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Counselor Beliefs and Perceived Knowledge Regarding Clients with Learning Disabilities

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COUNSELOR BELIEFS AND PERCEIVED KNOWLEDGE

REGARDING CLIENTS WITH LEARNING DISABILITIES

by

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ABSTRACT

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Clients with learning disabilities constitute a cultural group that has not been extensively studied. The professional literature has found that counselors have reported the need for additional training in working with clients with disabilities. This study explored counselors' beliefs and perceived knowledge regarding counseling clients with learning disabilities. Participants in this study were college counselors, mental health counselors, and school counselors who were members of the following professional counseling associations: the American College Counseling Association (ACCA), the American Mental Health Counselors Association (AMCHA), and the American School Counselor Association (ASCA). These counselors were assessed to determine their perceived competency regarding clients with learning disabilities and their multicultural competency. Additionally, group differences were assessed to determine if a difference existed between how counselor groups (college counselors, mental health counselors, and school counselors) reported their perceived competency regarding clients with learning disabilities and their multicultural competency. Counselors in this study completed a demographic questionnaire, a learning disability instrument, and a multicultural competency instrument. Surveys were distributed to 4,444 counselors. A total of 239 surveys were completed. Counselors' scores on the learning disability instrument revealed slightly positive beliefs and moderate levels of knowledge regarding clients with learning disabilities. A multivariate analysis of covariance (MANCOVA) was utilized to

assess counselors' perceived competency regarding clients with learning disabilities and counselors' multicultural competency. A statistically significant difference was found among counselors' scores on the learning disability instrument when controlling for educational program accreditation status and professional experience with clients with disabilities. Counselors from CORE accredited and CACREP accredited programs and counselors who had professional work experience with clients with disabilities reported more positive beliefs and higher levels of knowledge regarding clients with learning disabilities. However, no difference was found when counselor groups' (college counselors, mental health counselors, and school counselors) scores on the learning disability instrument were compared. Additionally, school counselors had significantly lower scores on the multicultural competency instrument when compared to college counselors and mental health counselors. These findings suggest a need for additional training and educational experiences related to clients with learning disabilities.

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CHAPTER ONE

INTRODUCTION

As the world becomes increasingly diverse, it is important for counselors to be competent to provide professional services to clients from different cultural backgrounds. Clients who have learning disabilities are a group that counselors need to be capable of counseling in an effective manner. This chapter provides the background, purpose, assumptions, definitions of terms, and research questions for this research study.

Background

Disability is one of the underrepresented cultural groups; any person can become a member of this group at anytime in their lifetime (Barton, 2009; Smart & Smart, 2006). Because of the complexity of disabilities and society's ignorance about individuals with disabilities, this population encounters many instances of oppression and discrimination (Conyers, 2003). According to Grönik (2009), disability definitions can be functional, administrative, and subjective in nature. Defining disability from a functional limitation standpoint emphasizes a medical interpretation of disability where the disability definition is based on physical impairments or changes in bodily structures (Grönik, 2009). Administrative definitions of disability stem from state and federal legislation regarding what is considered a disability in order for a person to receive some type of benefit (Grönik). What this means is that governing bodies make decisions on what a disability is and whether individuals meet criteria to receive services and adequate accommodations (Grönik). The subjective definitions, unlike functional limitation and administrative definitions, are how persons with a disability identify themselves as disabled. With these overarching definitions, many specific disabilities, such as learning

disabilities, fall into one or more of these definitional categories. As a result, there is often confusion, regarding learning disabilities, among counselors and among various work settings where counselors are employed (Kuehn, 1997).

Social isolation, segregation in various institutions, and inadequate educational opportunities are just a few of the oppressive situations people with disabilities have to endure (Conyers, 2003). Legislative acts such as the Education for All Handicapped Children Act of 1975, Individuals with Disabilities Education Act of 2004 (IDEA), Americans with Disabilities Act (ADA), and the Rehabilitation Act of 1973 were created to provide equal access of services to people with disabilities. However, this population still has difficulty obtaining and sustaining employment, housing, and other services that are taken for granted by persons without disabilities (Barton, 2009).

Each of the legislative acts listed above varies in the guidelines regarding access of services for persons with disabilities (Smith, Foley, & Chaney, 2008). The Education for All Handicapped Children Act of 1975 mandates that students with disabilities receive equal and adequate services (2008). This act was later revised and renamed the Individuals with Disabilities Education Act (IDEA) where the definition of disability was expanded and the terminology was changed to positively reflect children with disabilities (Wolfe, Postal, Wehman, Wehman, & Turner, 2005). In addition to IDEA, ADA was developed to offer more rights to people with disabilities (Wolfe et al., 2005). Under ADA, people with disabilities are responsible for reporting their disability to appropriate officials in order to receive adequate services (Cawthon & Cole, 2010). Under ADA, people must disclose their disability in order to receive services and accommodations, which they may not be comfortable with; or they may not be aware that this is something

that needs to be done (Cawthon & Cole, 2010). The Rehabilitation Act of 1973, on the other hand, was implemented to ban discrimination practices in federally funded programs and organizations that stigmatized and oppressed people with disabilities (Barton, 2009). Section 504 of the Rehabilitation Act protects students with disabilities from discrimination or access based on their ability status (Cawthon & Cole, 2010). The Social Security Administration (SSA) provides benefits and compensation for persons with disabilities who meet SSA's definition of disability (Barton, 2009). A brief examination of these legislative acts provides evidence that these provisions differ greatly. It is important that counselors are aware of these acts and that this important information regarding these acts is relayed to their clients with disabilities.

When it comes to providing services for people with disabilities, rehabilitation counselors are typically the professionals who provide service to this population, primarily due to the false perception that disability will be the focus of a client's concern (Smart & Smart, 2006). This misconception has become so imbedded that counselors outside the rehabilitation counseling realm may not believe that they need to be trained and skilled in counseling clients with disabilities (Olkin & Pledger, 2003). According to the Council on Rehabilitation Education (CORE), a rehabilitation counselor

> is a special type of professional counselor who helps evaluate and coordinate needed services to assist people with disabilities in coping with limitations caused by such factors as cognitive and learning difficulties, environmental and societal discrimination and barriers, psychological conflict/distress, or loss of physical/functional ability. (CORE, para. 1)

Some of the major job functions of rehabilitation counselors include "providing vocational counseling and consultation, conducting counseling interventions, using community-based rehabilitation services, managing cases, applying research to practice, conducting assessments, and practicing professional advocacy" (Leahy, Chan, & Saunders, 2003, pp. 71-73). Since disability is not always the sole concern of clients with disabilities and is a small part of an individual's identity, counselors from all mental health specialties will counsel clients who have disabilities (Smart & Smart, 2006).

Counselors' role in counseling clients with disabilities. Literature exists that has examined counselors' knowledge and preparation in working with clients with disabilities (Beecher, Rabe, & Wilder, 2004; Corrigan, 1998; Hatch, Shelton, & Monk, 2009; Milsom & Hartley, 2005; Milsom, 2006; Mitcham, Portman, & Dean, 2009; Smart & Smart, 2006; Smith, Foley, & Chaney, 2008). School counselors, like rehabilitation counselors, are a group of counselors who often counsel clients with disabilities (Scarborough & Gilbride, 2006). Various studies related to the complex work of school counselors have determined that school counselors receive some training regarding clients with disabilities. However, counselors in these studies reported feeling inadequately prepared to provide services to these clients and reported the need for additional training (Helms & Katslyannis, 1992; Milsom, 2002; Milsom & Akos, 2003; Romano, Paradise, & Green, 2009). Frye (2005) conducted an ethnographic, qualitative study, which involved three school counselors, in an effort to determine how school counselors were meeting the personal and social needs of students with disabilities. Results from this study concluded that school counselors are effective in their work regarding students with disabilities when counselors rely on strategies and interventions

learned in their preparation programs and when they adhered to the American School Counselor Association (ASCA) National Model. The ASCA National Model focuses on "transition planning, behavior modification, counseling parents, making referrals to specialists, improving self-esteem, working as part of the school staff multidisciplinary team, teaching social skills, and serving as consultants to parents and school staff" when working with students with disabilities (Frye, 2009, p. 443). Some school counselors are receiving training and have the ASCA National Model for guidance, however, additional studies are needed to determine how competent school counselors are when providing professional services to students with disabilities.

It is apparent that school counselors have complex roles and receive some training in providing professional services to clients with disabilities. College and mental health counselors also counsel clients with disabilities, however, very little literature exists that assess college and mental health counselors' competency related to clients with disabilities (Corrigan, 1998). Strike, Skovholt, and Hummel (2004) conducted a study in which the disability competency of mental health professionals was assessed. College and mental health counselors were included in the study. Within this study, disability was defined utilizing the ADA definition. Results from this study concluded that mental health professionals who had disability related experience reported an overall higher disability competency than mental health professionals who did not (Strike et al., 2004).

Literature exists that describes and analyzes the importance of school counselors' work with clients who have disabilities (Dunn & Baker, 2002; Frye, 2005; Hatch, Shelton, & Monk, 2008; Helms & Katslyannis, 1992; Milsom, 2002; Milsom, 2006; Milsom & Akos, 2003; Milsom & Hartley, 2005; Milsom, Goodnough, & Akos, 2007;

Romano, Paradise, & Green, 2009, Satcher, 1993; Scarborough & Deck, 1998; Scarborough & Gilbride, 2006). However, no study currently has been conducted that assesses the disability competency of college counselors, mental health counselors, and school counselors collectively. This research study investigated counselors' (college counselors, mental health counselors, and school counselors) beliefs and perceived knowledge with reference to counseling clients with learning disabilities.

Learning disabilities. Learning disabilities are one of the most prevalent disabilities counselors will encounter. These disabilities are invisible in nature, which means that observers may not be aware that an individual has a learning disability unless he or she chooses to disclose it (Cawthon & Cole, 2010; Satcher, 1993; Yocom & Coll, 1995). According to the National Center for Learning Disabilities (2011), a learning disability is "a neurological disorder that affects the brain's ability to receive, process, store, and respond to information" (para. 1). Based on this definition, this type of disability is not obvious, therefore, people with this type of disability may be perceived as not trying hard enough or being lazy (Yocom & Coll, 1995). Learning disabilities are usually diagnosed when an individual is enrolled in secondary or postsecondary institutions (Cawthon & Cole, 2010). In order for students with learning disabilities to excel academically and socially, school counselors should possess knowledge and skills appropriate for their work with these students (Cawthon & Cole, 2010; Yocom & Coll, 1995). Just as it is important for school counselors to have knowledge and skills about learning disabilities, college counselors should possess the same competency when providing professional services to these clients (Yocom & Coll, 1995). Usually in college or university settings there is an accessibility or disability services office that provides

college students with services that they need in order to achieve academically in college. However, typically these offices to do not provided counseling services to address the mental health needs of students with learning disabilities (Cawthon & Cole, 2010).

Very little literature exists that assesses mental health counselors' work with clients who have learning disabilities. It is important for mental health counselors to address the therapeutic needs of this population.

Purpose of Study

Because one out of 10 people in the U.S. have some type of disability, it is important for counselors to be competent in counseling clients with disabilities (Smart & Smart, 2006; Strike et al., 2004). Strike et al. (2004) conducted a study that addressed the disability competency of mental health professionals. They found that mental health professionals with more disability related experience reported higher disability competency than mental health professions who did not have disability related experience. They also found that mental health professionals who reported less disability related experience reported gaps between self-awareness, knowledge, and skills than did those mental health professionals who had more disability related experience. Strike et al. (2004) called for further research of counselors' competence for specific disabilities. This study was similar to the one conducted by Strike et al. in 2004 in that this study investigated counselors' (college, mental health, and school counselors) beliefs and perceived knowledge regarding clients with disabilities. This study differed from Strike et al.'s (2004) study in that this study focused on learning disabilities and college, mental health, and school counselors' beliefs and perceived knowledge related to counseling clients with learning disabilities.

People with disabilities are a separate cultural group within our society, therefore, counselors should be competent in their work with clients from this population. There is a movement for multicultural sensitivity, social justice, and advocacy within the counseling profession. There may be a relationship between counselors' multicultural sensitivity and their ability to work effectively with people who have learning disabilities. This study sought to explore counselors' multicultural sensitivity and effectiveness in their work with clients with learning disabilities.

The purpose of this study was to investigate the beliefs and perceived knowledge of college counselors, mental health counselors, and schools counselors regarding clients with learning disabilities. This study also investigated the differences of how counselors (college counselors, mental health counselors, and school counselors) reported their beliefs and perceived knowledge and investigated the differences between counselors' beliefs and perceived knowledge regarding clients with learning disabilities and counselors' multicultural counseling knowledge and awareness. The independent variables in this study included specialty areas of counselors, including college counselors, mental health counselors, and school counselors. The dependent variables included counselors reported beliefs and perceived knowledge regarding learning disabilities and their multicultural counseling knowledge and awareness as measured on instruments. Demographic information participants provided gave a description of the sample and determined how demographic information provided, such as educational program accreditation status, disability status, and disability related experience, influenced how participants reported their beliefs and perceived knowledge regarding clients with learning disabilities.

Importance of study. According to the American Counseling Association (ACA) Code of Ethics (2005), counselors are charged with being competent in their work with clients. Counselors who counsel outside the boundaries of their competence may be engaging in unethical behaviors and could potentially cause harm, unintentional or intentional, to their clients. Because competent counselors are needed to work effectively with all type of clients, counselor preparation programs are charged with providing training, resources, and experiences to produce competent counselors.

Counselors are charged with being competent when providing professional services to clients, therefore, cultural considerations need to be taken into account when counseling clients from underrepresented groups. Multicultural standards and competencies were developed to help counselors understand the complex nature of providing professional services to clients from various cultural backgrounds. Much of the focus of multicultural training has been on racial and ethnic groups, sexual orientation, religion, and gender. Little attention has been given to disability status and the role this can play in sessions with clients.

Assumptions of Study

The following assumptions were made when conducting this research study:

1. Counselors in the study met the criteria for being included in the study and answered the instrument questions honestly.
2. Instruments utilized in the study were reliable, valid, and accurately measure the beliefs and perceived knowledge regarding clients with learning disabilities and the multicultural counseling knowledge and awareness of counselors who participated in study.

Definition of terms

This is a list of terms utilized throughout this study. These terms are specifically defined as they are used in this particular research study.

Learning Disability: Group of neurological disorders that affect the brain's ability to receive, process, store, respond, and communicate information.

Ableism: Discrimination or prejudice against individuals with physical, mental, or developmental disabilities that is characterized by the belief that these individuals need to be fixed or cannot function as full members of society (Smith, Foley, & Chaney, 2008, pp. 304).

College Counselor: Counselor with at least a master's degree who works within a college, university, or community college setting. College counselors may provide academic advisement or personal counseling services to students enrolled in a college, university, or community college setting.

School Counselor: Counselor with at least a master's degree who works within an education setting providing services to elementary, middle, or high school students. School counselors provide a variety of services that include, but are not limited to, individual or group counseling, class scheduling, and assistance with college enrollment.

Mental Health Counselor: Counselor with at least a master's degree who works within a community agency, private practice, or other setting where counselors provide individual or group counseling services to a variety of clients or a specialized group of clients (e.g., substance abuse clients, trauma victims, etc.).

Disability Competency: Beliefs and perceived knowledge participants report having when counseling clients with learning disabilities.

Multicultural Competency: Self-awareness, knowledge, and skills participants report having when counseling clients from various cultural groups.

Research Questions

This study attempted to answer the following research questions:

1. What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities?
2. What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities?
3. What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency?

CHAPTER TWO

LITERATURE REVIEW

Competence in providing professional services to clients with disabilities is something all counselors should strive to achieve (Strike, Skovholt, & Hummel, 2004). With the population of people with disabilities increasing, the chances of a client with a disability entering a counselor's office will significantly increase (Smart & Smart, 2006). It is hoped that results from this study reveal the competence counselors perceive themselves having and determine the level of preparation counselors receive from counselor preparation programs related to counseling clients with learning disabilities.

Counselor competence related to clients with disabilities is not specified in the literature, however, multicultural competencies can serve as a model to assess a counselor's capability when working with a client who has a learning disability. Literature reviewed in this chapter is centered on the reported knowledge, awareness, and skills of college and school counselors on the topic of clients with disabilities. It should be noted that much of the literature reviewed in this chapter addresses various types of disabilities, however, the focus of this research study was clients with learning disabilities. The literature reviewed in this chapter covers multicultural standards and competencies, an overview of the disability movement, development of the counseling profession, and reported skills, knowledge, and awareness counselors have when counseling clients who have disabilities, including learning disabilities.

Multicultural standards and competency related to disabilities

Multicultural standards and competency. The movement towards multicultural competent counselors has been ongoing for almost 30 years (Castillo, Brossart, Reyes,

Conoley, & Phoummarath, 2007). In 1992, an influential article by Sue, Arredondo, and McDavis addressed multicultural counseling competencies and standards that should be implemented in counselor preparation programs to produce culturally competent counselors. These counseling competencies and standards focused on beliefs and attitudes, knowledge, and skills of counselors working with clients from different racial and ethnic backgrounds (Sue, Arredondo, & McDavis, 1992). Culturally competent counselors are consistently aware of their biases, assumptions, and prejudices as related to underrepresented groups, continue to understand the worldview of their underrepresented clients, and practice appropriate techniques and interventions when working with clients from underrepresented groups (Sue et al., 1992). The influential document published by Sue et al. (1992) set the groundwork for counseling accreditation bodies to charge counselor preparation programs with including courses and educational experiences that teach counselors-in-training how to become culturally competent counselors (Castillo et al., 2007).

