-Thomas & Day-Vines, 2010, p. 61).

Wilkerson and Eschbach (2009) introduced significant implications for the topic of competence as it relates to school counseling because the goal of all counseling programs should be to develop competent professionals. Competence may be objectively assessed, but it is more likely perceived.

Li, Lampe, Trusty, and Lin (2009) examined CACREP counseling programs to identify impaired counseling students that were in need of remediation or termination. The authors identified three different types of non-academic behaviors, including, (a) Interpersonal Relationship Problems, (b) Overt, Relationship Problems with Resistance, and (c) Covert, Lying and Addictive Behavior. The authors addressed the ethical responsibility to screen, remediate or dismiss students based on these behaviors.

Furthermore, additional research was suggested to compare CACREP and non-CACREP counseling programs because of the differing policies that govern the accreditation of each.

Teaching Competence

Developing competent professional counselors should be the goal of all graduate-level psychology programs (Procidano, et al., 1995), not simply content-based counselors. Knowledge of subject matter is not enough in professional counseling; the counselor must be able to critically analyze and apply knowledge to a given situation. Professional identity is taught through education, training, and supervised practicums and internships (Gibson, Dollarhide, & Moss, 2010). Professional identity can be tied into competence and individual abilities. Students report their reliance on external teaching to develop a professional identity (Gibson, et al., 2010). Research points to the importance of professional identity and the effects that it has on the professional's attitude, work, and confidence.

Assessing Competence

Assessing competence is a difficult task due to the subject nature of the topic. There are two primary ways to assess competence, including through an objective scale or through perceived learning. Due to the subjective nature of competence, assessing a domain that is not easy to define may prove to be difficult. Therefore, perceived competence is easily determined, reported, and compared due to self-report.

As stated earlier, competence can be defined as content-oriented and/or task-oriented. Content-oriented competence gives insight into how comfortable the counselor-in-training is with the subject matter. Moore-Thomas and Day-Vines (2010) contributed

substance to the subject of competence within the school counseling setting by conducting research on the significance of multiculturalism in the K-12 setting. The school setting has become increasingly diverse and professionals must be competent in multiculturalism, group counseling, individual counseling, theories, techniques, and many other subject areas in order to be most effective. The goal of all school counselor preparation programs should be to produce competent counselors in task and content-based competence (Wilkerson & Eschbach, 2009). The importance of overall competence is important in meeting the needs of the individual student. Assessing content-oriented competence can be more objective using criteria-based measures.

An objective scale usually includes a criterion-related assessment such as the National Counselor Examination for Licensure and Certification (NCE). Whereas, perceived learning may be determined through the use of an accepted survey that has been developed to measure the participant's level of confidence. When examining the difference between scores on the NCE, Adams (2005) found that graduates from CACREP accredited programs scored significantly higher ($p=.000$) than students from non-accredited programs.

When examining competence within doctoral counseling programs, Procidano, et al. (1995) attempted to find occurrences of counseling students' professional deficits and related corrective actions that took place in order to enhance the professional. The study showed that 89% of psychology departments reported a student professional deficiency in the past five years. Forty-six percent of the 89% reported a deficiency as "Limited clinical skills". In terms of corrective action, the majority (75%-89%) reported having a stated policy, screening procedures, and a process of evaluation. This study helped shed

light on the pervasiveness of counseling students' professional deficiencies, especially as they relate to "Limited clinical skills". This study appears to be examining the assessment of task-oriented competence.

Even and Robinson (2013) researched the impact of CACREP accreditation on ethical violations and sanctions. The researchers found that fully licensed graduates from CACREP accredited schools had significantly fewer reports of ethical misconduct than graduates from non-accredited schools. The implications of this study suggest accreditation of a counselor education program does prepare students to perform more ethically.

Blending Accreditation with Competence

Accreditation must have a developed set of criteria in order to assess quality. Likewise, competence must have a similar set in order to determine when certain standards have been met. Furthermore, accreditation relies on the premise that students within a program are meeting standards and therefore becoming more competent. The issue of objectively assessing the level of competence that students have obtained arises. Cato (2009) attempted to address several research questions concerning accreditation and competence. Cato (2009) states, "The following overarching themes emerged: (a) resources needed to obtain and maintain CACREP, (b) multiple interpretations of requirements, and (c) validation from having CACREP" (p. 68). In summary, both accreditation and competence are difficult to obtain, define, and maintain. Both accreditation and competence should be viewed as a journey rather than a destination.

Difficulties of Obtaining CACREP Accreditation

CACREP accreditation is a difficult process to navigate. The standards for both

the institution of higher education and the student are strenuous. Some of the standards include (a) additional practicum and internship hours well above the respective state requirement, (b) more strict student to faculty ratios, (c) additional coursework for counselors in training, and (d) the cost of accreditation is extensive. Colleges and universities must weigh the options of becoming CACREP accredited by examining a cost-to-benefit ratio.

Benefits of Obtaining CACREP Accreditation

Benefits of CACREP programs have been identified through research (Milsom & Akos, 2007; Adams, 2005). Some of the benefits include (a) nationally recognized program, (b) a more sought after degree, (c) increased likelihood of additional qualifications for counselors-in-training, such as becoming a National Board Certified Counselor (NBCC), and (d) a distinguishably more rigorous program. Even though the additional standards are more difficult to obtain, the institution of higher education may see an increase in students due to obtaining CACREP accreditation.

CACREP accreditation may increase the notoriety of the program and may increase student enrollment. One issue with increased enrollment is the student to faculty ratio that the program must maintain. The more students that enroll, the more faculty are required, meaning that the cost increases. This is a balancing act that the program must be willing to juggle.

Milsom and Akos (2007) found significantly more CACREP accredited programs produced more NBCC counselors, whereas more non-CACREP accredited programs developed more National Certified School Counselors (NCSC). CACREP accredited programs have significantly higher standards (Milsom & Akos, 2007; Adams, 2005) and

programs such as NBCC alignment with the more rigorous standards. The NCSC credential may be more appealing to school counselors because of the direct relation to the field. One reason may be due to the large amount of non-accredited programs producing school counselors (Milsom & Akos, 2007).

Summary

For the purpose of this study, CACREP and non-CACREP and state-approved colleges and universities offering master's level school counseling programs were identified. The results of the credentialing exams for each type of school were collected via an online survey. The scores were analyzed in order to find differences between the mean results.

CHAPTER THREE: METHODOLOGY

Accreditation is an important aspect of developing a reputable training program at institutions of higher education. Accreditation may improve accountability and patient care. For example, accreditation, in the healthcare system, improves quality and safety (Pomey, Lemieux-Charles, Champagne, Angus, Shabah, & Cantandriopoulos, 2010). Counselor education programs are no exception. Another layer of accountability includes ethical codes. According to the American Counseling Association (ACA), the Association for Counselor Education and Supervision (ACES), and the American Psychological Association (APA) codes of ethics, counselors should practice within their scope of competence (ACA: Section C, ACES Codes 3.04 and 3.05, APA: Standard 2) and maintain appropriate education and training (ASCA, D.1.e.). In order to measure accountability and competence an objective measure should be used. Researchers, such as Hollis (1998) and Schmidt (1999), have noted that continued research should be conducted to examining the relationship between accreditation, such as CACREP, and other variables of counselor preparation. Milsom and Akis (2007) noted future research should be conducted to explore the relationship between CACREP accreditation and success on standardized tests, such as the *Praxis II*: School Guidance and Counselor exam, the NCSCE, and other state licensure exams. The purpose of this study was to broaden the understanding of the overall effects of CACREP accreditation by measuring master's level school counselor's success on credentialing exams.

Research Design

This study used a quantitative research methodology. In order to complete this research, an online survey was used in order to obtain credentialing exam results from

master's level school counselors. A quantitative methodology is best for this study because the theoretical framework has been established, the research questions have one answer, and a survey was administered in order to deductively analyze the question (Creswell, 2009). This study was designed as a cross-sectional study for research question one and a correlational study for research question two. Cross-sectional design is based on examining different participants at one time and only seeks to examine existing differences with no intervention (Salkind, 2000). Correlational design examines the relationship between two or more variables (Salkind, 2000). The entire sample was tested equally and results were analyzed.

Population and Sampling Procedures

Overall demographic information for all participants was analyzed to establish the population information. A sampling of the results were determined by establishing the appropriate confidence interval and effect size. If the sample size were too large then additional variables could be added. If the sample size is too small then additional variables could be included. Due to the research questions centered on a correlation between accreditation and credentialing exams, data was comparable on many different variables, except accreditation of the program in which the participant completed their master's degree in school counseling (Campbell & Stanley, 1966).

The data was disaggregated by the accreditation of the college or university the participant attended. Two groups were established, including CACREP accredited programs, and non-CACREP programs. The results of the data were analyzed based on a range score on the exam.

Strengths and Limitations

There are several strengths and limitations to this study. First, research has indicated the need for future research bridging the gap between accreditation and education testing. The need for future research in this area is necessary. Second, the research design is appropriate for the research questions. Third, the data for the research is accessible and was analyzed in order to draw information out that can aid institutions of higher learning with education decision-making, such as accreditation decisions. Last, the data for the research could provide additions to the importance of credentialing exams, the effects of accreditation on credentialing exams, and how exams offer an objective measure of accreditation based on knowledge and competence.

Limitations of the study include a lack of depth in the research model due to missing qualitative aspects or other forms of data analysis. Data was only collected via a self-reported web-based survey; whereas, collecting ex post facto data or using qualitative methods on perceptions or data triangulation could enhance the depth of the research. Second, confounding variables pose an issue to the results of this study. The study attempted to address several variable, including age, ethnicity, and GPA; however, variables such as admissions standards of the accredited and non-accredited programs and experience and tenure of the faculty were not addressed. Last, the data is not maximally generalizable due to the small sample size and affect size based on the population.

Data Collection

Data was collected using SurveyMonkey, a web-based platform for creating and launching surveys. The survey began with an informed consent (Appendix A) and

continued with the survey questions (Appendix B). The survey included demographic questions, questions related to the student's master's level school counseling program, and questions asking for students to self-report if the participant had taken the *Praxis II*, NCSCE, NCE, or NBPTS, the specific score or score range on the *Praxis II*, if the participant had passed the exam, and the years of experience at the date of testing.

Instrumentation

The following credentialing exams were used as the dependent variables.

Praxis II: School Guidance and Counseling Exam

The Praxis Series exams are developed and adopted by state licensure boards to “ensure that teachers have achieved a specific level of mastery of academic skills, subject area knowledge, and pedagogical knowledge before they grant a teaching license” (Educational Testing Service, 2010). There are two primary types of exams within *The Praxis Series*: including *Praxis I*, which serves as a basic academic competency for teacher candidates, and *Praxis II*, which are the subject knowledge and pedagogical knowledge related to teaching. The *Praxis Series* tests align with state and national content standards and mandates of the No Child Left Behind (NCLB) act (Educational Testing Service, 2010). The *Praxis II* exam measures the basic content knowledge of the subject. The five sections on the *Praxis II: School Guidance and Counseling* exam include (a) counseling and guidance, (b) consulting, (c) coordinating, (d) professional issues, and (e) listening.

About the exam. *The Praxis Series* exams are developed by content experts, outside of Educational Testing Service (ETS) through (a) alignment with national, state, and professional standards, (b) analysis of the overall job outlook for the career choice

based on the licensure option, and (c) a review process of trained writers and test takers. This evidence-centered design process adds to the validity of the test.

The Praxis Series exams use face validity by examining if the questions are related to the subject. The evidence-centered design is a “construct-centered approach to developing tests that begins by identifying the knowledge and skills to be assessed through a job analysis” (Educational Testing Service, 2010). Tests are assessed by National Advisory Committees approximately every five years to ensure that the content of the test continues to align with the subject matter needed for the field.

The *Praxis II: School Guidance and Counseling* exam, test code 0420, consists of 120 multiple choice questions, consisting of approximately 66 questions in the Counseling and Guidance section, approximately 18 questions in the Consulting section, approximately 18 questions in the Coordinating section, approximately 18 questions in the Professional Issues section, and approximately 40 questions in the Listening section. In order to establish reliability a total number of 11,155 participants were administered the *Praxis II: School Guidance and Counseling* exam between September 1, 2007 and July 31, 2010. The range of scores was 250-990 with an interval of 10. The median score was 660, with a range of 620 to 700. The mean score was 654.6 (SD=61.4). The Standard Error of Measurement was 24. The reliability coefficient was 0.89, showing a highly reliable result on the exam.

The ETS recently released the *Praxis II: Professional School Counselor* exam, test code 0421, which is being administered for several states at the choice of the test-taker. The test consists of 120 multiple choice questions and each test-taker is offered two hours for administration. There are four major content categories for the test, including

approximately 22 questions in the Foundations category, approximately 54 questions in the Delivery of Service category, approximately 18 questions in the Management category, and 26 questions in the Accountability. This test does not include a listening section. The test topics are comprised of Foundations, including the history and role of the professional school counselor, human growth and development, ethics, and legalities, and Delivery of Services, including counseling and consultation and collaboration.

Requirements for certification. The *Praxis II: School Guidance and Counseling* exam does not grant a certification/license alone, but is required by many states to be submitted for certification/licensure as a school counselor. According to ASCA (American School Counselor Association, 2012), 13 states mention a Praxis II exam in order to obtain a state certification/license. Nearly every state requires some type of practicum, internship, or experience in order to submit for state certification/license.

Furthermore, ASCA (American School Counselor Association, 2012) states most public school settings require an advanced degree and courses in areas such as (a) human growth and development, (b) theories, (c) individual counseling, (d) group counseling, (e) social and cultural foundations, (f) testing/appraisal, (g) research and program evaluation, (h) professional orientation, (i) career development, (j) supervised practicum, and (k) supervised internship.

National Certified School Counselor Examination

The NCSCE is based on a job analysis and activities of a practicing school counselor. The exam attempts to provide a job-related certification that is aligned with the *Standards for Educational and Psychological Testing* and the National Commission

for Certifying Agencies (NCCA) standards (National Board for Certified Counselors, 2012).