Culture encompasses race, ethnicity, sexual orientation, socioeconomic status, ability, and age, therefore, it can become difficult for counselor preparation programs to focus on the unique aspects of different cultures. When developing the multicultural standards and competencies, Sue et al. (1992), identified racial and ethnic groups that were the most visible in society, such as African Americans, Asian Americans, Hispanic and Latino/as, and Native Americans. Eventually, the multicultural standards were used as a model of competency standards for additional cultural traits such as sexual orientation and gender (Sciarra, Chang, McLean, & Wong, 2005).

Disability. People with disabilities represent the largest minority group in the United States, with the non-disabled population having a 20% chance of becoming disabled at some point during their lifetime (Barton, 2009). Counselors of all specialty groups, not solely rehabilitation counselors, should be competent in providing services to clients with disabilities (Smart & Smart, 2006). Misconceptions suggest that only rehabilitation counselors should be educated to work with this population. However, as people with disabilities become more integrated into their communities and live independently, counselors from other mental health specialty groups will be called upon to provide mental health services for these clients (Olkin & Pledger, 2003; Smart & Smart, 2006; Smith, Foley, & Chaney, 2008).

To have a better understanding of the term disability, it is important for counselors to understand the different models for conceptualizing the term "disability". Smart and Smart (2006) and McDougall (2009) described five models: moral, biomedical, functional, environmental, and sociopolitical.

The moral model of disability stems from the belief that God punished a person for committing a sin and therefore has cast a disability on a person (McDougall, 2009). This model of disability is the least prevalent belief system today. However, some non-disabled individuals still hold this belief about people with disabilities (McDougall).

The biomedical model, commonly used in the medical profession, maintains that a disability can be explained and fixed (McDougall, 2009; Smart & Smart, 2006). From this framework, people with disabilities are considered *abnormal* and need to be *fixed* in order to cope in mainstream society (Smart & Smart, 2006). The disability is seen to exist within the individual with no influence from societal factors (McDougall, 2009). With

this conception of disability, persons with disabilities are treated and perceived as outside the norm group and devalued, perhaps even seen as less than a human (McDougall, 2009; Smart & Smart, 2006).

Functional and environmental are interconnected models of disability due to their interactions with a person's function and his or her environment (Smart & Smart, 2006). Within the functional and environmental model of disability, the biological aspect is present, however, more emphasis is placed on the individual's functioning as a person with a disability and the environment in which he or she lives (Smart & Smart). Counselors using the perspective of the functional and environmental models of disability see the client with a disability from a holistic perspective (Smart & Smart).

A more recent model is the sociopolitical model of disability, which stems from the belief that a person with a disability self-identifies and does not adhere to society's view and meaning of disability (Smart & Smart, 2006). The sociopolitical model views the stigmatization, discrimination, and prejudice of disability as a problem with the non-disabled group, not that of people with disabilities (Smart & Smart).

Within these various models of disability, disability is defined and approached differently. Counselors should keep these models in mind when counseling their clients.

Clients with learning disabilities represent the largest subgroup of the disability culture (Helms & Katisyannis, 1992; Satcher, 1993). Because of the many challenges and barriers these clients encounter, it is important for counselors to be competent in working with this specific population. Using the multicultural standards and competencies as a model (Sue et al., 1992), counselors should be aware of their own biases and prejudices about clients with learning disabilities, should be knowledgeable about learning

disabilities, should know about the various legislative acts related to clients with learning disabilities, should be sensitive to the impact learning disabilities have on their client, and should be able to utilize effective interventions and techniques when counseling these clients. The goal of counselor preparation programs is to produce culturally competent counselors who can effectively counsel clients with learning disabilities (Strike et al., 2004; Sue et al., 1992). Currently, it is unclear whether counselors are competent to effectively counsel this population.

Counseling profession

According to Remley (2011), there are four major forces which led to the creation of the field of counseling: "the decision that counseling psychologists, a specialty group within the field of psychology, must have a doctoral degree to enter the field of psychology, the development of school counseling programs, the development of rehabilitation counselors, and the development of counselors in community and mental health agencies." (Remley, 2011, p. 25). Each of these combined forces led to what the counseling field is today.

Before 1949, individuals with master's degrees in psychology were identified as professionals within the field of psychology, however, a decision was made by the American Psychological Association (APA) that only individuals with doctorates would be recognized as professionals (Remley, 2011). With this new decision implemented within the psychology profession and licensing boards, it was assumed the master's in counseling psychology would be discontinued, however, this has not been the case. Masters counseling programs began to flourish and develop across the country, especially in the areas of rehabilitation counseling, school counseling, and mental health counseling.

As the counseling profession began to emerge and programs developed and flourished, the United States was undergoing an intense competition with Russia (Remley, 2011). The United States feared the Russians would imposed their communistic views on U.S. citizens as Russia had apparently become more technologically savvy than the U.S. and managed to send a satellite into space before the U.S.. To counter this issue, the U.S. implemented an initiative to fund various programs to recruit young people into science and technology fields. This was done by providing training opportunities for school personnel to provide guidance and counseling services to high school students, encouraging these students to take math and science course and pursue careers in the areas of science and technology (Remley). As these opportunities continue to exist and expand, accreditation standards and policies were developed and implemented for individuals who wanted to pursue careers in the field of school counseling.

As the wave of school counseling emerged, rehabilitation counseling and community mental health counseling were developing and expanding as well (Remley, 2011). As was discussed in the previous chapter, various legislative acts were implemented to provide adequate and equal services for people with disabilities, which assisted in the development of the rehabilitation counseling profession. Counselors were also starting to obtain positions within community mental health agencies working with various populations such as individuals recovering from substances, persons with disabilities, victims of trauma, and persons suffering from anxiety and depression (Remley).

As these four combined forces moved the counseling profession forward, the counseling profession expanded to include various mental health specialty groups such as

college counselors, group counselors, grief counselors, military counselors, and children/adolescent counselors (Remley, 2011).

Counselor specialty groups and clients with disabilities

Rehabilitation counselors. Rehabilitation counseling is a specialty within the field of counseling wherein counselors specialize in working with people with disabilities (Leahy, 1997; Remley, 2011). According to Leahy (1997), rehabilitation counselors assist persons with disabilities in integrating fully into their environment through counseling and referral of services. Rehabilitation counselors, therefore, practice within this scope, receive graduate training in the area of rehabilitation counseling, and acquire certification and licensure in order to be qualified to provide services to people with disabilities (Leahy, 1997).

Rehabilitation counselors focus on providing counseling services and referral of services in order to address clients' needs (Leahy, 1997). They work in a variety of settings, including public and private medical settings, correctional facilities, institutions, and social services programs (Maki & Riggar, 1997). It should be noted that although rehabilitation counselors are trained to work exclusively with people with disabilities, various other counseling professionals also provide services to this population (Leahy, 1997; Smart & Smart, 2006). The rehabilitation counselor's critical role includes coordinating additional services for people with disabilities, therefore, collaboration, knowledge, and skills among all counseling professionals is needed in order to effectively assist persons with disabilities (Leahy, 1997).

College counselors. More and more people with disabilities are entering post-secondary education settings (Beecher, Rabe, & Wilder, 2004) so it is important that

college counselors are aware of their own biases and prejudices related to working with this population, are knowledgeable about disabilities, and utilize effective skills in counseling clients with disabilities. It should be noted that higher education settings enforce the Americans with Disabilities Act (ADA) which encompasses a variety of disabilities. Yocom and Coll (1995) conducted a research study in which counselors within community colleges settings reported receiving very little training concerning counseling clients with learning disabilities. However, counselors in this study were knowledgeable about disability legislation actions, able to identify prominent issues experienced by students, and appropriately referred students for additional services when necessary. The term *learning disability*, in this study, was defined by the National Joint Committee on Learning Disabilities as "a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities" (as cited in Yocom & Coll, 1995, p. 572). Beecher et al. (2004) identified guidelines for college counselors when working with clients with disabilities, however, no results were analyzed to determine the effectiveness in utilizing these guidelines. Further research is needed to assess the competence of college counselors' work with clients with learning disabilities and to determine whether the guidelines listed in Beecher et al.'s article are being followed by college counselors.

Corrigan (1998) addressed legal and ethical issues regarding college students with disabilities while noting the increasing number of college students with disabilities and various legislative acts college counselors must have knowledge about when working with students with disabilities. Like Beecher, et al. (2004), the author defined disability

utilizing the official ADA definition (Corrigan, 1998). In working with college students with disabilities, Corrigan warned that college counselors should be careful when assessing students' documentation because ADA policies and the American Counseling Association (ACA) Code of Ethics may conflict (Corrigan, 1998). Corrigan (1998) identified knowledge that college counselors should possess when working with college students with disabilities, however, no empirical data was collected and analyzed that supported Corrigan's argument.

School counselors. Much literature exists that relates to school counselors' knowledge, awareness, and skills for working with students with disabilities. Scarborough and Gilbride (2006) identified school counselors and rehabilitation counselors as specialty groups who work the most with students with disabilities: therefore, these counselors should possess knowledge, skills, and awareness in counseling this population. Milsom (2002) and Milsom and Akos (2003) conducted studies related to school counselor preparation in counseling clients with disabilities. Results from these studies indicated a lack of preparation for school counselors in providing professional services for students with disabilities and the need for school counselor education programs to educate school counselors in working with students with disabilities. Milsom (2002) focused her study on school counselors' activities and feeling of preparedness when working with clients with disabilities while Milsom and Akos (2003) studied whether school counselor preparation programs were adequately preparing school counselors-in-training to work with clients with disabilities. Results from both studies were similar in that school counselor preparation programs incorporate some

knowledge related to clients who have disabilities, however, counselors still reported a lack of preparation and the need for additional training.

Hatch, Shelton, and Monk (2008) and Romano, Paradise, and Green (2009) conducted related studies. Results indicated the need for school counselors to be knowledgeable about working with students with disabilities and advocating for these students. Both studies focused on students with disabilities as identified through various disability legislation acts, such as Individuals with Disabilities Act (IDEA) and Section 504 of the Rehabilitation Act (Hatch et al., 2008; Romano et al., 2009). Hatch et al. (2008) identified school counselors as being the least prepared to work with students with disabilities, and they conducted a research study to provide school counselor trainees the opportunity to work with clients with disabilities. Participants in the study were high school students who were identified as having high incidences of disabilities, such as learning disabilities, mild intellectual disabilities, and emotionally disturbed disabilities (2008). Facilitators were students in a counselor preparation program which provided guidance for helping students advocate for themselves and be successful. Results from the study identified the positive impact of the program for high school student participants in the program, and school counselor trainees increased their clinical knowledge related to clients with disabilities.

Romano, Paradise, and Green (2009), like Hatch et al., emphasized the challenges and barriers students with disabilities encounter and the important role school counselors can play to assist students with disabilities with these issues. Unlike Hatch et al. (2008), Romano et al. (2009) focused their study on the attitudes school counselors had regarding students who received services under IDEA and Section 504 of the Rehabilitation Act,

especially since the eligibility and services received for these legislative acts differs greatly for students with different kinds of disabilities. The authors utilized the *Attitudes toward Learning Disability* instrument, which was developed by authors for the purposes of study, to analyze school counselors' reported attitudes when working with students who had disabilities (Romano, et al., 2009). The results from the study revealed school counselors are in support of students with disabilities and have positive attitudes about providing services to them. However, school counselors reported feeling unprepared when intervening and advocating for students with disabilities because their roles are not clearly identified (Romano et al.).

Frye (2005) conducted a qualitative study of three school counselors over a 12-week period investigating whether the school counselors were meeting the personal and social needs of students with disabilities. School counselors in this study were purposely selected due to their knowledge of the American School Counselor Association (ASCA) National Model and their work ethic when working with students with disabilities (Frye, 2005). Results revealed that despite the challenges students with disabilities face, such as rejection and social isolation from peers, and school counselors' unlimited job responsibilities, the three school counselors in this research study reported making themselves available and advocating for students with disabilities (Frye).

Although literature exists, empirical and conceptual, that discusses the skills, knowledge, or awareness of counselors counseling clients with disabilities, very little literature exists collectively analyzing the beliefs and perceived knowledge of college counselors, mental health counselors, and school counselors related to counseling clients with disabilities, specifically learning disabilities. The study by Strike et al. (2004) is the

most recent study that assessed the disability competency of mental health professionals, which included mental health professionals from APA approved doctoral programs, disability services offices, and university counseling centers. Strike et al. (2004) developed the *Counseling Clients with Disabilities Survey* to assess participants' reported self-awareness, perceived knowledge, and perceived skills in working with clients with disabilities. From demographic information participants provided, authors assigned participants to two groups, experienced and non-experienced, which represented participants' experience level in working with clients with disabilities. Results from the study revealed a significant difference in the reported disability competency of participants who had experience working with clients who had disabilities, and those who did not have experience working with clients who had disabilities on all three subscales: perceived knowledge, perceived skills, and self-awareness (Strike et al., 2004). Participants with experience providing services to clients with disabilities had more perceived knowledge, perceived skills, and self-awareness than did the participants who did not have experience providing services to clients with disabilities.

Throughout this chapter, it has been reported that little empirical literature exists regarding the competency of college counselors and mental health counselors working with clients who have learning disabilities. School counselors, on the other hand, receive some training in working with students who have disabilities, but little is known how competent any of these counselors are in working effectively with clients with learning disabilities. This study investigated the beliefs and perceived knowledge college counselors, mental health counselors, and school counselors report having when counseling clients with learning disabilities. The potential contributions of this research

study included an analysis of the perceived disability competency of counselors, a collective analysis and comparison of the perceived disability competency among different counselor specialty groups, and an examination of the perceived disability competency and the multicultural competency among counselor specialty groups.

CHAPTER THREE

METHODOLOGY

As the population of people with disabilities continues to increase, it is important for counselors to have a level of awareness, knowledge, and skills that enable them to adequately serve this population (Smart & Smart, 2006). While counselors who specialize in rehabilitation counseling have specific preparation related to serving clients with disabilities, other counselors may not. Very little literature exists that explores the self-awareness, knowledge, and skills of non-rehabilitation counselors who provide professional services to clients with disabilities. The purpose of this study was to examine the beliefs and perceived knowledge counselors have regarding clients with learning disabilities. The most common definition of *disability* is the one used in the Americans with Disability Act (ADA; Barton, 2009). This definition is broad and incorporates a variety of disabilities including physical disabilities. However, this study focused on learning disabilities, which, according to the National Center for Learning Disabilities (NCLD), are described as "a group of neurological disorders that affect the brain's ability to receive, process, store, respond, and communicate information" (NCLD, 2009, para. 1).

This research study addressed the following questions: (1) What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities? (2) What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities? (3) What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency?

Research Design

A cross-sectional, non-experimental survey design was utilized for this research study. This design involved collecting a set of data from participants utilizing two instruments (one assessing perceived disability competency and another exploring multicultural competency) and a demographic questionnaire that provided characteristics of a sample of a population (Creswell, 2009). A cross-sectional, non-experimental, survey design has been utilized in several studies assessing counselors' knowledge, skills, and awareness in counseling clients with disabilities (Cole & Shapiro, 2005; Romano, Paradise, & Green, 2009; Strike, Skovholt, & Hummel, 2004; Wallick & Bruch, 2003). The ultimate purpose of this research study was to examine counselors' beliefs and perceived knowledge when counseling clients with learning disabilities and determine if differences exist among specialty groups of counselors (college counselors, mental health counselors, and school counselors). The relationship between counselors' multicultural competency and their perceived disability competency as measured on the *Multicultural Counseling Knowledge and Awareness Scale* (MCKAS) and the *Counselors' Beliefs and Perceived Knowledge about Learning Disabilities Instrument* (CBPKLDI) was analyzed. The CBPKLDI was developed specifically for this research study.

Research Questions

Research Question #1: What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities?

H_1: Counselors will self-report positive beliefs and adequate knowledge regarding clients with learning disabilities.

Research Question #2: What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities?

H_0: There is no difference in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities.

Alternate Hypothesis: School counselors will report more positive beliefs and knowledge regarding clients with learning disabilities than college counselors and mental health counselors.

Research Question #3: What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency?

H_0: There is no difference in how counselors self-report their perceived disability competency as measured by the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI) and their multicultural competency as measured on the *Multicultural Counseling Knowledge and Awareness Scale* (MCKAS).

Alternate Hypothesis: Counselors will report a high level of multicultural competence as measured on the *MCKAS*, however, school counselors will report a higher level of perceived disability competence than college and mental health counselors as measured by the *CBPKLDI.*

Variables

Three groups comprise the independent variables: college counselors, mental health counselors, and school counselors. These three groups have been the focus of many research studies related to counselor awareness of issues related to clients with

disabilities (Beecher, Rabe, & Wilder, 2004; Corrigan, 1998; Hatch, Shelton, & Monk, 2009; Milsom, 2006; Milsom & Hartley, 2005; Mitcham, Portman, & Dean, 2009; Rungta, Margolis, & Westwood, 1993; Smart & Smart, 2006; Smith, Foley, & Chaney, 2008). However, no research study has analyzed the overall self-reported beliefs and perceived knowledge of counselors regarding clients with learning disabilities; or analyzed the differences, if any, among college counselors, mental health counselors, and school counselors when counseling clients with learning disabilities. A questionnaire was used to collect demographic information (see appendix section) from participants including years of counseling experience, ethnicity, current work setting, personal disability status, and type of program accreditation of the counseling master's degree program from which they graduated. The demographic information collected provided descriptive statistics of the sample.