About the exam. The NCSCE incorporates 40 multiple choice, based on general counselor knowledge aligned with the NCE, and seven simulated school counseling scenarios, based on school counseling specific knowledge. The areas covered by the scenarios include (a) school counseling program delivery, (b) assessment and career development, (c) program administration and professional development, (d) counseling process concepts and applications, and (e) family-school involvements. Each scenario addresses components, including (a) scenario, which offers introductory information, (b) information gathering, which requires examinees to list relevant data that should be obtained given the scenario, and (c) decision making, which allows opportunity for the examinee to outline the single or multiple option approach to resolving the scenario. The examinee is allowed four hours to complete the exam.

Examinees are able to complete the NCSCE separately, if they have a passing score on the NCE or examinees are able to sit for the NCC and NCSCE concurrently.

Requirements for certification. The NCSCE makes a distinction between several different types of applicants attempting to sit for the exam, namely certified/licensed school counselors and counselor educators. First, counselors who are currently certified/licensed as a school counselor by a state's department of education are not required to have specific courses in cultural diversity in counseling, group work, career and lifestyle development, appraisal, and the fundamentals of school counseling; however, applicants must hold a master's degree or higher in counseling from a regionally accredited college or university. All applicants, with the exception of

counselor educators, must have at least three academic years of postgraduate counseling work experience and counseling supervision in a preK-12 school setting. Second, counselor educators may apply for the NCSCE without the years of experience and supervision as a school counselor; however, applicants must have three academic years documented as a full-time employee in a school counselor preparatory program at a regionally accredited college or university, with at least 50 percent of assigned duties in training school counseling students, including supervision of school counseling students.

In order to successfully pass the NCSCE, examinees must obtain a total score greater than or equal to the minimum passing score for both the general knowledge and school counseling knowledge sections. Score reports are divided into two primary sections: (a) five subscale scores for the Information Gathering (IG) and the Decision-Making (DM) sections for the scenario section and (b) five subscale scores for the multiple choice items. The minimum passing score for the general knowledge section is determined using a modified Angoff procedure. According to Livingston and Zieky (1982), the modified Angoff procedure begins with the selection of a panel of judges.

The authors continue by stating, the judges rate each question by determining the approximate number of examinees that should answer each question successfully, based on a hypothetical “minimally competent practitioner” (MCP). The rating of each question is averaged to determine a passing point. A 95 percent confidence interval is calculated using the standard error of measure and inter-rater reliability. Score reports indicate the total number of correct responses and indicate the passing score based on the Angoff procedure.

National Certified Counselor Exam for Licensure and Certification

The NCE can benefit examinees by aiding in both national and state certifications (National Board for Certified Counselors, 2012). “The purpose of the NCE is to assess knowledge, skills, and abilities viewed as important for providing effective counseling services” (National Board for Certified Counselors, 2012). Like the NCSCE, the NBCC has crafted the NCE to serve as a reflection of current job duties and expected knowledge of current practicing counselors. NBCC has also developed a combined examination where an applicant can sit for both the NCE and NCSCE concurrently.

About the exam. The NCE is comprised of 200 multiple choice questions and examinees are allowed four hours to complete the exam. The October 2012 version of the NCE covers five major work behavior areas, including: (a) fundamental counseling issues, (b) counseling process, (c) diagnostic and assessment services, (d) professional practice, and (e) professional development, supervision, and consultation. Furthermore, the NCE includes items in alignment with the eight CACREP core areas, including: (a) human growth and development, 12 items, (b) social and cultural diversity, 11 items, (c) helping relationships, 36 items, (d) group work, 16 items, (e) career development, 20 items, (f) assessment, 20 items, (g) research and program evaluation, 16 items, and (h) professional orientation and ethical practice, 29 items.

Requirements for certification. The following requirements are necessary in order to be NCE certified: (a) completion of a master’s degree or higher in counseling, (b) at least 48 graduate credit hours in human growth and development theories in counseling, social and cultural foundations in counseling, helping relationships in counseling, group counseling theories and processes, career counseling and lifestyle

development, assessment in counseling, research and program evaluation, professional orientation to counseling, and at least six semester hours of counseling field experience, (c) passing scores on the NCE, and (d) at least 3,000 hours of post-graduate counseling experience, including a minimum of 100 hours of supervision over a 24-month post-master's period. The experience requirement is waived if an examinee graduated from a CACREP accredited program.

In order to successfully pass the NCE, 160 items, out of the 200 total, are scored to determine passing scores. The remaining 40 items are field test items and are not included in scoring. Each scored item has a one point value, meaning the maximum score is 160. The minimum score is determined by using a modified Angoff procedure, which was described previously. Score reports indicate the total number of correct responses for 13 domains and the sum of all domains, giving the examinee a total score, and indicate the passing score based on the Angoff procedure.

National Board for Professional Teaching Standards

The NBPTS offers a certification for school counseling/early childhood through young adulthood. "The Early Childhood through Young Adulthood/School Counseling certificate is appropriate for counselors who work with students in grades preK-12 (3-18+) in educational settings" (National Board for Professional Teaching Standards, 2013, p. 1). The NBPTS is a portfolio-based assessment that offers school counselors an opportunity to provide artifacts and reflections to determine competence in school counseling through alignment with sound practice standards.

About the exam. The exam consists of two parts: (a) a portfolio of classroom samples, including student's work and video recordings of instruction and (b) a

computer-based assessment with six content knowledge based exercises. Within the assessment section specific entries are addressed, including (a) human growth and development, (b) school counseling program, (c) diverse populations, (d) theory, (e) data and planning, and (f) collaboration. Within the portfolio section four school counseling specific entries are addressed, including (a) addressing personal/social needs, (b) exploring career development, (c) maximizing academic learning, and (d) documented accomplishments that contribute to student learning. There are a total of 10 elements for the total assessment and portfolio, including four entries the portfolio and six exercises for the assessment.

Requirements for certification. In order to be eligible for national board certification, an examinee must (a) hold a bachelor's degree, (b) have completed three full years of teaching/school counseling, and (c) possess a valid state teaching/school counseling license, or, if teaching where a license is not required, have taught in schools recognized and approved to operate by the state.

Most NBPTS submissions are evaluated by 17 assessors who have meet several qualifications, including: (a) hold a bachelor's degree from an accredited institution, (b) three years of school counseling experience, (c) be current in domain areas for the exam, (d) complete appropriate assessor training, (e) hold a current certification in school counseling, and (f) hold NPBTS certification in the area that is being evaluated. Each section of the assessment and portfolio is scored on four levels. Level One scores range from 0.75 to 1.74, indicating little or no evidence, Level Two scores range from 1.75 to 2.74, indicating limited evidence, Level Three scores range from 2.75 to 3.74, indicating clear evidence, and Level Four scores range from 3.75 to 4.25, indicating clear,

consistent, and convincing evidence. Each score on each section is weighted to give a total score. In order to successfully pass the portfolio an examinee must have a total weighted score of 275 or higher. Each section of the portfolio and assessment must also have a numeric score, meaning that no sections can be skipped.