Participants

Participants included college counselors working in university, four-year college, or community college settings, mental health counselors working in agencies or private practice, and school counselors working in K-12 schools. Assuming a moderate effect size at $P = .80$ and $\alpha = .05$, a minimum of 159 participants (53 participants per group; Cohen, 1992) was needed. Participants were recruited based on their membership in professional counseling associations. A list of email addresses from the American College Counseling Association (ACCA), American Mental Health Counselors Association (AMCHA), and American School Counselor Association (ASCA) was obtained in order to invite counselors to participate in study. Invitational emails were distributed to all professional members of ACCA. With the ASCA membership list, a

stratified and systemic sampling method was utilized. Stratums for the ASCA membership list included regions of the country (Midwest, Southern, North Atlantic, and Western) and work setting (Elementary, Elementary/Middle, Middle/Junior, Secondary/High School, and Middle/Secondary). Members from each stratum were then randomly systematically selected to participate in research study. The invitational email messages were sent to members outlining the purpose of this study, explaining what participation in this study entailed, and a link to the online survey. Due to monetary and time constraints, follow up emails were not sent to potential participants. Four weeks after the initial invitation to participate was sent, the collected data was reviewed for power. The power computation determined that at least 159 participants are needed for this study (Cohen, 1992). Two hundred and thirty-nine participants fully completed the survey, yielding a five percent response rate. However, only 215 surveys were analyzed for research questions two and three. An explanation for the reduction in survey response is discussed in Chapter 4. Because more than the number of participants needed for the power computation was obtained, data was analyzed.

Procedure

An application to conduct this study was submitted to the Old Dominion University Institutional Review Board (IRB) through the Darden College of Education. Permission was granted to start the study. A copy of the IRB approval letter is included as an appendix.

Participants received an invitational email message that outlined the intention of the research study and encouraged them to participate. The email message included a link to a website to review the informed consent. Participants confirmed their agreement to

the informed consent prior to completing the instruments. Upon completion of the instruments, participants responded to a demographic questionnaire. The following participation characteristic information was included on the questionnaire: age, sex, disability status, years of counseling experience, experience working with clients with disabilities, certification and licensure status, and current work setting. The race demographic item included options such as African-American, American Indian or Alaskan Native, Asian-American, and White/European American, which were based on information from U.S. Census reports and the literature. Demographic characteristics such as disability status, age, sex, and years of counseling experience were included to align with Strike, Hummel, and Skolvolt (2004) study conducted on disability competency of mental health professionals.

Instrumentation

Counselors' Beliefs and Perceived Knowledge Regarding Learning Disabilities Instrument (CBPKLDI). Since no instrument existed that assesses counselors' beliefs and perceived knowledge related to clients with learning disabilities, a 16-item instrument was developed utilizing the *Counseling Clients with Disabilities Survey* (Strike, Skovholt, & Hummel, 2004) as a guide (see appendix section). A thorough review of the literature was conducted in order to determine the common attitudes and knowledge counselors have regarding clients with learning disabilities. An initial list of items was generated, then edited and revised by a research team which included the primary researcher, dissertation chair, methodologist, and statistical consultant.

The original development of the *Learning Disability Attitudes and Perceived Knowledge Instrument for Counselors* [now *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument*] contained 15 scale items on a 6-point Likert scale asking participants to self-report their attitudes and perceived knowledge regarding clients with learning disabilities. The LDAPKIC included two subscales, Attitudes and Perceived Knowledge. The response options for each item ranged from 1 – strongly disagree to 6 – strongly agree in which higher scores indicate positive attitudes and higher levels of perceived knowledge regarding clients with learning disabilities. Some items were reverse scored.

Several steps were taken to establish validity, including a content analysis performed by an expert panel of professionals specializing in disabilities and learning disabilities, a format evaluation performed by methodologist and a statistical consultant, and a peer review of item readability and response option review.

The expert panel included four counselors and counselor educators with expertise in disability related or learning disability related issues in counseling. These experts were asked to what extent the list of instrument items assess counselors' attitudes and perceived knowledge regarding counseling clients with learning disabilities. Specifically, experts were asked to rate each item as *Not at all*, *Somewhat*, or *A lot*. All four experts solicited returned instrument and provided feedback. All experts were female and their experience included research, teaching, and clinical practice related to clients with learning disabilities.

The expert feedback was related to the item format and structure to improve the clarity and concision of items. One expert suggested a reexamination of items to

determine if items clearly identified with perceived knowledge and attitudes subscales. She mentioned confusion on whether items on the Attitudes subscale reflected attitudes or beliefs. Only one expert recommended an additional item related to advocacy for clients with learning disabilities. She also recommended renaming the instrument *Counselors Attitudes and Perceived Knowledge regarding Learning Disabilities Instrument* to use more culturally appropriate terms.

Based on expert feedback, the Attitudes subscale was changed to Beliefs subscale, therefore the instrument was changed to *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI). In addition, an item was included inquiring about advocacy efforts for clients with learning disabilities. Other items' structure and wording were also modified based on feedback. Interrater reliability was not conducted due to the limited number of panel experts.

Following the expert review, a peer review of item readability and response option review was conducted. Ten instruments were emailed to counselor educators and counseling doctoral students soliciting feedback related to the wording, grammar, and readability of instrument. All ten instruments were returned and feedback was provided regarding item structure and format. Feedback included clearly outlining intention of item and concision of item structure. Feedback was included in the revision of the CBPKLDI.

After revisions from peer review were made, the CBPKLDI was posted on an online survey website for pilot study participants to complete. An invitational email was sent out to 40 counseling graduate students and counselors inviting them to complete the instrument. Of the 40 solicited, 23 participants completed the instrument, yielding a 53% response rate. Participants were asked to complete the instrument and provide additional

comments related to their experience completing the instrument. No additional comments or feedback were provided.

To examine the psychometric structure of the CBPKLDI, a Rasch analysis (Rasch, 1960, 1980) was implemented for the pilot data collected using Winsteps 3.72 (Linarce, 2011). A Rasch analysis was utilized because of its ability to assess measurement qualities such as, the unideminsionality of a scale, whether participants utilize response options in the fashion designed by the researcher, and, the manner in which the items align on a scale (hierarchy and linearity). Because so little pilot data was available, exploratory factor analysis could not be conducted with any confidence. However, a Rasch analysis is robust enough to use a minimal amount of data to determine an instrument's psychometric functioning.

Upon initial Rasch findings, the instrument was found to have higher than industry standards for separation and reliability (3.96, r=.94, respectively). The industry standard for separation is greater than 2 and for reliability is greater than .60. However, the person separation and reliability did not meet industry standard (.48, r=.19, respectively). This indicated that there was not enough variance in the data collected because all of the people were responding in the same way. However, with the accumulation of nine additional participants who would potentially be members of the sampling pool but different than the original pilot sample, the separation and reliabilities increased for both people and instrument items. This increase signifies that the assumption that the original pilot data was too homogenous was correct and further analysis was warranted (item separation 5.18, r=.96; person separation 1.09, r=.54). With this understanding, further analysis was conducted.

The Rasch analysis of the CBPKLDI rating scales demonstrated that the participants were not distinguishing between the response options as defined by the researcher. A closer examination of the Rasch outputs indicated that the response options from strongly disagree to strongly agree did not meet the industry standards of having a fifty percent likelihood of being selected, the structure measures did not align as intended, and the Andrich thresholds were disordered. These findings suggest that the rating scale may function better with an effective collapsing strategy or by redefining and rewording of response options. It was decided that collapsing adjacent response options was logically appropriate since the structure of the items and purpose and intention driving the instrument development called for agree-disagree scaling. Therefore, the response options were reduced from a 6-point rating scale to a 4-point rating scale by combining the response options moderately agree with agree and moderately disagree with disagree. This change improved the rating scale functioning as evidenced by all four of the response options having greater than 50 percent probability of being selected, aligning structure measures, and ordered Adrich thresholds. In addition, the Rasch Principle Components Analysis (PCAR) indicated that the data are matching the expected Rasch model. These results were interpreted as indicating that the CBPKLDI is likely a unideminsional instrument with 51 percent of the total variance explained by the measure.

The item map output for the CBPKLDI indicated that the mean for the people and instrument were aligned. When the means are aligned on the item map it can be assumed that the participants' ability matches the instrument's difficulty. This can be explained using the exemplar that a researcher has given a group of 5th graders a 5th grade math test

as opposed to giving a group of 5th graders a 10th grade math test and vice versa. On the item difficulty continuum, items that were easy to endorse, in ascending order, included five belief items (stigma advocacy, disabilities considered, no extra support, likely to achieve, difficult to empathize) and one perceived knowledge item (professional development). Difficult to endorse items, in ascending order, included three belief items (less independent, access extra support, curable) and seven perceived knowledge items (referral services, unfamiliar with strategies, do not know enough, federal regulations, comfortable with knowledge, effective interventions, offensive to inquire).

Investigation of the results of the individual scales resulted in two independently functioning unideminsional scales. Both the Belief and Perceived Knowledge scales had adequate item separation (4.13, r=.94 and 5.85, r=.97, respectively). In addition, the items in the two individual scales maintained hierarchy when separated out from the whole instrument. This suggests the scales function both independently and together as a whole instrument. It should be noted that the Belief scale may have a second factor as evidenced by nearly three items accounting for more than the industry standard of the unexplained variance. However, preliminary analysis indicates that the instrument functions well as a unideminsional instrument with high reliability.

Multicultural Counseling Knowledge and Awareness Scale (MCKAS). MCKAS (originally *Multicultural Counseling Awareness Scale* and *Multicultural Counseling Awareness Scale– Form B: Revised Self Assessment*) was developed in 1991 by Ponterotto and colleagues. Original development of the scale stemmed from a rational-empirical approach to development of the instrument (Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002). This approach "included initial item development and

selection, independent card sorts, a focus group discussion of items, and content validity. The empirical approach involved item analysis and sequence factor analytic procedures" (Ponterotto et al., p. 155). From this method, the scale, which originally included 135 items, was reduced to 70 items. The 70 item scale was tested in a pilot study in which 126 counseling students and professionals completed the instrument. After this pilot test, the scale was further reduced to 45 items. Twenty-eight items on the Knowledge/Skills subscale measured the general multicultural knowledge of participants and their familiarity with leading scholars in the area of multicultural knowledge. Fourteen items made up the Awareness subscale which indicates the level of participants' Eurocentric worldview. Three items comprised a social desirability cluster. Coefficient alphas for the Knowledge/Skills subscale and Awareness subscales were .90 and .70, respectively (Ponterotto et al.).

MCKAS has been used in a number of studies (Cannon, 2008; Constantine, 2002; Constantine, Arorash, Barakett, Blackman, Donnelly, & Eddles, 2001; Constantine & Gainor, 2001; Dickson, Argus-Calvo, & Tafoya, 2010; Lassiter & Chang, 2006; Munley, Lidderdale, Thiagarajan, & Null, 2004) where the alphas have been .90 or higher on the Knowledge/Skills subscale and ranged from .70 - .80 on the Awareness subscale.

Prior to the latest revision, critics of the MCKAS indicated that several areas of the instrument could use improvement. The six items that inquire about familiarity of scholars had been criticized for the subjectivity of scholars utilized, the need for social desirability items had been questioned because of the non-significant correlation of items with other social desirability instruments, and items had been viewed as being too long (Ponterotto et al., 2002). In response to these concerns, Ponterotto and colleagues

recruited a sample to conduct an exploratory principles components analysis to determine if revisions of the scale should be made. Results of the analysis indicated that revisions were needed in the following areas: the six items related to respondents' knowledge of scholars were eliminated; the social desirability items were eliminated; and the items with low factor loadings were also eliminated. These revisions resulted in the scale being reduced from 45 items to 32 items and the title being changed to the *Multicultural Counseling Knowledge and Awareness Scale* (MCKAS). The revised MCKAS consists of 20 Knowledge and 12 Awareness items, where the Knowledge items are positively scored and ten of the 12 Awareness items are negatively scored (Ponterotto et al.). Ponterotto and colleagues recruited another sample of 199 counseling students to test the revisions of the MCKAS. Alpha levels for the MCKAS were .85 on both the Knowledge and Awareness subscales.

The current MCKAS is a 32 item scale that assesses the perceived multicultural knowledge and awareness of respondents (Constantine & Ladany, 2000; Ponterotto, Rieger, Barret, & Sparks, 1994; Ponterotto et al., 2002). The MCKAS scale was chosen for use in this study due to its brevity and high validity and reliability findings with several populations which included counseling internship students (Cannon, 2008), school counselor trainees (Constantine et al., 2001; Constantine, 2002), school counselors (Constantine & Gainor, 2001; Dickson, Arugs-Calvo, & Taforya, 2010), Hispanic counseling students, substance abuse counselors (Lassiter & Chang, 2006), and graduate students in training within a counselor education and counseling psychology programs (Munley, Lidderdale, Thiagarajan, & Null, 2004). Additionally, the MCKAS is "least influenced by high desirability attitudes on the part of respondents" (Constantine &

Ladany, 2000, pp.161) when compared to other similar instruments such as the *Multicultural Awareness/Knowledge/Skills Survey* (MAKSS; D'Andrea, Daniels, & Heck, 1991; as cited in Hays, 2008), *Multicultural Counseling Inventory* (MCI; Sodowsky, 1996; as cited in Hays, 2008), and the *Cross-Cultural Counseling Inventory-Revised* (CCCI-R; LaFromboise et al., 1991; as cited in Hays, 2008).

In addition to an increase in alpha levels as a result of the revisions by Ponterotto et al.'s research team, convergent validity was also established through significant moderate correlation with the Knowledge/Skills subscales when compared to other multicultural counseling instruments, such as the MCI (2002). There was a high correlation ($r = .74$) between the Awareness subscale of the MCKAS and the Counseling Relationship subscale of the MCI, however, no correlation existed between the Awareness subscales of both the MCKAS and MCI (Ponterotto et al., 2002). Discriminant validity was also found within both the Awareness and Knowledge subscales. Both were significantly correlated when compared to the *Social Desirability Survey* ($r = -.39$; Ponterotto et al.).

Data Analysis

Data was analyzed using statistical software (SPSS Statistics 18.0). Data for the independent variable (three levels of counselors) was collected from participants using a demographic questionnaire. Listed below are the research hypotheses and the analyses that were performed.

Research Question #1: What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities?

H_1: Counselors will self-report positive beliefs and adequate knowledge regarding clients with learning disabilities.

Analysis 1: Descriptive statistics were utilized to determine counselors' beliefs and perceived knowledge regarding clients with learning disabilities. Further descriptive analysis included the manner in which participants self-reported beliefs and perceived knowledge regarding clients with learning disabilities as well as demographic information. The demographic information collected included participants' age, personal experience with disability, professional experience working with clients with disabilities, state of residence, sex and the accreditation status of the educational program from which the participants obtained counseling training. This information was used to determine whether these factors are associated with the responses of participants regarding self-reported beliefs and perceived knowledge in counseling clients with learning disabilities.

The data obtained for research questions two and three were analyzed using the same statistical analysis.

Research Question #2: What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities?

H_0: No differences exist between college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities.

Research Question #3: What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency?

H_0: There is no difference in how counselors self-report their perceived disability competency and their multicultural competency as measured on the CBPKLDI and MCKAS, respectively.

Analysis 2: A multivariate analysis of covariance (MANCOVA) was utilized to determine the differences among counselors perceived disability competency and their multicultural competency as measured on the CBPKLDI and the MCKAS, respectively. To eliminate confounding variables, the covariates used to determine impact on the CBPKLDI and MCKAS included disability status, disability related exposure and experience, and educational program accreditation status.

Validity Threats

Validity threats, internal and external, existed within this research study. Internal validity threats included threats in the study procedures and the varied experience of participants (Creswell, 2009). Participants were recruited from a variety of settings with the assumption that all counselors in these settings have some level of awareness, knowledge, and skills in counseling clients with learning disabilities.

Another threat to internal validity included participants who completed a degree in a rehabilitation counseling program. Participants who graduated from a rehabilitation counseling program may have more knowledge, skills, and training in working with clients with learning disabilities than non-rehabilitation counselors, since rehabilitation counseling preparation programs focus on assisting clients with disabilities. To address this internal validity threat, items regarding programs in which participants received their degrees and work experience in counseling clients with learning disabilities were included on the demographic questionnaire. Of the 239 participants, only five participants

reported graduating from a rehabilitation counseling program. Although five participants reported graduating from a rehabilitation counseling program, based on their credentials and work setting, they were included in one of the counselor groups, college counselor, mental health counselor, or school counselor, for data analysis.

Another threat to internal validity included the potential fatigue of participants. Participants completed three surveys, including one demographic questionnaire, a 16-item instrument with a 4-point rating scale, and a 32-item instrument with a 7-point rating scale. Participants may have become fatigued with the process and stopped completing surveys. Incomplete surveys were not included in the data analysis.

A final threat to internal validity included the development of the CBPKLDI. Measurement errors during survey development can occur. This threat to internal validity was addressed through reliability and validity tests which included soliciting input from experts with disability related and survey development experience and conducting a pilot study.

External validity threats included those threats that cause researchers to make incorrect inferences from the data to other populations (Creswell, 2009). One external validity threat included the characteristics of participants in the research study. Participants in the study may have had some interest or knowledge in counseling clients with learning disabilities and therefore may chose to participate in research study. However, participants who do not have an interest or knowledge in counseling clients with learning disabilities may not have participated in study, which may skew the results due to the level of experience of participants. This external validity threat was addressed by inviting professional members of ACCA and AMCHA to participate in research study.

In addition, ASCA professional members were randomly systematically selected. Members of ACCA, AMCHA, and ASCA had an equal chance of being selected for the study.

Another external validity threat included the setting, time, and selection of participants. Due to the various settings of participants, the characteristics of participants, and the time participants completed the survey, results of the study may not be generalizable to the population due to the specifics of the participants and research design.

A final external validity threat included the use of counselors who are members of counseling professional organizations. Counselors are not required to obtained membership in ACCA, AMCHA, and ASCHA, although they are encouraged. Utilizing counselors who are members of these professional organizations does not recognize counselors who are not members of these professional organizations. Thus, results may not be generalizable to the entire counseling profession population due to the use of counselors who are members of specific professional organizations.

CHAPTER FOUR

RESULTS

The purpose of this research study was to determine counselors' beliefs and perceived knowledge regarding clients with learning disabilities. This chapter provides the results of the research study. The chapter begins with demographic information regarding the sample and continues with each research question's results.

Demographic Information

Participants were recruited utilizing professional counseling associations including the American College Counseling Association (ACCA), American Mental Health Counselors Association, and the American School Counselor Association (ASCA).

ACCA had 1,413 members, which includes 1,112 who identified as professional, regular, or new program members, 275 who identified as student members, and 21 who identified as retired members. A membership type was not identified for five members.

AMCHA had 5,767 members. The demographics of AMCHA members included 63 who identified as associate members, 3,247 who identified as clinical members, 458 who identified as regular members, 266 who identified as retired members, and 1,733 who identified as student members.

ASCA had 29,848 members. The demographics of ASCA members included 19,104 who identified as professional members, 9,976 who identified as student members, 527 who identified as retired members, and 241 who identified as affiliate members.

Invitational email messages to participate in the study by completing the survey were sent to 2,738 members of ACCA and ASCA. Of the 2,738 emails distributed, 214

were undeliverable and nine individuals sent emails declining participation in the research study. An invitational email was also sent to 1,942 members of AMHCA via their marketing agency. Of the 1,942 emails distributed, 13 individuals sent emails declining participation in the research study. Of the 4,444 total invitational emails that were distributed, 239 participants completed the survey. This resulted in a five percent response rate.

Participants were asked to indicate their gender, ethnicity, and race (see Table 1). A majority of the population identified as female (76.6%, n = 183), Non-Hispanic or Latino (79.5%, n = 190), and White/European American (87.4%, n = 209). Gender, ethnic, and racial information is displayed in Table 1.

Table 1

Gender, Ethnicity, and Race of Participants

	Frequency	Percentage
Gender		
Male	53	22.2
Female	183	76.6
Transgender	0	0
No Response	3	1.2
	N = 239	100.0
Ethnicity		
Hispanic/Latino	6	2.5
Non-Hispanic/Latino	190	79.5
No Response	43	18.0
	N = 239	100.0
Race[a]		
African-American/Black	19	7.9

American Indian or Alaskan Native	7	2.9
Asian-American	1	0.4
White/European American	209	87.4
Native Hawaiian/Pacific Islander	0	0
Biracial/Multiracial	5	2.1
Other not specified	6	2.5

[a] Participants could select more than one option, therefore, frequencies do not equal 239 and percentages do not equal 100.

Participants were asked to indicate their age and state of residence. The average age of participants was 48.97 years of age. All states, with the exception of North Dakota, were represented and the largest portion of professionals reported their state of residence as Virginia (18%). Four participants indicated their residence outside the United States in Hong Kong (n = 1), Italy, (n = 1), NYS (n = 1), and outside the USA (n = 1). Descriptive data regarding age and state of residence of participants is displayed in Table 2 and 3.

Table 2

Age of Participants

N	Range	Mean	*SD*
237	23.00-83.00	48.97	12.77

Table 3

State of Residence of Participants

State	*n*	Percentage
Alabama	2	0.8
Alaska	1	0.4
Arizona	2	0.8
Arkansas	1	0.4
California	7	2.9
Colorado	3	1.3
Connecticut	3	1.3
Delaware	3	1.3
Florida	8	3.3
Georgia	6	2.5
Idaho	1	0.4
Illinois	6	2.5
Indiana	3	1.3
Iowa	3	1.3
Kansas	4	1.7
Louisiana	6	2.5
Maine	2	0.8
Maryland	6	2.5
Massachusetts	10	4.2
Michigan	7	2.9
Minnesota	4	1.7
Mississippi	1	0.4
Missouri	11	4.6
Montana	1	0.4
Nebraska	2	0.8
New Hampshire	1	0.4
New Jersey	9	3.8
New Mexico	2	0.8

New York	5	2.1
North Carolina	6	2.5
Ohio	5	2.1
Oklahoma	1	0.4
Oregon	5	2.1
Pennsylvania	10	4.2
Puerto Rico	1	0.4
South Carolina	4	1.7
South Dakota	2	0.8
Tennessee	7	2.9
Texas	7	2.9
Utah	1	0.4
Vermont	4	1.7
Virginia	43	18.0
Washington	9	3.8
West Virginia	2	0.8
Wyoming	4	1.7
Hong Kong	1	0.4
Italy	1	0.4
NYS	1	0.4
Outside the USA	1	0.4
No Response	5	1.9
	$N = 239$	100.0

Participants were asked to indicate their personal experience with disabilities, which included whether they identified as having a disability (15.9%, $n = 38$) or identified as not having a disability (84.1%, $n = 201$). Participants were also asked to indicate whether they had a loved one, close friend, or relative with a disability (68.6%, $n = 164$) or did not have a loved one, close friend, or relative with a disability (31.4%, $n =$

75). Table 4 shows the percentages of participants who have personal experience with disabilities.

Table 4

Personal Experiences with Disabilities

Experience	Frequency	Percentage
Self Identify as having Disability		
Yes	38	15.9
No	201	84.1
Total	$N = 239$	100.0
Close friend, loved one, relative with disability		
Yes	164	68.6
No	75	31.4
Total	$N = 239$	100.0

Additional demographic questionnaire items inquired about participants' educational credentials and educational program accreditation status. See Table 5.

Table 5

Educational Characteristics of Participants

	Frequency	Percentage
Degree		
Bachelor's	2	0.8
Master's	160	66.9

Educational Specialist	12	5.0
Doctorate	65	27.2
	$N = 239$	100.0
Accreditation[a]		
CACREP	131	54.8
CORE	5	2.1
AAMFT	14	5.9
Unknown	57	23.8
Other	36	15.1

[a] Participants could select more than one option, therefore, frequencies do not equal 239 and percentages do not equal 100.

Participants were asked to indicate whether they worked more than 20 hours a week counseling clients with disabilities and whether they had a practicum or internship experience working primarily with clients with disabilities (see Table 6).

Table 6

Participants' Counseling Experience with Clients with Disabilities

	Frequency	Percentage
Internship or practicum with clients with disabilities		
Yes	58	24.3
No	180	75.3
No Response	1	0.4
	$N = 239$	100.0
Employment working with clients with disabilities		

Yes	88	36.8
No	149	62.3
No Response	2	0.8
	$N = 239$	100.0

Participants were asked to indicate their years of pre-masters and post-master's counseling experience. The experience of participants ranged from zero to 43 years. Because of the responses, participants' years of experience were grouped (Strike, Skovholt, & Hummel, 2004) by no pre-master's experience (31%, $n = 74$), more than one year but less than two years experience (36%, $n = 86$), more than two years but less than three years experience (6.7%, $n = 16$), more than three years but less than four years experience (6.3%, $n = 15$), more than four years but less than 5 years experience (3.8%, $n = 9$), and more than five years experience (12.6%, $n = 30$). See Table 7.

Table 7

Participants' Pre-master's Counseling Experience

Experience	Frequency	Percentage
No pre-master's experience	74	31.0
More than one year but less than two years	86	36.0
More than two years but less than three years	16	6.7
More than three years but less than four years	15	6.3
More than four years	39	16.4
No Response	9	3.8

Total	$N = 239$	100.0

Participants were asked to indicate their years of post-master's counseling experience. Like the data from the pre-master's experience, post-master's counseling experience were grouped into no post master's experience (1.7%, $n = 4$), more than one year but less than two years post-master's experience (6.7%, $n = 16$), more than two years but less than three years post-master's experience (3.8%, $n = 9$), more than three years but less than four years post-master's experience (2.9%, $n = 7$), more than four years but less than five years post-master's experience (5.0%, $n = 12$), and more than five years of post-master's experience (79.9%, $n = 191$). The majority of the sample had substantial experience in the counseling profession (see Table 8).

Table 8

Participants' Post-masters Counseling Experience

Experience	Frequency	Percentage
No post-master's experience	4	1.7
More than one year but less than two years	16	6.7
More than two years but less than three years	9	3.8
More than three years but less than four years	7	2.9
More than four years but less than five years	12	5.0
More than five years	191	79.9
	$N = 239$	100.0

Participants were asked to indicate their credentials and current work setting. Descriptive data of participant responses can be found in Table 9.

Table 9

Credentials and Work Setting

	Frequency	Percentage
Credential[a]		
Licensed by state as counselor	127	53.1
Certified or licensed by state as school counselor	92	38.5
Certified or licensed by state as substance abuse counselor	12	5.0
Certified Rehabilitation Counselors (CRC)	3	1.3
National Certified Counselors (NCC)	89	37.2
Other	14	5.9
None/No Response	54	22.6
Work Setting[a]		
Private Practice	63	26.3
Community Mental Health	12	5.0
School	96	40.0
Hospital	5	2.1
University/College	77	32.1
Vocational Rehabilitation	0	0
Residential Setting	6	2.5
Other	26	10.8

[a] Participants could select more than one option, therefore, frequencies do not equal 239 and percentages do not equal 100.

Further descriptive data was adjusted to group counselors into three groups: college counselors, mental health counselors, and school counselors. Counselors were selected for these groupings based on an examination of their current work settings and credentials. Of the 239 participants who completed surveys, 215 participants were identified as college counselors, mental health counselors, and school counselors. The remaining 24 respondents could not be identified for membership in one of the three counselor groups because it was unclear as to whether those participants were college counselors, mental health counselors, or school counselors, therefore, the responses of those participants were not used in answering research questions two and three.

Instruments

Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument (CBPKLDI). Item analyses were conducted on the 16 items hypothesized to assess beliefs and perceived knowledge when counseling clients with learning disabilities. The initial overall reliability analysis revealed a Cronbach's α of .53. An item analysis was conducted to evaluate the two subscales. Subscale items were correlated with the total score from its own subscale and then with the other subscale. The Beliefs subscale, when correlated with the Beliefs total scores, indicated a positive, moderate relationship strength among all items on subscale, with correlations ranging between .29 and .40 ($p < .01$). The Perceived Knowledge subscale, when correlated with the Perceived Knowledge total score, indicated a positive, moderate relationship strength among all items on subscale, with the exception of item 16 (I believe it is offensive to

inquire about a person's learning disability.), with correlations ranging between .39 and .76 ($p < .01$). Item 16 was found non-significant on both the Belief and Perceived Knowledge subscales ($p > .05$).

Item analyses were also conducted on the Beliefs subscale items when correlated with the Perceived Knowledge subscale total scores. Results indicated that item 1 (I believe it is difficult to empathize with the daily obstacles faced by a person living with a learning disability), item 2 (I believe people with learning disabilities are just as likely to achieve their career goals as people without learning disabilities), item 11 (A learning disability is a curable medical condition.), and item 15 (Counselors should work to reduce the stigma that clients living with learning disabilities encounter.) were significant at $p < .05$. When the Perceived Knowledge subscale items were compared with the Beliefs subscale total score, results indicated that item 14 (I believe it is important to seek out professional development opportunities related to counseling clients living with learning disabilities.) was significant at $p < .01$. These significant results indicate that items 1, 2, 11, 14, and 15 were significantly correlated with both subscales, which means that items can work on both subscales. Preliminary comparison analyses of these correlations were conducted to determine the strength of the relationship of items on both subscales. Results revealed that items 1, 2, 11, and 15 on the Beliefs subscale, had stronger relationships with the Belief subscale while item 14, an item on the Perceived Knowledge subscale, had a stronger relationship on the Perceived Knowledge subscale. Based on this analysis, all items were kept on their individual subscale.

Due to the low reliability of the entire instrument, a peer review was conducted for statistically significant and non-significant items on both the Beliefs subscale and

Perceived Knowledge subscale. The outcome of this analysis indicated the reverse coding of item 1 and the removal of item 16, which increased the Cronbach's α from .53 to .66. The Beliefs subscale Cronbach's α is .595 and the Perceived Knowledge subscale Cronbach's α is .767. Continued item analysis demonstrated that items 1, 11, and 15 from the Beliefs subscale were still correlated with the Perceived Knowledge subscale total score and item 14 from the Perceived Knowledge subscale was still correlated with the Beliefs subscale total scores. Additionally, item 5 from the Beliefs subscale was correlated with the Perceived Knowledge subscale total score and items 7, 8, 9, and 13 from the Perceived Knowledge subscale were correlated with the Beliefs subscale total score. However, although items were correlated with both scales, the items had a stronger correlation with its individual scale total score. Results of item analysis on both subscales of the CBPKLDI are displayed in Table 10.

Table 10

Item Analysis for CBPKLDI

Items	Belief Total Score Correlation	Perceived Knowledge Total Score Correlation
Belief Subscale		
1. Difficult to empathize	0.457[b]	-0.296[b]
2. Achieve career goals	0.519[b]	0.127
3. Less independent	0.225[b]	0.001
4. Extra Support	0.365[b]	0.085
5. Appropriate counseling interventions	0.461[b]	0.158[a]
10. Advantage of extra support	0.380[b]	0.033
11. Curable medical condition	0.211[b]	-0.317[b]
15. Reduce stigma	0.368[b]	0.193[b]

Perceived Knowledge		
6. No knowledge about federal regulations	0.079	0.742[b]
7. Effective counseling interventions	0.145[a]	0.729[b]
8. Additional community services	0.206[b]	0.608[b]
9. Comfortable with knowledge	0.191[b]	0.763[b]
12. Unfamiliar effective counseling strategies	0.061	0.673[b]
13. Do not know enough	0.136[a]	0.769[b]
14. Professional development opportunities	0.168[b]	0.410[b]

[a] Significant at $p < .05$
[b] Significant at $p < .01$

Multicultural Counseling Knowledge and Awareness Scale (MCKAS).

Reliability analysis was conducted for the MCKAS. Results revealed Cronbach's α of .893, which is consistent with previous literature utilizing the MCKAS (Cannon, 2008; Constantine, 2002; Constantine et al., 2001; Constantine & Gainor, 2001; Dickson, Argus-Calvo, & Tafoya, 2010; Lassiter & Chang, 2006; Munley, Lidderdale, Thiagarajan, & Null, 2004).

Tests of Normality

Before the analyses were conducted to answer the research questions, several steps were taken to insure normality of data. Descriptive statistics were conducted to insure that the sample was normally distributed. Sample total scores of the MCKAS and mean scores on the Perceived Knowledge subscale and Beliefs subscale were normally distributed.

A test of homogeneity for dependent variables, total scores on the MCKAS, Perceived Knowledge subscale, and Beliefs subscale, was conducted to indicate the relationship between the subscales of the CBPKLDI and the total score on the MCKAS.

A total score for the CBPKLDI was not computed because the focus on the research study was on counselors' scores on the two subscales, Beliefs and Perceived Knowledge. Levene's statistic was non-significant ($p = .883$, $p = .730$, and $p = .147$), which indicated the variance and covariance matrices among the total score on the MCKAS and the subscale scores on the CBPKLDI were equal. The Pearson correlations, ranging from $r. =$ .153 to .225, indicated a relationship among the Belief subscale, Perceived Knowledge subscale, and the MCKAS instrument, however, the relationship was not strong. This correlation indicated a weak, positive relationship between the CBPKLDI subscales and MCKAS, therefore, they are not identical. Normality of the sample was obtained and a weak, positive correlation of the CBPKLDI subscales and MCKAS was found, therefore, further analysis of data was conducted.

Research Question One

The first research question was the following: What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities? Participants were asked to complete the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI) in which they responded to items assessing their beliefs and perceived knowledge and rated whether they Strongly Disagreed, Disagreed, Agreed, or Strongly Agreed with each item (see Table 11). The average scores reflected the CBPKLDI with item 1 reverse coded and the removal of item 16. The possible range of scores was 1 to 4. A score of 1 indicated counselors had negative beliefs and low levels of knowledge; and a score of 4 indicated counselors had positive beliefs and high levels of knowledge. The mean (M) score for counselors on the Perceived Knowledge subscale was 2.88, and the mean (M) score for counselors on the Beliefs subscale was

2.62 (see Table 12). These results indicated that counselors perceived themselves to have slightly positive beliefs and levels of knowledge that tended toward the high end of the scale. The research hypothesis stated that counselors will self-report positive beliefs and adequate knowledge regarding clients with learning disabilities, therefore, the hypothesis failed to be rejected.