Procedures and Data Analysis

Descriptive statistics were used to establish the total number of participants for both CACREP and non-CACREP programs. The mean age of participants and the ethnicity of the participant will also be reported. Research question one sought to only examine observations of range of Praxis II results related to accreditation; therefore, a cross-section design was used to examine existing differences. Research question two sought to identify a relationship between two or more variables; therefore, a correlational, non-experimental study was conducted. Correlational studies require at least one independent variable, in this case accreditation, with two or more groups, CACREP and non-CACREP accredited. The data was ordinal data and entered into the Statistical Package for the Social Sciences (SPSS). Gender was ordinal data and applied the value of one for males and two for females. Ethnicity of the participants was ordinal data and entered with values assigned. Accreditation was ordinal data and assigned as one for CACREP accredited and two for non-CACREP accredited. The range score for the *Praxis II* exam was interval data and entered as a variable. The average performance on the *Praxis II* exam was analyzed using an independent t-test. The independent t-test compared the means of the two groups to determine homogeneity by using Levene's Test for Equality of Variance. The independent t-test was used to determine if the means of the two groups, CACREP and non-CACREP, are statistically different or not.

CHAPTER FOUR: RESULTS

Identifying variables is an essential step in the process of developing a sound research proposal. The variables should be directly related to the research topic and research questions. Research is conducted by identifying two major types of variables including independent, which is the manipulated variable, and dependent, which is the influenced variable. Variables in non-experimental research studies may denote variables as predictor and criterion. Furthermore, non-experimental designs limit their variables to only certain options, allowing for more controlled responses (Patten, 1997). Non-experimental designs allow the research to observe, rather than manipulate, based on the criteria set (Patten, 1997).

Multiple variables may contribute to overall test scores. Accreditation, age, gender, ethnicity, GPA, and years of experience may all be considered contributing variables to the overall performance on an exam. The *Praxis II*: School Guidance and Counseling exam, NCE, NCSCE, and the NBPTS can serve as a measure of knowledge within the field of counseling. The purpose of this study is to examine the connection between accreditation and credentialing exams based on accreditation, age, gender, ethnicity, and years of experience. Accreditation was differentiated by institutions recognized by CACREP and those that are not recognized by CACREP. Age and years of experience are listed as continuous variables. Gender and ethnicity are listed as categorical variables.

Data Collection

Data, including demographic data, accreditation data, and results on credentialing exams was gathered using an online survey through SurveyMonkey, a web-based platform for creating and launching surveys for the purpose of collecting data (SurveyMonkey, 2013). Data was collected in order to analyze the correlation between accreditation and credentialing exams. The specific demographic data requested included (a) gender, (b) age, (c) GPA for the participant's school counseling program, (d) ethnicity, (e) accreditation, CACREP or non-CACREP, of the participant's school counseling program, and (f) graduation year of the participant from their school counseling program. The credential exam data consisted of (a) if the participant had taken the *Praxis II: School Guidance and Counseling*, (b) the results of the *Praxis II* exam, both numerical value and range of score, if the participant had taken the exam, (c) if the participant had passed the *Praxis II* in their state, (d) the number of years of experience at the date of taking the *Praxis II*, (e) if the participant had taken the NCSCE, (f) if the participant had passed the NCSCE, (g) the number of years of experience at the date of taking the NCSCE, (h) if the participant had taken the NCE, (i) if the participant had passed the NCE, (j) the number of years of experience at the date of taking the NCE, (k) if the participant had attempted the NBPTS: School Counseling/Early Childhood through Young Adulthood certification, (l) if the participant had completed the NBPTS, (m) if the participant had passed the NBPTS, and (n) the number of years of experience at the date of the NBPTS.

Data Analysis

A quantitative approach was undertaken to answer two research questions. Data analysis software, SPSS, was used to calculate descriptive and inferential statistics relevant to the research questions. Demographic statistics, including frequencies and percentages, were also calculated using SPSS to provide a profile of participants. Research Question 1 was answered using an independent-samples *t*-test, whereas Research Question 2 was assessed using a multiple regression. The two research questions were:

Research Question 1 (RQ1): Does CACREP accreditation affect exam results on credentialing exams for graduate school counseling students?

Research Question 2 (RQ2): How do accreditation of graduate program, age, gender, ethnicity, and Grade Point Average (GPA) relate to *Praxis II* exam scores?

Prior to conducting the inferential analyses, data cleaning was undertaken, which consisted of checking for outliers and missing data. Statistical assumptions, including normality of distributions and homogeneity of variance, were checked to ensure planned tests were valid. Highlighted in Table 1 are the variables, levels, and associated statistical tests that were conducted in regard to each hypothesis.

Table 1

<i>Study Variables and Statistical Test Used to Evaluate Two Research Questions</i>			
Research Question	Independent/Predictor Variables	Dependent/Criterion Variable	Statistical Test
1	CACREP Accreditation (yes, no)	<i>Praxis II</i> score	Independent-samples <i>t</i> -test
2	Accreditation, age, gender, ethnicity, GPA	<i>Praxis II</i> score	Hierarchical Multiple regression

Demographics

Table 2 below provides demographic data gathered from the survey. After data cleanup, a total of 68 participants completed the online survey ($n=68$). Of the 68 participants 53 were females (77.9%) and 15 were males (22.1%). Interestingly, 50 participants (73.6%) reported as under the age of 44, meaning that no less than half of the total number of participants ($n=35$) would be females under 44 years of age. Furthermore, 56 participants reported their ethnicity as Caucasian (82.4%), 8 participants reported as Black or African American (11.8%), 2 reported as Hispanic or Latino (2.9%), and 2 declined to identify (2.9%). These three categories indicate that approximately two out of three participants were Caucasian females under the age of 44. Out of all participants 32 (47.1%) reported that their master's level school counseling program was CACREP accredited, meaning that 36 (52.9%) participants reported graduating from a non-CACREP accredited program.

In attempts to analyze data from those participants that completed the *Praxis II* exam from CACREP accredited and non-CACREP accredited programs, therefore addressing research question one, data was limited to only students that reported a range of scores on their *Praxis II* exam ($n=18$). Out of the 68 total participants 18 participants indicated that they completed the *Praxis II* (26.5%). Out of the 18 total participants, 14 identified themselves as female (77.8%) and four identified themselves as male (22.2%). The vast majority of participants ($n=13$; 72.2%) indicated they were under the age of 44 and 77.8% ($n=14$) reported their ethnicity as Caucasian. Furthermore, 61.1% ($n=11$) indicated that they completed a CACREP accredited master's level school counseling program.