Table 11

CBPKLDI Item Descriptive Statistics

Items	*M*	*SD*	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Difficult to empathize[a]	3.09	0.75	5	43	117	74
2. Achieve career goals	2.82	0.75	40	126	63	10
3. Less independent	1.96	0.66	2	41	142	54
4. Extra support	3.04	0.63	48	157	30	4
5. Appropriate counseling interventions	3.26	0.67	83	142	9	3
6. No knowledge about federal regulations[a]	3.11	0.76	7	36	120	76
7. Effective counseling interventions	2.70	0.66	16	144	72	5
8. Additional community services	3.02	0.73	57	137	38	6
9. Comfortable with knowledge	2.66	0.77	29	111	90	6
10. Advantage of extra support	1.75	0.62	3	12	148	74
11. Curable	1.64	0.54	0	6	141	91

medical condition						
12. Unfamiliar effective counseling strategies[a]	2.80	0.67	7	61	144	27
13. Do not know enough[a]	2.66	0.78	10	97	97	35
14. Professional development opportunities	3.26	0.65	79	149	6	3
15. Reduce stigma	3.14	0.65	115	113	6	5

[a] Indicates a reverse coded item

Table 12

Participants' Perceived Disability Competency Scores

	Perceived Knowledge	Beliefs
N	239	239
M	2.88	2.62
SD	0.48	0.25
Range[a]	1.43-4.00	1.88-3.38

[a] Range of individuals' average scores

Research Questions Two and Three

The second research question was the following: What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities? The third research question was the following: What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency? A multivariate analysis of covariance (MANCOVA) was conducted for research questions

two and three, in which covariates included participants' personal experience with disability, work experience with clients with disabilities, and educational program accreditation status. Descriptive statistics of college counselors', mental health counselors', and school counselors' scores on both the CBPKLDI subscales and the MCKAS total scores are displayed in Tables 13 and 14.

Table 13

CBPKLDI Descriptive Statistics of Individual Groups of Counselors

Group	College Counselors	Mental Health Counselors	School Counselors	Total
n	71	52	92	215
Perceived Knowledge *M*	2.85	2.80	2.97	2.89
Perceived Knowledge *SD*	0.48	0.55	0.46	0.49
Beliefs *M*	2.61	2.60	2.67	2.63
Beliefs *SD*	0.20	0.32	0.24	0.25

Table 14

MCKAS Descriptive Statistics for Individual Group of Counselors

Descriptive Statistics	*n*	*M*	*SD*
College Counselors	71	175.20	19.23
Mental Health Counselors	52	174.04	20.77

School Counselors	92	165.21	21.11
Total	215	170.64	20.88

When conducting a MANCOVA, a homogeneity test should be conducted to confirm the equality of variance among dependent variables (Perceived Knowledge subscale score, Beliefs subscale score, and MCKAS total score), the three levels of independent variables (college counselors, mental health counselors, and school counselors), and covariates. Box's M indicated a non-significant relationship among counselor groups, CBPKLDI subscales, MCKAS instrument, and covariates ($p = 0.35$). This indicates that the variance and covariance among counselors', total scores, and covariates were equal across all groups.

Using the Wilk's statistic, the MANCOVA revealed a statistically significant difference between counselors' scores on the CBPKLDI subscales and the MCKAS, $\Lambda = .87$, $F(6, 384) = 4.59$, $p < .05$, partial $\eta^2 = 0.07$ (see Table 15). In answering research question two, a post hoc analysis (Tukey) was conducted to determine where group differences occurred on the CBPKLDI (see Table 16). The post hoc analysis included groups of counselors and the CBPKLDI and MCKAS and revealed a non-significant difference when college counselors, mental health counselors, and school counselors were compared to one another on the CBPKLDI subscales. The hypothesis for research question two was that no differences exist between college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities, therefore, the hypothesis failed to be rejected. However, a

statistically significant difference was found among college counselors, mental health counselors, and school counselors and the MCKAS. Results of the post hoc analysis among groups of counselors can be found in Table 16.

Table 15

MANCOVA Results

Variables	Wilks' Lambda	*F*	α	Partial η^2
Counselors	0.87	4.59	0.0002[a]	0.07
Self-Identify with a disability and Loved one with a disability	0.96	0.91	0.52	0.01
Practicum/internship experience and Job with disability	0.87	2.28	0.008[a]	0.05
CORE, CACREP, AAMFT, Accreditation – Unknown, Accreditation – Other	0.73	1.94	0.002[a]	0.10

[a] Significant at $p < .01$

Table 16

Post Hoc Analysis Between Groups on the CBPKLDI and MCKAS

	Comparison	α	95% CI[a]
Perceived Knowledge			(Lower, Upper)
College	Mental Health	0.88	(-0.16, 0.24)
	School	0.19	(-0.29, -0.04)
Mental Health	College	0.88	(-0.18, 0.17)

	School	0.09	(-0.35, 0.02)
School	College	0.19	(-0.04, 0.29)
	Mental Health	0.09	(0.10, 0.43)
Beliefs			(Lower, Upper)
College	Mental Health	0.99	(-0.098, 0.11)
	School	0.28	(-0.15, 0.03)
Mental Health	College	0.99	(-0.11, 0.098)
	School	0.28	(-0.16, 0.03)
School	College	0.28	(-0.03, 0.15)
	Mental Health	0.28	(-0.03, 0.16)
MCKAS			
College	Mental Health	0.95	(-7.58, 9.90)
	School	0.006[b]	(2.43, 17.56)
Mental Health	College	0.95	(-9.90, 7.58)
	School	0.03[b]	(0.52, 17.14)
School	College	0.006[b]	(-17.56, -2.43)
	Mental Health	0.03[b]	(-17.14, -0.52)

[a]Confidence Interval (lower, upper)
[b]Significant at $p < .05$

Using the Wilk's statistic, the results of the MANCOVA indicated a non-significant difference between the covariate personal disability status and having a loved one with a disability and dependent variables (subscale scores on the CBPKLDI and the MCKAS total score), $\Lambda = .96$, $F(9, 467) = .90$, $p > .05$, partial $\eta^2 = .01$ (see Table 15). A significant difference was found between the covariates practicum or internship working with clients with disabilities and employment with clients with disabilities, $\Lambda = .87$, $F(12, 508) = .008$, $p < .05$, partial $\eta^2 = .05$ (see Table 15). Those participants who indicated having a practicum or internship working primarily with clients with disabilities and employment working primarily with clients with disabilities reported more positive

beliefs and higher levels of knowledge than those who reported having no practicum or internship working primarily with clients with disabilities (see Table 17).

A significant difference was also found with covariate Accreditation, which included CORE, CACREP, AAMFT, Accreditation Unknown, and Accreditation Other, $\Lambda = .73$, $F(33, 566) = 1.94$, $p < .05$, partial $\eta^2 = .10$ (see Table 15). Those participants who identified their educational program accreditation status as CORE reported higher levels of knowledge than those participants who identified their educational program accreditation status as CACREP, AAMFT, did not know their accreditation status, or identified Other accreditation, which included educational program accreditation status not listed on the demographic questionnaire. Regarding the Beliefs subscale, participants who identified their educational program accreditation status as CACREP reported more positive beliefs than participants who identified their educational program accreditation status as CORE, AAMFT, did not know their accreditation status, and Other accreditation, which included accreditation status not listed on the demographic questionnaire. Mean (*M*) scores from covariates can be found in Table 17.

Table 17

Descriptive Statistics of Covariates

Covariates	Frequency	Percentage	Perceived Knowledge *M*	Beliefs *M*
Self Identify as having Disability				
Yes	38	15.9	3.08	2.61
No	201	84.1	3.02	2.61

Total	$N = 239$	100.0		
Close friend, loved one, relative with disability				
Yes	164	68.6	3.04	2.63
No	75	31.4	3.06	2.59
Total	$N = 239$	100.0		
Internship and/or practicum with clients with disabilities				
Yes	58	24.3	3.17	2.70
No	180	75.3	3.12	2.65
No Response	1	0.4		
	$N = 239$	100.0		
Employment working with clients with disabilities				
Yes	88	36.8	3.30	2.63
No	149	62.3	3.07	2.62
No Response	2	0.8		
	$N = 239$	100.0		
Accreditation[a]				
CACREP	131	54.8	3.10	2.67
CORE	5	2.1	3.34	2.59
AAMFT	14	5.9	3.01	2.62
Unknown	57	23.8	3.07	2.67
Other	36	15.1	3.15	2.68

[a] Participants could select more than one option, therefore, frequencies do not equal 239 and percentages do not equal 100.

In answering research question three, a statistically significant difference was found between counselors and the scores on CBPKLDI subscales and the MCKAS, Λ = .87, $F(6, 384) = 4.59$, $p < .05$, partial $\eta^2 = 0.07$ (see Table 15). The hypothesis for research question three stated that no difference exists in how counselors self-report their perceived disability competency and their multicultural competency, therefore, the hypotheses was rejected.

In order to best understand data and the group differences, univariate ANOVAs and a discriminant function analysis were conducted to explore the differences between groups of counselors and the subscale scores of the CBPKLDI and the MCKAS total score (see Table 18).

Results from the univariate ANOVA revealed statistically significant differences between counselors' scores on the Perceived Knowledge subscale of the CBPKLDI, $F(2, 212) = 7.61$, $p < .05$, partial $\eta^2 = .07$, and the MCKAS, $F(2, 212) = 3.33$, $p < .05$, partial $\eta^2 = .03$. This indicates that the statistically significant difference in counselors' scores occurred on the Perceived Knowledge subscale and the MCKAS.

Table 18

Univariate ANOVA for Covariates and Scores for CBPKLDI and MCKAS

Variables		*F*	α	Partial η^2
Counselors	Perceived Knowledge	7.61	0.001[a]	0.07
	Beliefs	2.12	0.12	0.02
	MCKAS	3.33	0.04[a]	0.03

Self-Identify with a disability and Loved one with a disability	Perceived Knowledge	0.27	0.85	0.004
	Beliefs	1.10	0.35	0.01
	MCKAS	1.49	0.22	0.02
Practicum/internship experience and Job with disability	Perceived Knowledge	5.77	0.0002[a]	0.11
	Beliefs	0.30	0.88	0.006
	MCKAS	0.61	0.66	0.01
CORE, CACREP, AAMFT, Accreditation – Unknown, Accreditation – Other	Knowledge	2.31	0.01[a]	0.12
	Beliefs	2.33	0.01[a]	0.12
	MCKAS	1.48	0.14	0.07

[a] Significant at $p < .01$

A discriminant analysis was conducted as a follow up to the significant MANCOVA, which is a robust post hoc analysis for a significant MANCOVA. The first discriminant function tests the model as a whole while the second function peels away variates from the first discriminant function. The first discriminant function overall Wilk's Lambda was significant, $\Lambda = 0.90$, $\chi^2 (6, N = 215) = 22.12, p < .05$, which indicates differences existed among counselors across both instruments. The second discriminant function Wilk's Lambda was non-significant, $\Lambda = 0.999$, $\chi^2 (2, N = 215) =$

0.26, $p > .05$, which indicates that no differences existed among counselors across both instrument after removing the first discriminant function (see Table 19). Because only the first discriminant function was significant, it will be the only one discussed. When examining the eigenvalues of the discriminant functions, the first discriminant function accounted for 98.9% of the total variance, while the second discriminant function accounted for 1.1% of the total variance (see Table 20).

Table 19

Discriminant Analysis Wilk's Lambda

Function	Wilks' Lambda	Chi-square	α
1 through 2	0.900	22.124	0.001
2	0.999	0.256	0.880

Table 20

Eigenvalues of Discriminant Functions

Function	Eigenvalue	Percentage of Variance	Cumulative Percentage	Canonical Correlation
1	0.109	98.9	98.9	0.314
2	0.001	1.1	100.0	0.035

The Perceived Knowledge and Beliefs subscales had moderate relationships on the first discriminant function, however, the MCKAS had a negative relationship on the function. This indicates that counselor groups differentiated more on the Perceived Knowledge subscale and Belief subscale than the MCKAS (see Table 21). This also

indicates that the Perceived Knowledge had the largest contribution on the first discriminant function. This is consistent with the univariate ANOVA in that significance was found with the Perceived Knowledge subscale (see Table 18).

When examining the group centroids for the first discriminant function (see Table 22), which indicates the mean values on the discriminant function for the three groups of counselors, school counselors obtained the highest mean score while mental health counselors and college counselors had the lowest mean scores on the first discriminant function. This indicates that school counselors differentiated from college counselors and mental health counselors on the first discriminant function, which is largely contributed by the Perceived Knowledge subscale. School counselors' scores differentiated more on the Perceived Knowledge subscale than college counselors and mental health counselors differentiated on the Perceived Knowledge subscale. These results suggest that school counselors perceived they had more knowledge regarding learning disabilities than did college counselors and mental health counselors.

Table 21

Discriminant Function Coefficients

Scale	Function	
	1	2
Perceived Knowledge	0.490	0.807
Beliefs	0.449	-0.039
MCKAS	-0.885	0.483

Table 22

Group Centriods of Discriminant Functions

Counselor	Function	
	1	2
College Counselor	-0.284	0.039
Mental Health Counselor	-0.284	-0.053
School Counselor	0.379	$-1.728e^{-5}$

Conclusion

Results regarding research question one indicated that counselors reported slightly positive beliefs and levels of perceived knowledge that tend toward the higher end of the scale. This indicates that counselors perceived themselves to be competent in working with clients with learning disabilities.

Research questions two and three were answered utilizing a multivariate analysis of covariance (MANCOVA). Results regarding research question two indicated there was no significant difference among college counselors, mental health counselors, and school counselors regarding their beliefs and perceived knowledge related to counseling clients with learning disabilities. Results also revealed that the covariates including educational program accreditation status and work experience with clients with disabilities correlated with the CBPKLDI subscales. Participants who reported their educational program accreditation status as CORE reported higher levels of knowledge than other educational accredited programs, and participants who identified their educational program

accreditation status as CACREP reported more positive beliefs than other educational accredited programs in study. Also, participants who indicated possessing work experience with clients with disabilities reported more positive beliefs and higher levels of knowledge related to counseling clients with learning disabilities than participants who did not indicate having work experience with clients with disabilities.

The MANCOVA was also utilized to answer research question three. Results revealed that a significant difference was found in how counselors reported their perceived disability competency and their multicultural competency. The results indicated that counselors responded differently on both instruments. The discriminant analysis revealed a difference was found with the CBPKLDI Perceived Knowledge subscale, indicating that counselors differentiated more on the Perceived Knowledge subscale than on the Beliefs subscale and the MCKAS. Further analysis revealed that school counselors had a higher mean score than college counselors and mental health counselors, which indicated the school counselors perceived themselves to have more knowledge related to clients with learning disabilities than college counselors and mental health counselors.

CHAPTER FIVE

DISCUSSION

An exploration of the beliefs and perceived knowledge of counselors has been evaluated using the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI). Results revealed counselors perceived themselves to have slightly positive beliefs and moderate levels of knowledge regarding clients with learning disabilities. When examining group differences, no significant difference exists among the perceived disability competency of college counselors, mental health counselors, and school counselors. However, a significant difference did exist among college counselors', mental health counselors', and school counselors' multicultural competency as measured on the *Multicultural Counseling and Awareness Scale* (MCKAS). Further analysis revealed that counselors differed more on the Perceived Knowledge subscale than the Beliefs subscale and the MCKAS, with school counselors differing more on the Perceived Knowledge subscale than college counselors and mental health counselors. This chapter provides a discussion of the results, limitations, and the implications of this study.

Findings from Descriptive Data

The purpose of this study was to assess counselors' perceived disability competency as it relates to working with clients with learning disabilities. The instruments used for this survey research study included the CBPKLDI, which assessed counselors' beliefs and perceived knowledge and was developed for the purposes of this research study, and the MCKAS, which assessed the multicultural competency of participants. Invitational emails were sent to 4,752 counselors who were members of the

American College Counseling Association (ACCA), American Mental Health Counselors Association (AMCHA), and American School Counselor Association (ASCA). Three hundred and eight individuals either declined participation in research study at this time or the invitational email was undeliverable. Of the 4,444 invitations to participate, 239 surveys were completed, yielding a response rate of five percent. The most likely explanation of the low response rate was the length of the survey, which included three parts and took approximately 30 minutes to complete.

Of the 239 surveys completed, 215 surveys were used to answer research questions two and three. It was unclear whether some of the participants identified as a college counselor, mental health counselor, or school counselor, therefore, the 24 participant responses were not included in the data analyses for research questions two and three due to the inability to fit the respondents into one of the three counselor groups.

The majority of the sample identified as female (76.6%, $n = 183$) and White/European American (87.4%, $n = 209$), which is consistent with the demographics of other research studies involving counseling professionals and students (Castillo, Brossart, Reyes, Conoley, & Phoummarath, 2007; Milsom & Dietz, 2009; Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002; Strike, Skovholt, & Hummel, 2004). The average age of participants was 48.97 years and all states were represented, with the exception of North Dakota.

Additional information was collected from participants regarding their personal, educational, and professional experiences working with clients with disabilities. The majority of participants (68.6%) indicated having a loved one, close friend, or relative with a disability. This indicates that a majority of participants have personal experiences

related to individuals with disabilities, which may have biased their responses and the outcome of this study.

Most of the sample reported their highest degree as a master's degree (66.9%). This indicates that the sample consisted of practitioners in the counseling field, which was the intended target population. Very few participants reported no post-master's counseling experience (1.7%) while majority of the sample (79.9%) had more than five years of post-master's experience. This indicates that participants were experienced professionals providing counseling.

Overall, the sample included participants who were similar to the demographics of counselors in other research studies while a majority of participants indicated some experience (personal) with people with a disability. These results are similar to the findings of Strike et al.'s (2004) study when assessing for participants' disability competency.

Research Question One Findings

Research question one answered how counselors reported their beliefs and perceived knowledge on the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI). The possible range of scores was 1 to 4. A score of 1 indicated counselors had negative beliefs and low levels of knowledge; and a score of 4 indicated counselors had positive beliefs and high levels of knowledge. The mean of counselors' scores on the Perceived Knowledge and Beliefs subscale was 2.88 and 2.62, respectively. According to the results of the data analysis, the hypothesis failed to be rejected, indicating that counselors reported slightly positive beliefs and moderate levels of knowledge regarding counseling clients with learning disabilities. This indicates

that counselors, more often than not, scored positively on items on the instrument. However, it is interesting to note that counselors had a higher mean on the Perceived Knowledge subscale than the Beliefs subscale. This could indicate that counselors perceived themselves to be knowledgeable when counseling clients with learning disabilities. However, counselors reported having only slightly positive beliefs regarding clients with learning disabilities.

When considering individual items, item 11 (A learning disability is a curable medical condition.) had the lowest mean average, 1.64, indicating that counselors disagreed with this item. This indicates that counselors work from a more holistic model of counseling where a client with a learning disability is not abnormal and does not need to be cured. Items 5 (A learning disability should be considered when selecting appropriate counseling interventions.) and 14 (I believe it is important to seek out professional development opportunities related to counseling clients with learning disabilities.) received the highest mean average, 3.26, indicating that most counselors agreed with these items. This indicates that participants incorporate appropriate counseling interventions when working with clients with learning disabilities and continue to educate themselves through professional development opportunities about clients with learning disabilities. As such, participants in this sample are considering clients' learning disabilities when engaging in the therapeutic process.

Research Question Two Findings

Research question two answered whether differences exist in how college counselors, mental health counselors, and school counselors reported their beliefs and perceived knowledge regarding clients with learning disabilities. According to the results

of the data analysis, the hypothesis failed to be rejected, indicating no significant difference existed among the three groups of counselors. School counselors had a higher mean average on the Perceived Knowledge and Beliefs subscales of the CBPKLDI (2.97, 2.67, respectively), while mental health counselors had the lowest mean average on both subscales (2.80, 2.60, respectively). These results suggest that perhaps school counselors have the highest perceived knowledge and most positive beliefs toward clients with learning disabilities and mental health counselors have the lowest. However, the scores were not statistically significant.

Much of the literature on counseling clients with learning disabilities pertains to or involves school counselors (Hatch, Shelton, & Monk, 2009; Milsom, 2006; Milsom & Hartley, 2005; Mitcham, Portman, & Dean, 2009; Rungta, Margolis, & Westwood, 1995). It is possible that school counselors receive more training regarding clients with learning disabilities than college counselors and mental health counselors. However, results from the data analysis did not indicate significant higher scores in either knowledge or beliefs for school counselors when compared to college counselors and mental health counselors.

The results may indicate that college counselors and mental health counselors are receiving some training regarding clients with learning disabilities. One possible explanation for college counselors having a lower mean score, when compared to school counselors, is that while college counselors may encounter clients with learning disabilities in college, students may go to the disability services office to receive accommodations and support. Therefore, students with learning disabilities may not be utilizing the services of college counselors. If college counselors are not exposed to or are

not working with students with learning disabilities, they will not increase their clinical knowledge in providing services to a student with a learning disability who enters their office.

Mental health counselors, on the other hand, had the lowest mean average, indicating only slightly positive beliefs (2.60) and modest levels of perceived knowledge (2.80) associated with learning disabilities. This could indicate that mental health counselors may not be receiving in-service training in their current work setting, or that clients with learning disabilities are receiving services from other sources, such as vocational rehabilitation centers. Although college counselors and mental health counselors had a lower mean average when compared to school counselors, their scores were not statistically significant. All counselors encounter clients with learning disabilities and should seek out information and training that will enable them to work proficiently with these clients.

Counselors' scores on the CBPKLDI subscales were found to be significant when controlled for work experience with clients with disabilities (practicum or internship experience primarily with clients with disabilities and job working primarily with clients with disabilities) and educational program accreditation status (CORE, CACREP, AAMFT, Accreditation-Unknown, and Accreditation-Other). Controlling for these variables indicated an influence of these variables on the scores for the CBPKLDI subscales, which could indicate a relationship among educational program accreditation status, work experience with clients with disability, and the subscale scores on the CBPKLDI. Analysis revealed that counselors who reported their educational program accreditation status as CORE reported higher levels of knowledge regarding clients with

learning disabilities than other educational accredited program statuses utilized in study. This result is not surprising in that CORE accredits graduate programs that specifically prepare rehabilitation counselors who exclusively serve clients with disabilities. Also, counselors who reported their educational program accreditation status as CACREP reported slightly higher positive beliefs regarding clients with learning disabilities than other educational accredited program statuses utilized in study. It is interesting to note that CORE educational programs, which are programs who specialized in training counselors to work primarily with clients with disabilities, perceived themselves to have more knowledge, while CACREP educational programs perceived themselves to have slightly more positive beliefs than other programs utilized in study. These results could indicate that CORE accredited educational programs do a better job of providing knowledge about working with clients with learning disabilities than other educational accredited programs, while CACREP accredited educational programs do a better job of providing counselor trainees with insight into their biases and assumptions regarding clients with learning disabilities.

Analysis also revealed that counselors who reported having work experience with clients with disabilities had a higher mean score on the CBPKLDI subscales than those who reported having no work experience with clients with disabilities. This indicates that those who worked with clients with disabilities perceived themselves as being more competent in working with these clients than participants who reported having no work experience with clients with disabilities. The results regarding participants' work experience with clients with disabilities is similar to the findings found in Strike et al.'s (2004) study, where counselors with disability related work experience were found to

have more positive beliefs about clients with disabilities than counselors without disability related experience.

Research Question Three Findings

Research question three was related to the question of whether there was a difference in how counselors reported their perceived disability competency versus their multicultural competency. According to the results of the data analysis, the hypothesis was rejected, demonstrating a difference in how counselors reported their perceived disability competency and multicultural competency. This result indicates that counselors reported differently on the CBPKLDI subscales than on the MCKAS. It should be noted that both scales assessed counselor competency regarding multiculturalism, yet both scales assess different aspects of multiculturalism, such as the culture of disability and racial and ethnic culture. One possible explanation could be that counselors view multiculturalism as focusing on race, ethnicity, and other cultural factors to the exclusion of disability.

School counselors scored higher on the CBPKLDI subscales than college counselors and mental health counselors, although their higher scores were non-significant. However, school counselors had significantly lower mean scores on the MCKAS than college counselors and mental health counselors, indicating school counselors have less multicultural competence than college counselors and mental health counselors. This result could mean that school counselors interpret their multicultural competency as measured on the MCKAS differently than their perceived disability competency as measured on the CBPKLDI. As indicated earlier, this difference in interpretation could have been created if participants defined multiculturalism solely from

a racial and ethnic perspective. This could also indicate that school counselors are not incorporating multicultural skills and techniques in their work setting with students.

College counselors and mental health counselors, however, had little variation in their scores on the MCKAS. The highest score that can be obtained on the MCKAS is 224. The ranking of participant's scores on the MCKAS was: college counselors (175.20), mental health counselors (174.04), and school counselors (165.21). This could indicate that all of the three groups of counselors need to engage in multicultural training and professional development workshops and seminars to increase their multicultural competency.

Implications for Practice

School counselors obtained a higher mean score on the CBPKLDI subscales (which was not significant) and a significantly lower mean score on the MCKAS than college counselors and mental health counselors. These results indicate a possible lack of multicultural understanding for school counselors. Because school counselors have extensive contact with a variety of cultures within the confines of their assigned schools, it might be beneficial for training regarding multiculturalism to be more fully incorporated in academic preparation programs in a manner that would be applicable to school counselors' work environment. Of course, offering practicing school counselors continuing education opportunities focusing on incorporating multicultural techniques, skills, and practices with their students, parents, and the larger school community would be beneficial as well.

College counselors and mental health counselors had the lowest mean scores on the Perceived Knowledge and Beliefs subscales (2.85, 2.61 and 2.80, 2.60, respectively),

and although not statistically significant, the scores may indicate a lower perceived disability competency than school counselors. With college students with learning disabilities entering postsecondary settings, college counselors should be prepared to work with this population of students. Since most college and university campuses have disability service offices, college counselors should form relationships with professionals in these offices in an effort to meet the mental health needs of students with learning disabilities. Forming relationships with disability service professionals could be beneficial for ensuring that the emotional and mental health needs of college students are being addressed as the disability service professionals can make sound referrals to college counselors. College students with learning disabilities may be dealing with college adjustment issues and other college student stressors that may not have anything to do with having a learning disability (Beecher, Wild, & Rabe, 2004) however, these students may already have established relationships with disability service professionals who can refer to the counseling center when necessary. Another benefit of forming these collaboration relationships with disability service professionals includes access to information regarding accommodations being provided for college students with learning disabilities through the American with Disabilities Act (ADA). As discussed in Chapter 2, there is a difference in the services offered through ADA and the Individuals with Disabilities Education Act (IDEA). College students with learning disabilities may be unaware of the rights and accommodations they may have access to in order to succeed in college (Beecher et al.). This lack of awareness for students with learning disabilities could cause additional stress, and college counselors can intervene to provide support for these college students as they adjust to college life.

Strike et al.'s (2004) study was the most recent study regarding disability competency that included mental health professionals. However, the professionals in the study by Strike et al. (2004) included counselors in a college counseling center, disability services office personnel, and counseling psychology doctoral students. The limitation of Strike et al.'s 2004 study is that it did not include school counselors and mental health counselors working within private practice and mental health community agencies. These two groups of counselors encounter clients with learning disabilities in addition to the mental health professionals utilized in Strike et al.'s (2004) study. Mental health counselors may not be receiving adequate or sufficient training within their graduate program and post-master's clinical experience in topics association with learning disabilities. Incorporating additional readings and experiential activities in graduate program curriculum related to this area would help increase trainees' awareness. However, adding disability related educational curriculum may be difficult for some programs because of the rigor of accreditation standards for preparing counselors to be certified and licensed as professional counselors. Continuing education opportunities or on-the-job training can provide mental health counselors with adequate specialized training. Mental health counselors could also form partnerships with vocational rehabilitation centers within the community. These offices provide employment coaching, housing assistance, and other support services for persons living with learning disabilities. Such partnerships could include vocational rehabilitation center personnel providing workshops and in-service training on various disability related issues and consultation on meeting the mental health needs of clients with learning disabilities in

addition to increasing mental health counselors' clinical knowledge and experience in working with clients with learning disabilities.

Limitations

Like all studies, this project had some limitations. The first limitation was the development of the CBPKLDI. This instrument was developed solely for the purposes of this research study. The alpha level for the scale was moderate (.66). Before being used in additional studies, further pilot tests and item and data analysis should be conducted to evaluate the reliability and item analysis of the CBPKLDI.

Another limitation was the use of the term *learning disability*. Learning disability is a broad category for a multitude of disabilities. Further research should focus on counselors' perceived competency regarding more specific types of learning disabilities, such as dyslexia.

Another limitation included identifying work settings for the sample of participants. Based on participants' credentials and work settings, participants were placed in counselor groups. There may have been some inaccuracies in group placement in that college counselors may have included individuals who worked in university/college settings as counselor educators, disability service offices, or other student services offices.

The recruitment of participants was another limitation. Participants were recruited utilizing professional counseling associations. Utilizing only this recruitment method excludes counselors who may work with clients with learning disabilities but are not members of these professional counseling associations.

Student members of these professional associations were excluded in this study. However, inclusion of student members could have provided more information about counselors' work with clients with learning disabilities, and therefore, might have impacted the results.

Future research should incorporate additional methods of recruiting counselors, such as soliciting local mental health agencies, vocational rehabilitation centers, family therapy centers, student members within professional counseling associations, and other counseling professional associations.

A final limitation was the characteristics of the population. A majority of the sample indicated having a close friend, loved one, or relative with a disability. This could indicate that the sample included individuals who were invested and interested in the research topic of clients with learning disabilities.

Conclusion

The purpose of this research study was to assess counselors' beliefs and perceived knowledge regarding clients with learning disabilities. Results indicated that counselors reported little perceived disability competency in working with this population of people which pointed to a need for additional training, graduate and post-graduate, in working with clients with learning disabilities. Also, there appears to be a need for additional training regarding multicultural techniques and skills in counseling. The population of people with learning disabilities continues to increase (Beecher, Rabe, & Wilder, 2004; Cawthon & Cole, 2010), therefore, it is imperative that counselors expand their knowledge base about how to work with the variety of issues these clients may bring to a counseling session.

CHAPTER SIX

MANUSCRIPT

Counselor Beliefs and Perceived Knowledge

Regarding Clients with Learning Disabilities

for submission to the

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Abstract

Clients with learning disabilities constitute a cultural group that has not been extensively studied. This study examined the perceived disability competency and multicultural competency of 239 college counselors, mental health counselors, and school counselors. Results indicated counselors reported a moderate level of perceived disability competency. School counselors had lower scores on the multicultural counseling instrument than college counselors and mental health counselors.

Counselor Beliefs and Perceived Knowledge Regarding Clients with Learning Disabilities

Persons with learning disabilities constitute a cultural subgroup within American society. As the world becomes increasingly diverse, it is important for counselors to be competent in the provision of services to clients from a variety of different cultural backgrounds. Counselors need to be capable of working effectively with clients living with learning disabilities, which comprise an increasing population. When it comes to providing services for people with disabilities, rehabilitation counselors are typically the professionals who serve this population, primarily due to the false perception that disability will be the focus of a client's concern (Smart & Smart, 2006). This misconception has become so imbedded that counselors outside the rehabilitation counseling realm may not believe that they need to be trained and skilled in counseling clients with disabilities (Olkin & Pledger, 2003).

Counselors' role in counseling clients with disabilities.

Literature exists that examines counselors' knowledge and preparation in providing professional services to clients with disabilities (Beecher, Rabe, & Wilder, 2004; Corrigan, 1998; Hatch, Shelton, & Monk, 2009; Milsom & Hartley, 2005; Milsom, 2006; Mitcham, Portman, & Dean, 2009; Smart & Smart, 2006; Smith, Foley, & Chaney, 2008). School counselors, like rehabilitation counselors, are a group of counselors who often work with persons with disabilities (Scarborough & Gilbride, 2006). Various studies related to the complex work of school counselors have determined that school counselors receive some training related to clients with disabilities. However, counselors in these studies reported feeling inadequately prepared to provide services to these clients

and reported the need for additional training (Helms & Katslyannis, 1992; Milsom, 2002; Milsom & Akos, 2003; Romano, Paradise, & Green, 2009). Frye (2005) conducted an ethnographic, qualitative study, which involved three school counselors, in an effort to determine how school counselors were meeting the personal and social needs of students with disabilities. Results from this study concluded that school counselors are effective in their work regarding students with disabilities when counselors rely on strategies and interventions learned in their preparation programs and when they adhered to the American School Counselor Association (ASCA) National Model. The ASCA National Model focuses on "transition planning, behavior modification, counseling parents, making referrals to specialists, improving self-esteem, working as part of the school staff multidisciplinary team, teaching social skills, and serving as consultants to parents and school staff" when counseling students with disabilities (Frye, 2009, p. 443). Some school counselors receive training and utilize the ASCA National Model for guidance, however, additional studies are needed to determine how competent school counselors are when providing professional services to students with disabilities.

College counselors and mental health counselors also counsel clients with disabilities, however, very little literature exists that assess college counselors' and mental health counselors' competency related to clients with disabilities (Corrigan, 1998). Strike, Skovholt, and Hummel (2004) conducted a study in which the disability competency of mental health professionals was assessed. College counselors and mental health counselors were included in the study. Within this study, disability was defined utilizing the Americans with Disabilities Act (ADA) definition, which defined disability as "a physical or mental impairment that substantially limits one or more of the major life

activities of such an individual" (Barton, 2009, p. 14). Results from this study concluded that mental health professionals who had disability related experience reported an overall higher disability competency than mental health professionals who did not (Strike et al., 2004).

The importance of school counselors' work with clients who have disabilities has been emphasized (Dunn & Baker, 2002; Frye, 2005; Hatch, Shelton, & Monk, 2008; Helms & Katslyannis, 1992; Milsom, 2002; Milsom, 2006; Milsom & Akos, 2003; Milsom & Hartley, 2005; Milsom, Goodnough, & Akos, 2007; Romano, Paradise, & Green, 2009, Satcher, 1993; Scarborough & Deck, 1998; Scarborough & Gilbride, 2006). However, no studies have been conducted that assess the perceived disability competency of college counselors, mental health counselors, and school counselors collectively.