Table 2

Participant Demographics

All Participants				Participants Included in Analyses			
Variable	<i>n</i>	%	Variable				
Gender			Gender				
Female	53	77.9	Female	14	77.8		
Male	15	22.1	Male	4	22.2		
Total	68	100.0	Total	18	100.0		
Age			Age				
25 to 34	25	36.8	25 to 34	8	44.4		
35 to 44	25	36.8	35 to 44	5	27.8		
45 to 54	11	16.2	45 to 54	3	16.7		
55 to 65	7	10.3	55 to 65	2	11.1		
Total	68	100.0	Total	18	100.0		
Ethnicity			Ethnicity				
Black or African American	8	11.8	Black or African American	3	16.7		
Caucasian	56	82.4	Caucasian	14	77.8		
Hispanic or Latino	2	2.9	Hispanic or Latino	1	5.6		
Decline to Identify	2	2.9	Total	18	100.0		
Total	68	100.0					
Accreditation of Program			Accreditation of Program				
Yes	32	47.1	Yes	11	61.1		
No	36	52.9	No	7	38.9		

Research Question 1

Research Question 1 was assessed using an independent-samples *t*-test to determine if *Praxis II* scores differed between those who attended a CACREP accredited school and those who attended an unaccredited school. The dependent variable was *Praxis II* score, which was measured at the ordinal level. *Praxis II* score was scaled as 2 = *Below 300*, 3 = 300 – 399, 4 = 400 – 499, 5 = 500 – 599, 6 = 600 – 699, 7 = 700 – 799, 8 = 800 – 899, and 9 = 900 or above. The independent variable was CACREP accreditation, which was measured at the nominal level as 1 = *yes* and 2 = *no*.

Data cleaning. Data were screened for missing values and dependent variable data were additionally screened for univariate outliers. Missing data were investigated using frequency counts. Of 68 cases, values were missing for *Praxis II* score for 50 cases. Of the remaining cases, none were missing data for accreditation status. Outliers were identified by comparing z-scores to a critical value of ± 3.29 , $p < .001$, a procedure recommended by Tabachnick and Fidell (2012). Values outside of the range of $[-3.29, 3.29]$ represent scores that are more than three standard deviations away from the mean, and thus are outliers. The distribution of *Praxis II* scores was evaluated for outliers and none were identified. Thus, 18 cases were included in the independent-samples *t*-test for Research Question 1 ($n = 18$). Descriptive statistics for *Praxis II* scores for the two levels of accreditation are displayed in Table 3.

Table 3

Descriptive Statistics for Praxis II Scores by Accreditation Status

Accredited	<i>n</i>	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
Yes	11	3.00	9.00	6.91	1.514	-1.718	4.781
No	7	2.00	7.00	5.86	1.864	-1.874	3.432

Normality. The assumption of normality was tested prior to running the *t*-test. The dependent variable was analyzed for normality within each of the two groups of the independent variable. The skew coefficients were divided by the skew standard errors to obtain z-skew coefficients, which were used to test whether the distributions were normally distributed. Z-kurtosis coefficients were calculated in the same manner. According to Tabachnick and Fidell (2012), z-skew and z-kurtosis coefficients exceeding the critical value of ± 3.29 indicate significant skew or kurtosis, which indicates non-normality. Based on the evaluation of the z-skew and z-kurtosis coefficients, the distribution for accredited institutions was significantly leptokurtic (Table 4). However,

as there is no commonly used transformation for correcting positive kurtosis (Neuendorf, 2011), data for this variable were left untransformed and assumed suitable for inclusion in the analysis.

Table 4

Descriptive Statistics for Assessing Normality of Praxis II Scores

Accredited	<i>n</i>	Skewness	Std. error of skew	z-skew	Kurtosis	Std. error of kurtosis	z-kurtosis
Yes	11	-1.718	0.661	-2.599	4.781	1.279	3.738
Large	7	-1.874	0.794	-2.360	3.432	1.587	2.163

Homogeneity of variance. The homogeneity of variance assumption was tested using Levene's Test of Equality of Error Variance. The significance of the test indicates whether the error variance of a dependent variable is equal across groups of an independent variable. Results from the test indicated that the distribution of the dependent variable did meet the assumption of homogeneity of variance, $p = .425$.

Results for Research Question 1

An independent-samples *t*-test was conducted to determine if a difference in *Praxis II* scores existed based on CACREP accreditation status. Results from the analysis were non-significant, $t(16) = 1.316$, $p = .207$. This indicates there was no significant difference in *Praxis II* scores between those who attended a CACREP accredited school and those who attended an unaccredited school.

Research Question 2

Research Question 2 was assessed using a multiple regression analysis to determine if accreditation of graduate program, age, gender, ethnicity, and GPA significantly predict *Praxis II* scores. The criterion variable was *Praxis II* scores, which were measured as described in the analysis for Research Question 1. The predictor

variables were accreditation of graduate program (yes, no), age (25-34, 35-44, 45-54, 55-64), gender (male, female), ethnicity (Black/African American, Caucasian, Hispanic/Latino), and GPA (on a scale from 2.59 to 4.0). A hierarchical multiple regression was conducted to assess the effects of the independent variables (accreditation, age, gender, ethnicity, and GPA) on the dependent variable (*Praxis II* scores). The categorical variables were dummy coded, creating multiple variables for each predictor. Therefore, each group of predictor variables was entered in its own step of the regression, creating five models.

Data cleaning. Data were screened for missing values and univariate outliers among the dependent variable in the same manner as described for Research Question 1. Of the total of 18 cases remaining after removing cases with data missing for *Praxis II* score results, none were missing data for the predictor variables. Multivariate outliers were evaluated using Mahalanobis distance. Mahalanobis distances were computed for each variable and these scores were compared to a critical value from the chi-square distribution table. Mahalanobis distance for ten predictor variables indicates a critical value of 29.59 and no cases within the distributions were found to exceed this value. As such, all 18 cases were included in the regression analysis ($n = 18$). Descriptive statistics for overall *Praxis II* scores and GPA are displayed in Table 5.

Table 5

Descriptive Statistics for Praxis II Scores and GPA

Variable	<i>n</i>	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
<i>Praxis II</i>	18	2.00	9.00	6.50	1.689	-1.566	2.722
GPA	18	3.59	4.00	3.93	0.123	-1.640	1.974

Normality. The assumption of normality was tested prior to running the regression in the same manner as described for Research Question 1. The dependent

variable and GPA were analyzed for normality. Based on the evaluation of the z-skew and z-kurtosis coefficients, neither distribution had significant skewness or kurtosis (Table 6). Thus, the variables were assumed to be normally distributed and suitable for inclusion in the parametric analysis.

Table 6

Descriptive Statistics for Assessing Normality of Praxis II Scores and GPA

Variable	<i>n</i>	Skewness	Std. error of skew	z-skew	Kurtosis	Std. error of kurtosis	z-kurtosis
<i>Praxis II</i>	18	-1.566	0.536	-2.922	2.722	1.038	2.622
GPA	18	-1.640	0.536	3.060	1.974	1.038	1.902

Linearity and homoscedasticity. The assumptions of linearity and homoscedasticity were checked by visual evaluation of a standardized residual plot. According to Tabachnick and Fidell (2012), an approximately even, centralized shape around 0 indicates adequate homoscedasticity and linearity. The band enclosing the residuals appears approximately equal in width across all values of the predicted DV, therefore linearity and homoscedasticity were assumed (Figure 1).