Learning Disabilities

Learning disabilities are one of the most prevalent types of disability that counselors will encounter. These disabilities are invisible in nature, which means that observers may not be aware that an individual may have a learning disability unless he or she chooses to disclose it (Cawthon & Cole, 2010; Satcher, 1993; Yocom & Coll, 1995). According to the National Center for Learning Disabilities (2011), a learning disability is "a neurological disorder that affects the brain's ability to receive, process, store, and respond to information" (para. 1). Based on this definition, this type of disability is not obvious, therefore, people with a learning disability may be perceived as not trying hard enough or being lazy (Yocom & Coll, 1995). Learning disabilities are usually diagnosed when an individual is enrolled in K-12 or postsecondary institutions (Cawthon & Cole, 2010). In order for students with learning disabilities to excel academically and socially,

school counselors should possess knowledge and skills appropriate for their work with these students (Cawthon & Cole, 2010; Yocom & Coll, 1995). Just as it is important for school counselors to have knowledge and skills about learning disabilities, college counselors should possess the same competency when providing professional services to clients with learning disabilities (Yocom & Coll, 1995). Usually in college or university settings there is an accessibility or disability services office that provides college students with the assistance they need in order to achieve academically. However, typically these offices to do not provide counseling services to address the emotional and mental health needs of students with learning disabilities (Cawthon & Cole, 2010).

Individuals with learning disabilities represent the largest subgroup of the disability culture (Helms & Katisyannis, 1992; Satcher, 1993). Because of the many challenges and barriers these clients encounter, it is important for counselors to have competency in working with this specific population. Using the multicultural standards and competencies as a model (Sue et al., 1992), counselors should be aware of their own biases and prejudices about clients with learning disabilities, knowledgeable about learning disabilities, cognizant about the various legislative acts related to clients with learning disabilities, sensitive to the impact learning disabilities have on their client, and able to utilize effective interventions and techniques when counseling clients with learning disabilities. The goal of counselor preparation programs is to produce culturally competent counselors who can effectively counsel all clients including those with learning disabilities (Strike et al., 2004; Sue et al., 1992). Currently, it is unclear whether counselors are competent to effectively counsel this population.

The purpose of this study was to investigate the beliefs and perceived knowledge of college counselors, mental health counselors, and schools counselors regarding clients with learning disabilities. This study also investigated the differences in how counselors (college counselors, mental health counselors, and school counselors) reported their beliefs and perceived knowledge regarding clients with learning disabilities and their multicultural counseling knowledge and awareness. This study sought to answer the following research questions:

1. What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities?
2. What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities?
3. What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency?

Method

Procedures

Participants included counselors who were members of professional counseling associations in college counseling, mental health counseling, and school counseling. Assuming a moderate effect size at $P = .80$ and $\alpha = .05$, a minimum of 159 participants (53 participants per group; Cohen, 1992) were needed for this study. After approval from the university institutional review board, potential respondents were sent an invitational email outlining the purpose of the study and encouraging participation. The email message included a link to a website where the survey was found. Upon completion of

the instruments, participants responded to a demographic questionnaire. Participants provided information related to their age, sex, race, disability status, years of counseling experience, experience working with clients with disabilities, certification and licensure status, and current work setting.

Participants

Invitational email messages to participate in the study were sent to 4,680 members of college counseling, mental health counseling, and school counseling professional associations across the nation. Of the 4,680 emails distributed, 214 were undeliverable, 22 individuals sent emails declining participation in the research study, and 239 surveys were completed. This resulted in a five percent response rate. The most likely explanation of the low response rate was the length of the survey, which included three parts and took approximately 30 minutes to complete.

Of the 239 surveys completed, 215 were used to answer research questions two and three. It was unclear whether some of the participants identified as a college counselor, mental health counselor, or school counselor, therefore, 24 participant responses were not included in the data analyses for research questions two and three due to the inability to fit the respondents into one of the three counselor groups.

The majority of the sample identified as female (76.6%, $n = 183$) and White/European American (87.4%, $n = 209$), which is consistent with the demographics of other research studies involving counseling professionals and students (Castillo, Brossart, Reyes, Conoley, & Phoummarath, 2007; Milsom & Dietz, 2009; Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002; Strike, Skovholt, & Hummel, 2004). The

average age of participants was 48.97 years and all states were represented with the exception of North Dakota.

Additional information was collected from participants regarding their personal, educational, and professional experiences working with clients with disabilities. The majority of participants (68.6%) indicated having a loved one, close friend, or relative with a disability. This indicates that a majority of participants had experienced personal relationships with individuals with disabilities.

Most of the sample reported their highest degree as a master's degree (66.9%). This indicates that the sample consisted of practitioners in the counseling field, which was the intended target population. Very few participants reported no post-master's counseling experience (1.7%) while the majority of the sample (79.9%) had more than five years of post-master's experience. This indicates that participants were experienced professionals providing counseling.

Instruments

Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument (CBPKLDI). Since no instrument existed that assessed counselors' beliefs and perceived knowledge related to clients with learning disabilities, a 16-item instrument was developed utilizing the *Counseling Clients with Disabilities Survey* (Strike, Skovholt, & Hummel, 2004) as a guide. A thorough review of the literature was conducted in order to determine the common attitudes and knowledge counselors have regarding clients with learning disabilities. An initial list of items was generated, then edited and revised by the primary researcher, a research team including experts in survey research, a methodologist, and a statistical consultant.

Several steps were taken to establish validity including a content analysis performed by an expert panel of professionals specializing in disabilities and learning disabilities, a format evaluation performed by a methodologist and a statistical consultant, and a peer review of item readability and response option review. Once feedback was received regarding validity and readability of the instrument, revisions were completed. A pilot study was conducted to determine psychometric properties of the instrument. Results were analyzed utilizing a Rasch analysis and revealed the instrument had acceptable levels of separation and reliability (3.96, r=.94, respectively). The industry standard for separation was greater than 2 and for reliability was greater than .60. The items aligned on a hierarchy and according to the Rasch Principle Components Analysis (PCAR) the instrument appeared unidimensional. Final reliability analysis revealed a Cronbach's α of .66.

Multicultural Counseling Knowledge and Awareness Scale (MCKAS). ***The*** MCKAS (originally the *Multicultural Counseling Awareness Scale* and *Multicultural Counseling Awareness Scale– Form B: Revised Self Assessment*) was developed in 1991 by Ponterotto and colleagues and assesses the perceived multicultural knowledge and awareness of respondents (Constantine & Ladany, 2000; Ponterotto, Rieger, Barret, & Sparks, 1994; Ponterotto et al., 2002). The MCKAS consists of 20 Knowledge and 12 Awareness items, where the Knowledge items are positively scored and 10 of the 12 Awareness items are negatively scored (Ponterotto et al., 2002). Ponterotto and colleagues recruited sample of 199 counseling students to test the revisions of the MCKAS. Alpha levels for the MCKAS were .85 on both the Knowledge and Awareness subscales.

The MCKAS scale was chosen for use in this study due to its brevity and high validity and reliability findings with several populations which included counseling internship students (Cannon, 2008), school counselor trainees (Constantine et al., 2001; Constantine, 2002), school counselors (Constantine & Gainor, 2001; Dickson, Arugs-Calvo, & Taforya, 2010), Hispanic counseling students and substance abuse counselors (Lassiter & Chang, 2006), and graduate students in training within counselor education and counseling psychology programs (Munley, Lidderdale, Thiagarajan, & Null, 2004). Additionally, the MCKAS is "least influenced by high desirability attitudes on the part of respondents" (Constantine & Ladany, 2000, pp.161) when compared to other similar instruments such as the *Multicultural Awareness/Knowledge/Skills Survey* (MAKSS; D'Andrea, Daniels, & Heck, 1991), *Multicultural Counseling Inventory* (MCI; Sodowsky, 1996), and the *Cross-Cultural Counseling Inventory-Revised* (CCCI-R; LaFromboise et al., 1991).

Results

Data Analysis

Research question one. The first research question was the following: What are counselors' beliefs and perceived knowledge regarding clients with learning disabilities? Participants were asked to complete the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI) responding to items assessing their beliefs and perceived knowledge using a 4-point rating scale Strongly Disagree, Disagree, Agree, or Strongly Agree. The possible range of scores was 1 to 4. A score of 1 indicated counselors had negative beliefs and low levels of knowledge; and a score of 4 indicated counselors had positive beliefs and high levels of knowledge. The mean (*M*)

score for counselors on the Perceived Knowledge and Beliefs subscale was 2.88 and 2.62, respectively. The research hypothesis stated that counselors will self-report positive beliefs and adequate knowledge regarding clients with learning disabilities. According to the results of the data analysis, the hypothesis failed to be rejected, indicating that counselors reported slightly positive beliefs and moderate levels of knowledge regarding counseling clients with learning disabilities. These results indicated that counselors perceived themselves to have slightly positive beliefs and levels of knowledge that tended toward the high end of the scale (see Table 1).

Table 1

Participants' Perceived Disability Competency Scores

	Perceived Knowledge	Beliefs
N	239	239
M	2.88	2.62
SD	0.48	0.25
Range	1.43-4.00	1.88-3.38

Research question two. The second research question was the following: What differences, if any, exist in college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities? The third research question was the following: What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency? A multivariate analysis of covariance (MANCOVA) was conducted for

research questions two and three, in which covariates included participants' personal experience with disability, work experience with clients with disabilities, and educational program accreditation status.

Normality tests and test of homogeneity were conducted to evaluate the data and indicated that the variance and covariance among counselors, their scores on the CBPKLDI and MCKAS, and covariates were equal across all groups.

Using the Wilk's statistic, the MANCOVA revealed a statistically significant difference between counselors' scores on the dependent variables (CBPKLDI subscales and the MCKAS), $\Lambda = .87$, $F(6, 384) = 4.59$, $p < .05$, partial $\eta^2 = 0.07$ (see Table 2). In answering research question two, a post hoc analysis (Tukey) was conducted to determine where group differences occurred on the CBPKLDI (see Table 3). The post hoc analysis included groups of counselors and the CBPKLDI and MCKAS which revealed a non-significant difference when college counselors, mental health counselors, and school counselors were compared to one another on the CBPKLDI subscales. The hypothesis for research question two was that no differences exist between college counselors', mental health counselors', and school counselors' beliefs and perceived knowledge regarding clients with learning disabilities, therefore, the hypothesis failed to be rejected. However, a statistically significant difference was found among college counselors, mental health counselors, and school counselors and the MCKAS (see Table 3).

Table 2

MANCOVA Results

Variables	Wilks' Lambda	F	α	Partial η^2
Counselors	0.87	4.59	0.0002[a]	0.07
Self-Identify with a disability and Loved one with a disability	0.96	0.91	0.52	0.01
Practicum/internship experience and Job with disability	0.87	2.28	0.008[a]	0.05
CORE, CACREP, AAMFT, Accreditation – Unknown, Accreditation – Other	0.73	1.94	0.002[a]	0.10

[a] Significant at $p < .01$

Table 3

Post Hoc Analysis Between Groups on the CBPKLDI and MCKAS

	Comparison	α	95% CI[a]
Perceived Knowledge			(Lower, Upper)
College	Mental Health	0.88	(-0.16, 0.24)
	School	0.19	(-0.29, -0.04)
Mental Health	College	0.88	(-0.18, 0.17)
	School	0.09	(-0.35, 0.02)
School	College	0.19	(-0.04, 0.29)
	Mental Health	0.09	(0.10, 0.43)
Beliefs			(Lower, Upper)
College	Mental Health	0.99	(-0.098, 0.11)

	School	0.28	(-0.15, 0.03)
Mental Health	College	0.99	(-0.11, 0.098)
	School	0.28	(-0.16, 0.03)
School	College	0.28	(-0.03, 0.15)
	Mental Health	0.28	(-0.03, 0.16)
MCKAS			
College	Mental Health	0.95	(-7.58, 9.90)
	School	0.006[b]	(2.43, 17.56)
Mental Health	College	0.95	(-9.90, 7.58)
	School	0.03[b]	(0.52, 17.14)
School	College	0.006[b]	(-17.56, -2.43)
	Mental Health	0.03[b]	(-17.14, -0.52)

[a]Confidence Interval (lower, upper)
[b]Significant at $p < .05$

Using the Wilk's statistic, the results of the MANCOVA indicated a non-significant difference between the covariate personal disability status and having a loved one with a disability and dependent variables (subscale scores on the CBPKLDI and the MCKAS total score), $\Lambda = .96$, $F(9, 467) = .90$, $p > .05$, partial $\eta^2 = .01$ (see Table 2). A significant difference was found between the covariates practicum or internship working with clients with disabilities and employment with clients with disabilities, $\Lambda = .87$, $F(12, 508) = .008$, $p < .05$, partial $\eta^2 = .05$ (see Table 2). Those participants who indicated having a practicum or internship working primarily with clients with disabilities and employment working primarily with clients with disabilities reported more positive beliefs and higher levels of knowledge than those who reported having no practicum or internship working primarily with clients with disabilities (see Table 2).

A significant difference was also found with the covariate Accreditation, which included CORE, CACREP, AAMFT, Accreditation Unknown, and Accreditation Other,

$\Lambda = .73$, $F(33, 566) = 1.94$, $p < .05$, partial $\eta^2 = .10$ (see Table 2). Those participants who identified their educational program accreditation status as CORE reported higher levels of knowledge than those participants who identified their educational program accreditation status as CACREP, AAMFT, did not know their accreditation status, or identified Other accreditation, which included educational program accreditation status not listed on the demographic questionnaire. Regarding the Beliefs subscale, participants who identified their educational program accreditation status as CACREP reported more positive beliefs than participants who identified their educational program accreditation status as CORE, AAMFT, did not know their accreditation status, and Other accreditation, which included accreditation status not listed on the demographic questionnaire.

Research question three. The third research question was the following: What differences, if any, exist between how counselors self-report their perceived disability competency and their multicultural competency? Using the Wilk's statistic, the MANCOVA revealed a statistically significant difference between counselors' scores on the dependent variables (CBPKLDI subscales and the MCKAS), $\Lambda = .87$, $F(6, 384) = 4.59$, $p < .05$, partial $\eta^2 = 0.07$ (see Table 2). The hypothesis for research question three stated that no difference exists in how counselors self-report their perceived disability competency and their multicultural competency, therefore, the hypotheses was rejected (see Table 2). A discriminant function analysis was conducted as a follow up to the significant MANCOVA. Discriminant analysis explores where the differences occur between groups of counselors and the subscale scores on the CBPKLDI and the MCKAS total score.

The first discriminant function tests the model as a whole while the second function peels away variates from the first discriminant function. The first discriminant function overall Wilk's Lambda was significant, $\Lambda = 0.90, \chi^2 (6, N = 215) = 22.12, p < .05$, which indicates differences existed among counselors across both instruments. The second discriminant function Wilk's Lambda was non-significant, $\Lambda = 0.999, \chi^2 (2, N = 215) = 0.26, p > .05$, which indicates that no differences existed among counselors across both instrument after removing the first discriminant function (see Table 4). Because only the first discriminant function was significant, it will be the only one discussed. When examining the eigenvalues of the discriminant functions, the first discriminant function accounted for 98.9% of the total variance, while the second discriminant function accounted for 1.1% of the total variance (see Table 5).

Table 4

Discriminant Analysis Wilk's Lambda

Function	Wilks' Lambda	Chi-square	α
1 through 2	0.900	22.124	0.001
2	0.999	0.256	0.880

Table 5

Eigenvalues of Discriminant Functions

Function	Eigenvalue	Percentage of Variance	Cumulative Percentage	Canonical Correlation
1	0.109	98.9	98.9	0.314
2	0.001	1.1	100.0	0.035

The Perceived Knowledge and Beliefs subscales had moderate relationships on the first discriminant function, however, the MCKAS had a negative relationship on the function. This indicates that counselor groups differentiated more on the Perceived Knowledge subscale and Belief subscale than the MCKAS (see Table 6). This also indicates that the Perceived Knowledge had the largest contribution on the first discriminant function.

When examining the group centroids for the first discriminant function (see Table 7), which indicates the mean values on the discriminant function for the three groups of counselors. School counselors obtained the highest mean score while mental health counselors and college counselors had the lowest mean scores on the first discriminant function. This indicates that school counselors differentiated from college counselors and mental health counselors on the first discriminant function, which is largely contributed by the Perceived Knowledge subscale. School counselors' scores differentiated more on the Perceived Knowledge subscale than college counselors and mental health counselors. These results suggest that school counselors perceived they had more knowledge related to learning disabilities than did college counselors and mental health counselors.