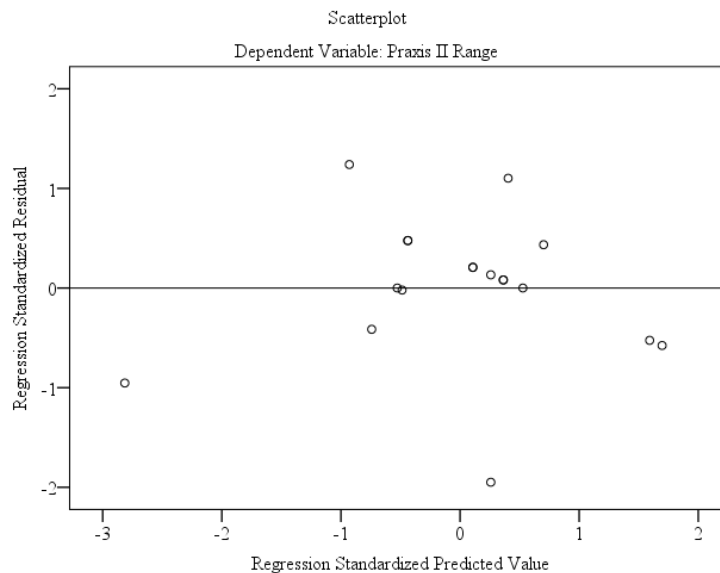


Figure 1. Standardized residual plot

Multicollinearity. The assumption of absence of multicollinearity was evaluated by assessing tolerance (T) and variance inflation factor (VIF) values that were obtained through the regression analysis. T values of less than .10 or VIF values of greater than 10 are indications of multicollinearity (Pallant, 2007). T and VIF values from the present analysis did not indicate multicollinearity (Table 6); thus the assumption was met.

Results for Research Question 2

Using SPSS 20.0, Hypothesis 2 was assessed using a hierarchical multiple regression analysis to test whether accreditation, age, gender, ethnicity, and GPA significantly predicted *Praxis II* scores. Accreditation was entered into the regression as the first step. The age variables were entered into the second step. Gender was entered after that, followed by ethnicity variables. The fifth and final step added GPA. Results from the analysis indicated that the five predictors did not significantly predicted *Praxis II* scores, as none of the five models was significant. Additionally, when the effects of the predictors were considered separately, none of them significantly predicted *Praxis* scores. Details for all models and coefficients for the final model are displayed in Table 7.

Table 7

Model Summary Generated from Multiple Regression Analysis of Hypothesis 2

Model	<i>R</i>	ΔR^2	Standard Error	ΔF	Sig		
1	.200	.040	2.988	2.712	.104		
2	.230	.053	3.039	0.278	.841		
3	.237	.056	3.059	0.222	.640		
4	.277	.077	3.102	0.433	.730		
5	.279	.078	3.128	0.067	.797		

	Unstandardized Coefficients		Standardized Coefficients	t	Sig	T	VIF
	B	Std. Error	β				
(Constant)	-2.619	9.698		-0.270	.788		
Accreditation	1.218	0.890	.203	1.369	.177	.738	1.354
Age 35-44	-0.506	0.919	-.081	-0.550	.584	.752	1.330
Age 45-54	0.122	1.257	.015	0.097	.923	.674	1.485
Age 55-64	0.219	1.462	.022	0.150	.881	.730	1.370
Gender	0.713	0.996	.096	0.716	.477	.890	1.123
African American	1.925	2.686	.208	0.717	.476	.193	5.194
Caucasian	1.022	2.476	.130	0.413	.681	.162	6.176
Hispanic	2.771	3.355	.157	0.826	.412	.448	2.232
GPA	0.669	2.588	.038	0.259	.797	.758	1.319

Note. DV: *Praxis II* scores

Summary

The aim of the study was twofold: (a) to determine if a significant differences in results on the *Praxis II* exam could be found based on accreditation of the participants' master's level school counseling program, and (b) to determine if age, gender, ethnicity, and GPA predicted *Praxis II* scores. First, in determining if results on the *Praxis II* were related to accreditation no statistical significance was found; therefore, the null hypothesis is retained. Due to the small sample size and the unreliability of the data a Type II error is possible. Second, in determining if age, gender, ethnicity, and GPA predicted *Praxis II* results no statistically significant predictor was found; therefore, the null hypothesis for research questions two is rejected. Due to the possibility of a false negative result there is a possibility of a Type I error.

The sample of participants that was used for this research seemed to match well with the field of school counseling, meaning that the majority of current school counselors would probably best identify themselves as female, Caucasian, and under the age of 44. Interestingly, the number of accredited versus non-accredited school counseling programs used for this study was also indicative of the current field, meaning that approximately half of all school counseling programs used for this research were accredited and nearly half of the population of school counseling programs are accredited. This research indicates that approximately one out of four counselors (26.5%) has attempted the *Praxis II* exam, which may or may not be indicative of all school counselors. The statistical analyses used included independent t-tests and a multiple regression. These statistical analyses were appropriate given the nature of the research questions and provided appropriate analysis of the data.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The need to strengthen the link between accreditation, as a standard for practice, and credentialing exams, as a measure of competence, is apparent. Based on the literature identified both establishing a standard of practice and measurement of that standard is difficult. The primary issue that seems to arise is the subjective, qualitative nature of the counseling profession; therefore, to impose quantitative qualities seems to minimize the essence of the profession. However, the research both identified and provided attempts to close the gap and add to the current body of knowledge.

Conclusions

This research found no statistically significant data to support CACREP accreditation had an effect on the *Praxis II*; however, the sample size was low and may have been impacted by other contributing and/or unidentified variables. Second, this research found that neither age, gender, ethnicity, nor Grade Point Average (GPA) had a significant relationship with *Praxis II* results. This, too, may have been influenced by the sample size; however, based on demographics in the field the results may be marginally generalizable.

Implications for Practice

The implications of this study may change the perceptions of accreditation or the role that credentialing exams play in measuring competence; however, as with any research, cautions should be taken when attempting to overgeneralize or stereotype. The most important take away may be that alignment between the *Praxis II* and standards of accreditation may need to be tightened.

Recommendations for Research

Future research should include more predictive and criterion variables to strengthen the study. The addition of a qualitative aspect to this study may answer the “why” question and increase the depth of understanding from the participants’ point of view. For example, researchers could conduct interviews of master’s level school counseling students inquiring about their perceptions of accreditation and the reasons for selecting certain programs. This study could be replicated using the same statistical measures for any state, then a meta-analysis could be compiled for the United States to increase generalizability. Using a standardized method of data gathering, such as ex post facto model from credentialing or professional organizations, analysis, such as additional independent t-tests on means of exam results, and isolation of the accreditation variable based on individual standards, could prove to strengthen the study and add beneficial information to the field and the current body of knowledge.

REFERENCES

- Adams, S. A. (2005). Does CACREP accreditation make a difference? A look at NCE results and answers. *Journal of Professional Counseling: Practice, Theory, & Research*, 33(2), 60-76.
- Altshuler, S. J., & Webb, J. R. (2009). School social work: Increasing the legitimacy of the profession. *Children & Schools*, 31(4), 207-218.
- American Counselor Association. (2005). Code of ethics. Retrieved from <http://www.counseling.org/Files/FD.aspx?guid=ab7c1272-71c4-46cf-848c-f98489937dda>
- American School Counselor Association. (2012). *State Certification Requirements*. Retrieved from <http://www.schoolcounselor.org/content.asp?contentid=242>
- American School Counselor Association. (2010). *Ethical Standards for School Counselors*. Retrieved from <http://asca2.timberlakepublishing.com//files/EthicalStandards2010.pdf>
- Association for Counselor Education and Supervision (1991). Ethical guidelines for counseling supervisors. Retrieved from http://www.acesonline.net/ethical_guidelines.asp
- American Psychological Association. (2010). Ethical principles of psychologists and code of conduct. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- American Psychological Association. (2012). What is the purpose of accreditation? Retrieved from <http://www.apa.org/ed/accreditation/about/about-accreditation.aspx?item=6>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Worth Publishers.
- Bashook, P. G. (2005). Best practices for assessing competence and performance of the behavioral health workforce. *Administration and Policy in Mental Health*, 32(5/6), 563-592, doi: 10.1007/s10488-005-3265-z
- Bourg, E. F. (1986). Evaluation of student competence. In J. E. Callan, D. R. Peterson, & G. Stricker (Eds.), *Quality in professional psychology training: A national conference and self-study*, 83-96. National Council of Schools of Professional Psychology.
- Campbell, D. T., & Stanley, J. C. (1966). *Experimental and quasi-experimental designs for research*. Boston, MA: Houghton Mifflin.

- Cato, S. C. (2009). *Historically Black Colleges and Universities and CACREP Accreditation: Counselor Educators' Perceptions and Barriers in Relation to Accreditation*. ProQuest.
- Cobb, W. D. (2010). A comparative analysis of Alabama *Praxis II* examination scores between online and traditional graduate students at an Alabama institution of higher learning (Doctoral dissertation). Retrieved from ProQuest. (3432205)
- Council for Accreditation of Counseling and Related Educational Programs. (2009). Retrieved from <http://www.cacrep.org/doc/2009%20Standards%20with%20cover.pdf>
- Council for Higher Education Accreditation. (2013). *2013-2014 Directory of CHEA-Recognized Organizations*. Retrieved from http://www.chea.org/pdf/2013-2014_Directory_of_CHEA_Recognized_Organizations.pdf
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Educational Testing Service. (2010). *Praxis Technical Manual*. Retrieved from <http://www.ets.org/Media/Tests/PRAXIS/pdf/PraxisTechnicalManual.pdf>
- Educational Testing Service. (2012). *Contact ETS Research-Data Requests*. Retrieved from http://www.ets.org/research/contact/data_requests/
- Epstein, R. M. & Hundert, E. M. (2002). Defining and assessing professional competence. *Journal of the American Medical Association*, 287(2), 226-235.
- Even, T. A., & Robinson, C. R. (2013). The impact of CACREP accreditation: A multiway frequency analysis of ethical violations and sanctions. *Journal of Counseling & Development*, 91, 26-34.
- Gibson, D. M., Dollarhide, C. T., & Moss, J. M. (2010). Professional identity development: A grounded theory of transformational tasks of new counselor. *Counselor Education & Supervision*, 50, 21-38.
- Herlihy, B., Gray, N., & McCollum, V. (2002). Legal and ethical issues in school counselor supervision – Special issue: legal and ethical issues in school counseling. *Professional School Counseling*, 6(1), 55-60.
- Hollis, J. W. (1998). *Counselor preparation 1996-98: Programs, faculty, trends* (9th ed.). Muncie, IN: Accelerated Development.

- Li, C., Lampe, R., Trusty, J. G., & Lin, Y. (2009). Cluster analysis of impaired counseling students: A survey of master's level CACREP-accredited programs. *Journal of Professional Counseling: Practice, Theory, and Research*, 37(1), 38-50.
- Livingston, S. A., & Zieky, M. J. (1982). *Passing Scores: A Manual for Setting Standards of Performance and Occupational Tests*. Retrived from: http://www.ets.org/Media/Research/pdf/passing_scores.pdf
- Milsom, A. & Akos, P. (2007). National certification: Evidence of a professional school counselor? *Professional School Counseling*, 10(4), 346-351.
- Moore-Thomas, C. & Day-Vines, N. (2010). Culturally competent collaboration: School counselor collaboration with African American families and communities. *Professional School Counseling*, 14(1), 53-63.
- National Board for Certified Counselors. (2012). *National Certified School Counselor Examination (NCSCCE) Additional Information for Candidates*. Retrieved from <http://www.nbcc.org/Assets/Exam/handbooks/NCSCCE.pdf>
- National Board for Professional Teaching Standards. (2013). *ECYA/School Counseling Assessment at a Glance*. Retrieved from <http://www.nbpts.org/sites/default/files/documents/certificates/nbpts-certificate-ecya-sc-assessment.pdf>
- Neuendorf, K. (2011). Transforming data. Retrieved from <http://academic.csuohio.edu/kneuendorf/c63111/hand21.pdf>
- Nolan, E. J. (1978). Leadership interventions for promoting personal mastery, *Journal for Specialist in Group Work*, 3(3), 132-138.
- Pallant, J. (2007). *SPSS survival manual* (3rd ed.). Berkshire, UK: Open University Press.
- Piaget, J. (1969). *The psychology of the child*. New York, NY: Basic Books.
- Pomey, M., Lemieux-Charles, L., Champagne, F., Angus, D., Shabah, A., & Cantandriopoulos, A. (2010). Does accreditation stimulate change? A study of the impact of the accreditation process on Canadian healthcare organizations. *Implementation Science*, 5(31), 1-14.
- Pope, K. S. & Vasquez, M. J. T. (2007). Sexual relationships with clients. *Ethics in psychotherapy and counseling: A practical guide* (3rd ed.). (pp.173-200). San Francisco, CA: Jossey-Bass.

- Procidano, M. E., Busch-Rossnagel, N. A., & Geisinger, K. F. (1995). Responding to graduate students' professional deficiencies: A national survey. *Journal of Clinical Psychology, 51*(3), 426-433. doi: 10.1002/1097-4679(199505)51:3<426::AID-JCLP2270510318>3.0.CO;2-X
- Rape, Abuse, and Incest National Network. (n.d.). Retrieved from www.rainn.org
- Roe, R. A. (2002) What makes a competent psychologist? *European Psychologist, 7*(3), 192-202 doi:10.1027//1016-9040.7.3.192
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology, 21*(2). 95-103.
- Salkind, N. J. (2000). *Exploring Research* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Schmidt, J. J. (1999). Two decades of CACREP and what do we know? *Counselor Education and Supervision, 39*(1). 34-45.
- Shaw, B. F. and Dobson K. S. (1988). Competency judgments in the training and evaluation of psychotherapists. *Journal of Consulting and Clinical Psychology, 56*, 666-672.
- Southern Association of Colleges and Schools. (n.d.). Retrieved from <http://www.sacscoc.org>
- SurveyMonkey. (2013). Retrieved from www.surveymonkey.com
- Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Boston, MA: Allyn and Bacon.
- Wergin, J. F. (2005). High education: Waking up to the importance of accreditation. *Change, 37*(3), 35-41.
- Wheeler, S. (2002). Nature or nurture: Are therapists born or trained? *Psychodynamic Practice, 8*(4), 427-441.
- Wilkerson, K. & Eschbach, L. (2009). Transformed school counseling: The impact of a graduate course on trainees' perceived readiness to develop comprehensive, data-driven programs. *Professional School Counseling, 13*(1), 30-37.
- Virginia Board of Counseling (2010). Regulations governing the practice of professional counseling. Retrieved from <http://www.dhp.state.va.us/counseling/leg/LPC%204-14-10.doc>

Virginia Department of Education. (2012). Retrieved from
http://www.doe.virginia.gov/teaching/educator_preparation/college_programs/colleges.shtml#lu

8VAC20-22-10 *et. seq* (2007). *Licensure Regulations for School Personnel*. Retrieved from http://www.doe.virginia.gov/teaching/licensure/licensure_regs.pdf

APPENDICES

APPENDIX A
Informed Consent

Informed Consent

Dear Prospective Participant:

My name is Richard Justin Silvey and I am a doctoral student in the Counseling Psychology department at Argosy University working on my dissertation. This study is a requirement to fulfill my degree and will not be used for decision-making by any organization. This study is for research purposes only.

You are cordially invited to volunteer your participation in my dissertation research. The purpose of this research is to examine The Effects of Council for Accreditation of Counseling and Related Educational Programs (CACREP) Accreditation on Credentialing Exam Results.

What Will Be Involved If You Participate?

Your participation in this study is completely voluntary. If you participate in this research, you will be asked to complete and/or participate in an online survey.

How Long Will This Study Take?

The research will be conducted between 6/19/2013 and 7/5/2013. You will be asked to participate during this timeframe. It is recommended that you have access to any credentialing exam results that you have attempted (i.e. *Praxis II*: School Guidance and Counseling, National Certified School Counselor Examination (NCSCE), National Certified Counselor exam (NCE), and National Board for Professional Teaching Standards (NBPTS) for School Counseling/Early Childhood through Young Adulthood). The survey will take 5-10 minutes to complete.

What If You Change Your Mind About Participating?

You can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether to participate or to discontinue participating will not jeopardize your future relations with Argosy University or your school district. You can do so without fear of penalty or negative consequences of any kind.

How Will Your Information Be Treated?

The information you provide for this research will be treated confidentially, and all data (written and recorded) will be kept securely. Written documentations will be stored in a locked file cabinet, accessible only by me, in my home. Recorded data and transcribed data will be stored on my personal password protected laptop, which accessible only by me, then transferred to the locked cabinet after the research is completed. Results of the research will be reported as summary data only, and no individually identifiable

information will be presented. In the event your information is quoted in the written results, I will use pseudonyms or codes to maintain your confidentiality.

All information obtained will be held with the strictest confidentiality. You will be asked to refrain from placing your name or any other identifying information on any research form or protocols to further ensure confidentiality is maintained at all times. All recorded information will be stored securely for three years, as per Argosy University requirements. At the end of the three years, all recorded data and other information will be deleted and all written data will be shredded.

What Are the Benefits in This Study?

There will be no direct or immediate personal benefits from your participation in this research, except for the contribution to the study. For the professional audience, the potential benefit of this research will provide additional knowledge to the literature on The Effects of CACREP Accreditation on Credentialing Exam Results. You also have the right to review the results of the research if you wish to do so. A copy of the results may be obtained by contacting Richard Justin Silvey at: Email: rjsilvey@stu.argosy.edu or Phone: 434-509-8729. Additionally, should you have specific concerns or questions, you may contact my dissertation chair, Dr. David Arena at Argosy University, by email at darena@argosy.edu, or Dr. Calvin Berkey, IRB Chair, Argosy University by email at cberkey@argosy.edu.

1. I have read and understand the information explaining the purpose of this research and my rights and responsibilities as a participant. My agreement below designates my consent to voluntarily participate in this research, according to the terms and conditions outlined above. I am 18 years or older and have completed a master's degree in school counseling.

Agree
Disagree

2. What is today's date?

APPENDIX B

Survey

Survey

3. What is your gender?

- Female
- Male

4. What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

5. What was your final Grade Point Average (GPA) for your school counseling program?

- 3.8 - 4.0
- 3.6 - 3.79
- 3.4 - 3.59
- 3.2 - 3.39
- 3.0 - 3.19
- 2.8- 2.99
- 2.6 - 2.79
- 2.49 or below
- I do not know.

6. Ethnicity

- American Indian or Alaska Native
- Asian
- Black or African American
- Caucasian
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- Decline to Identify

7. Was your school counseling program Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredited?

- Yes
- No
- I do not know.

8. What institution did you complete your school counseling program with?

9. What year did you graduate from your school counseling program?

10. Did you take the *Praxis II*: School Guidance and Counseling exam?

- Yes
- No
- I do not know.

11. If you completed the *Praxis II*: School Guidance and Counseling exam, what was your composite score?

12. What was your range of scores on your *Praxis II*: School Guidance and Counseling exam?

- 900 or above
- 800-899
- 700-799
- 600-699
- 500-599
- 400-499
- 300-399
- Below 300
- I do not know.
- I did not take the *Praxis II*: School Guidance and Counseling exam.

13. Did you pass the *Praxis II*: School Guidance and Counseling exam for your state?

- Yes
- No
- I do not know.
- My state does not have a required passing score.
- I did not take the *Praxis II*: School Guidance and Counseling exam.

14. How many years of experience did you have at the date of testing?

- 0 years
- 1-3 years
- 4-6 years
- 7-10 years
- 11 or more years
- I do not know.

I did not take the *Praxis II*: School Guidance and Counseling exam.

15. Did you take the National Certified School Counselor Examination (NCSCE)?

- Yes
- No
- I do not know.

16. Did you pass the NCSCE?

- Yes
- No
- I do not know.
- I did not take the NCSCE.

17. How many years of experience did you have at the date of testing?

- 0 years
- 1-3 years
- 4-6 years
- 7-10 years
- 11 or more years
- I do not know.
- I did not take the NCSCE.

18. Did you take the National Certified Counselor exam (NCE)?

- Yes
- No
- I do not know.

19. Did you pass the NCE?

- Yes
- No
- I do not know.
- I did not take the NCE.

20. How many years of experience did you have at the date of testing?

- 0 years
- 1-3 years
- 4-6 years
- 7-10 years
- 11 or more years
- I do not know.
- I did not take the NCE.

21. Have you attempted to gain the National Board for Professional Teaching Standards (NBPTS) credential for School Counseling/Early Childhood through Young Adulthood credential?

- Yes
- No
- I do not know.

22. Were you successful in obtaining the NBPTS: School Counseling credential?

- Yes
- No
- I do not know.
- I did not attempt the NBPTS credential.

23. How many years of experience did you have at submission?

- 0 years
- 1-3 years
- 4-6 years
- 7-10 years
- 11 or more years
- I do not know.
- I did not attempt the NBPTS credential.