Table 6

Discriminant Function Coefficients

Scale	Function	
	1	2
Perceived Knowledge	0.490	0.807
Beliefs	0.449	-0.039

MCKAS	-0.885	0.483

Table 7

Group Centriods of Discriminant Functions

Counselor	Function	
	1	2
College Counselor	-0.284	0.039
Mental Health Counselor	-0.284	-0.053
School Counselor	0.379	$-1.728e^{-5}$

Discussion

Research question one answered how counselors reported their beliefs and perceived knowledge as measured on the *Counselors' Beliefs and Perceived Knowledge regarding Learning Disabilities Instrument* (CBPKLDI). The possible range of scores was 1 to 4. A score of 1 indicated counselors had negative beliefs and low levels of knowledge; and a score of 4 indicated counselors had positive beliefs and high levels of knowledge. The mean (*M*) score for counselors on the Perceived Knowledge and Beliefs subscale was 2.88 and 2.62, respectively. Counselors report slightly positive beliefs and moderate levels of knowledge when counseling clients with learning disabilities. This indicates that counselors, more often than not, scored positively on items on the instrument. However, it is interesting to note that counselors had a higher mean on the

Perceived Knowledge subscale than the Beliefs subscale. This could indicate that counselors perceived themselves to be knowledgeable when counseling clients with learning disabilities. However, counselors reported having only slightly positive beliefs regarding clients with learning disabilities. Results related to CBPKLDI scores should be viewed with caution due to the low reliability of the instrument.

Research question two answered whether differences exist in how college counselors, mental health counselors, and school counselors reported their perceived knowledge and beliefs about clients with learning disabilities. According to the results of the data analysis, the hypothesis failed to be rejected, indicating no significant differences exist among the three groups of counselors. School counselors had a higher mean average on the Perceived Knowledge and Beliefs subscales of the CBPKLDI (2.97, 2.67, respectively), while mental health counselors had the lowest mean average on both subscales (2.80, 2.60, respectively). These results suggest that perhaps school counselors tend toward higher perceived knowledge and more positive beliefs about clients with learning disabilities and mental health counselors tend toward lower perceived knowledge and less positive beliefs. However, the scores were not statistically significant.

Much of the literature on counseling clients with learning disabilities pertains to or involves school counselors (Hatch, Shelton, & Monk, 2009; Milsom, 2006; Milsom & Hartley, 2005; Mitcham, Portman, & Dean, 2009; Rungta, Margolis, & Westwood, 1995). It is possible that school counselors receive more training regarding clients with learning disabilities than college counselors and mental health counselors. However, results from the data analysis did not indicate significant higher scores in either

knowledge or beliefs subscale scores for school counselors when compared to college counselors and mental health counselors.

The results may indicate that college counselors and mental health counselors are receiving some training regarding clients with learning disabilities. One possible explanation for college counselors having a lower mean score, when compared to school counselors, is that while college counselors may encounter clients with learning disabilities in college, students may go to the disability services office to receive accommodations and support. Therefore, students with learning disabilities may not be utilizing the services of college counselors. If college counselors are not exposed to working with students with learning disabilities, they will not increase their clinical knowledge in providing services to a student with a learning disability who enters their office.

Mental health counselors, on the other hand, had the lowest mean average, indicating only slightly positive beliefs (2.60) and modest levels of perceived knowledge (2.80) associated with learning disabilities. This could indicate that mental health counselors may not be receiving in-service training in their current work setting or that clients with learning disabilities are receiving services from other sources such as vocational rehabilitation centers. All counselors encounter clients with learning disabilities and should seek out information and training that will enable them to work proficiently with these clients.

Counselors' scores on the CBPKLDI subscales were found to be statistically significantly different when controlled for work experience with clients with disabilities (practicum or internship experience primarily with clients with disabilities and job

working primarily with clients with disabilities) and educational program accreditation status (CORE, CACREP, AAMFT, Accreditation-Unknown, and Accreditation-Other). Controlling for these variables indicated an influence of these variables on the scores the CBPKLDI subscales, which could indicate a relationship among educational program accreditation status, work experience with clients with disability, and the subscale scores on the CBPKLDI. Analysis revealed that counselors who reported their educational program accreditation status as CORE reported higher levels of knowledge regarding clients with learning disabilities than other counselors who graduated from other accredited program statuses utilized in study. This result is not surprising in that CORE accredits graduate programs that specifically prepare rehabilitation counselors who primarily serve clients with disabilities. Also, counselors who reported their educational program accreditation status as CACREP reported more positive beliefs regarding clients with learning disabilities than other educational accredited program statuses utilized in study. It is interesting to note that counselors who graduated from CORE accredited programs, which are programs that specialize in training counselors to work primarily with clients with disabilities, perceived themselves to have more knowledge, while counselors who graduated from CACREP accredited programs perceived themselves to have more positive beliefs than graduates of other programs in study. These results could indicate that CORE accredited programs do a better job of providing knowledge about working with clients with learning disabilities than other educational accredited programs, while CACREP accredited programs do a better job of providing counselor trainees with insight into their biases and assumptions regarding clients with learning disabilities.

Analysis also revealed that counselors who reported having work experience with clients with disabilities had a higher mean score on the CBPKLDI subscales than those who reported having no work experience with clients with disabilities. This indicates that those who had provided professional services to clients with disabilities in the past perceived themselves as being more competent in working with these clients than participants who reported having no work experience with clients with disabilities. The results regarding participants' work experience with clients with disabilities is similar to the findings found in Strike et al.'s (2004) study, where counselors with disability related work experience were found to have more positive attitudes towards clients with disabilities than counselors without disability related experience.

Research question three answered whether there was a difference in how counselors reported their perceived disability competency and their multicultural competency. The results demonstrated a difference in how counselors reported their perceived disability competency and multicultural competency. Counselors reported differently on the CBPKLDI subscales than on the MCKAS. It should be noted that both scales assessed counselor competency regarding multiculturalism, but each scale assessed different aspects of multiculturalism.

School counselors scored higher on the CBPKLDI subscales than college counselors and mental health counselors, although their higher scores were non-significant. However, school counselors had significantly lower mean scores on the MCKAS than college counselors and mental health counselors, indicating school counselors have less multicultural competence than college counselors and mental health counselors. This result could mean that school counselors interpret their multicultural

competency as measured on the MCKAS differently than their perceived disability competency as measured on the CBPKLDI. This difference in interpretation could have been created if participants defined multiculturalism solely from a racial and ethnic perspective. This could also indicate that school counselors are not incorporating multicultural skills and techniques in their work setting with students.

College counselors and mental health counselors, however, had little variation in their scores on the MCKAS. The highest score that can be obtained on the MCKAS is 224. The ranking of participant's scores on the MCKAS was: college counselors (175.20), mental health counselors (174.04), and school counselors (165.21). This could indicate that all three groups of counselors need to engage in multicultural training and professional development workshops and seminars to increase their multicultural competency.

Implications for practice

School counselors obtained a higher mean score on the CBPKLDI subscales (which was not significant) and a significantly lower mean score on the MCKAS than college counselors and mental health counselors. These results indicate a possible lack of multicultural understanding for school counselors. Because school counselors have extensive contact with a variety of cultures within the confines of their assigned schools, it might be beneficial for training regarding multiculturalism to be more fully incorporated in academic preparation programs in a manner that would be applicable to school counselors' work environment. Of course, offering practicing school counselors continuing education opportunities focusing on incorporating multicultural techniques,

skills, and practices with their students, parents, and the larger school community would be beneficial as well.

College counselors and mental health counselors had the lowest mean scores on the Perceived Knowledge and Beliefs subscales (2.85, 2.61 and 2.80, 2.60, respectively), and although not statistically significant, the scores may indicate a lower perceived disability competency than school counselors. With college students with learning disabilities entering postsecondary settings, college counselors should be prepared to work with this population of students. Since most college and university campuses have disability service offices, college counselors should form relationships with professionals in these offices in an effort to meet the needs of students with learning disabilities. Forming relationships with disability service professionals could be beneficial for ensuring that the emotional and mental health needs of college students are being addressed as the disability service offices can make sound referrals to college counselors. College students with learning disabilities may be dealing with college adjustment issues and other college student stressors that may not have anything to do with having a learning disability (Beecher, Wild, & Rabe, 2004) however, these students may already have established relationships with disability service professionals who can refer to the counseling center when necessary. Another benefit of forming these collaboration relationships with disability service professionals includes access to information regarding accommodations being provided for college students with learning disabilities through the American with Disabilities Act (ADA). There is a difference in the services offered through ADA when college students with learning disabilities enter postsecondary education settings. College students with learning disabilities may be

unaware of the rights and accommodations they may have access to in order to succeed in college (2004). This lack of awareness for students with learning disabilities could cause additional stress, and college counselors can intervene to provide support for these college students as they adjust to college life.

Strike et al.'s (2004) study was the most recent regarding disability competency that included mental health professionals. However, the professionals in the study by Strike et al. (2004) included counselors in a college counseling center, disability services office personnel, and counseling psychology doctoral students. Strike et al.'s 2004 study did not include school counselors and mental health counselors working within private practice and mental health community agencies. These two groups of counselors encounter clients with learning disabilities in addition to the mental health professionals utilized in Strike et al.'s (2004) study. Mental health counselors may not be receiving adequate or sufficient training within their graduate program and post-master's clinical experience in topics associated with learning disabilities. Incorporating additional readings and experiential activities in graduate program curriculum related to this area would help increase trainees' awareness. However, adding disability related educational curriculum may be difficult for some programs because of the rigor of accreditation standards for preparing counselors to be certified and licensed as professional counselors. Continuing education opportunities or on-the-job training can also provide mental health counselors with specialized training. Mental health counselors could also form partnerships with vocational rehabilitation centers within the community. These offices provide employment coaching, housing assistance, and other support services for persons living with learning disabilities. Such partnerships could include vocational rehabilitation

center personnel providing workshops and in-service training on various disability related issues and consultation on meeting the mental health needs of clients with learning disabilities in addition to increasing mental health counselors' clinical knowledge and experience in working with clients with learning disabilities.

Limitations

Like all studies, this project had some limitations. The first limitation was the development of the CBPKLDI. This instrument was developed solely for the purposes of this research study. The alpha level for the scale was moderate, .66. Before being used in additional studies, further pilot tests and item and data analysis should be conducted to evaluate the reliability and item analysis of the CBPKLDI.

Another limitation was the use of the term *learning disability*. Learning disability is a broad category for a multitude of disabilities. Further research should be focused on counselors' competency regarding more specific types of learning disabilities, such as dyslexia.

Another limitation included identifying work setting for the sample of participants. Based on participants' credentials and work settings, participants were placed in counselor groups. There may have been some inaccuracies in group placement in that college counselors may have included individuals who worked in university/college settings as counselor educators, disability service offices, or other student services offices.

The recruitment of participants was another limitation. Participants were recruited utilizing professional counseling associations. Utilizing only this recruitment method

excludes counselors who may work with clients with learning disabilities, but are not members of these professional counseling associations.

Student members of these professional associations were excluded in this study, however, inclusion of student members could have provided more information about counselors' work with clients with learning disabilities, and therefore, might have impacted the results.

Future research should incorporate additional methods of recruiting counselors, such as soliciting local mental health agencies, vocational rehabilitation centers, family therapy centers, student members within professional counseling associations, and other counseling professional associations.

A final limitation was the characteristics of the population. A majority of the sample indicated having a close friend, loved one, or relative with a disability. This could indicate that the sample included individuals who were invested and interested in the research topic of clients with learning disabilities.

Conclusion

This research study sought to assess counselors' beliefs and perceived knowledge regarding clients with learning disabilities. Results indicated that counselors are reporting some competency in working with this population of people. These results indicate a need for additional training, graduate and post-graduate, in working with clients with learning disabilities. Also, there appears to be a need for additional training regarding multicultural techniques and skills in counseling. The population of people with learning disabilities continues to increase (Beecher, Rabe, & Wilder, 2004; Cawthon & Cole,

2010), therefore, it is imperative that counselors expand their knowledge base about how to work with the variety of issues these clients may bring to a counseling session.

REFERENCES

American Counseling Association. (2005). *Code of Ethics*. Alexandria, VA. Retrieved from http://www.counseling.org

Barton, B. (2009). Dreams deferred: Disability definitions, data, models, and perspectives. *Journal of Sociology & Social Welfare, 34*, 13-24. Retrieved from http://www.wmich.edu/hhs

Beecher, M. E., Rabe, R. A., & Wilder, L. K. (2004). Practical guidelines for counseling students with disabilities. *Journal of College Counseling, 27*, 83-89. Retrieved from http://www.counseling.org

Cannon, E. P. (2008). Promoting moral reasoning and multicultural competence during internship. *Journal of Moral Education, 37*, 503-518. doi: 10.1080/03057240802399384

Castillo, L. G., Brossart, D. F., Reyes, C. J., Conoley, C. W., & Phoummarath, M. J. (2007). The influence of multicultural training on perceived multicultural counseling competencies and implicit racial prejudice. *Journal of Multicultural Counseling and Development, 35*, 243-254. Retrieved from http://www.multiculturalcenter.org/jmcd

Cawthon, S. W., & Cole, E. V. (2010). Postsecondary students who have a learning disability: Student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and Disability, 23*, 112-28. Retrieved from http://www.ahead.org/publications/jped

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin, 112*, 155-59. Retrieved from http://www.apa.org/pubs/journals

Cole, C. L., & Shapiro, E. S. (2005). Perceptions of trainers and practitioners regarding assessment and intervention for students with low incidence disabilities. *Psychology in the Schools, 42*, 677-689. doi: 10.1002/pits.20118

Constantine, M. G. (2002). Racism attitudes, white racial identity attitudes, and multicultural counseling competence in school counselor trainees. *Counselor Education & Supervision, 41*, 162-74. Retrieved from http://www.unco.edu/ces

Constantine, M. G., Arorash, T. J., Barakett, M. D., Blackmon, S. K. M., Donnelly, P. C., & Edles, P. A. (2001). School counselors' universal-diverse orientation and aspects of their multicultural counseling. *Professional School Counseling, 5*, 13-20. Retrieved from http://www.schoolcounselor.org

Constantine, M. G., & Gainor, K. A. (2001). Emotional intelligence and empathy: Their relation to multi-cultural counseling knowledge and awareness. *Professional School Counseling, 5*, 131-39. Retrieved from http://www.schoolcounselor.org

Constantine, M. G., & Ladany, N. (2000). Self-report multicultural counseling competence scales: Their relation to social desirability attitudes and multicultural case conceptualization ability. *Journal of Counseling Psychology, 47*, 155-64. doi: 10.103//0022-0167.47.2.155

Conyers, L. M. (2003). Disability culture: A cultural model of disability. *Rehabilitation Education, 17*, 139-154. Retrieved from http://www.elliottfitzpatrick.com/jre.html

Corrigan, M. J. (1998). Counseling college students with disabilities: Legal, ethical, and clinical issues. *Journal of College Counseling, 1*, 181-189. Retrieved from www.counseling.org

Council on Rehabilitation Education (2011). Frequently asked questions. Schaumburg, IL. Retrieved from http://www.core-rehab.org

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: Sage.

Dickson, G. L., Argus-Calvo, B., & Tafoya, N. G. (2010). Multicultural counselor training experiences: Training effects and perceptions of training among a sample of predominately Hispanic students. *Counselor Education & Supervision, 49*, 247-265. Retrieved from http://www.unco.edu/ces

Dunn, N. A. W., & Baker, S. B. (2002). Readiness to serve students with disabilities: A survey of elementary school counselors. *Professional School Counseling, 5*, 277-284. Retrieved from http://www.schoolcounselor.org

Frye, H. N. (2005). How elementary school counselors can meet the needs of students with disabilities. *Professional School Counseling, 8*, 442-450. Retrieved from http://www.schoolcounselor.org

Grönvik, L. (2009). Defining disability: Effects of disability concepts on research outcomes. *International Journal of Social Research Methodology, 12*(1), 1-18. doi: 10.1080/13645570701621977

Hatch, T., Shelton, T., & Monk, G. (2009). Making the invisible visible: School counselors empowering students with disabilities through self-advocacy training. *Journal of School Counseling, 7*, 1-19. Retrieved from http://jsc.montana.edu

Hays, D. G. (2008). Assessing multicultural competence in counselor trainees: A review of instrumentation and future directions. *Journal of Counseling and Development, 86*, 95-101. Retrieved from http://www.counseling.org

Helms, N. E., & Katsiyannis, A. (1992). Counselors in elementary schools: Making it work for students with disabilities. *School Counselor, 39*, 232-38.

Kuehn, M.D. (1997). Parameters of practice: Policy and law. In D. R. Maki & T. F. Riggar (Eds). *Rehabilitation counseling: Profession and practice.* (pp. 55-71). New York: Springer.

Lassiter, P. S., & Chang, C. Y. (2006). Perceived multicultural competency of certified substance abuse counselors. *Journal of Addictions & Offender Counseling, 26*, 73-83. Retrieved from http://www.counseling.org

Leahy, M. J. (1997). Qualified providers of rehabilitation counseling services. In D. R. Maki & T. F. Riggar (Eds.). *Rehabilitation counseling: Profession and practice.* (pp. 95-110). New York: Springer.

Leahy, M. J., Fong, C., & Saunders, J. L. (2003). Job functions and knowledge requirements of certified rehabilitation counselors in the 21st century. *Rehabilitation Counseling Bulletin, 46*, 66-81. Retrieved from http://rcb.sagepub.com

Linarce (2011). Winsteps 3.72 [Statistical Software].

Maki, D. R., & Riggar, T. F. (1997). Rehabilitation counseling: Concepts and paradigms. In D. R. Maki & T. F. Riggar (Eds.). *Rehabilitation counseling: Profession and practice* (pp. 3-31). New York: Springer.

McDougall, A. G. (2008). *Counselors' knowledge, skills, and attitudes regarding individuals with disabilities: Examining contact and attitudes as predictors of knowledge and skills.* (Unpublished doctoral dissertation). University of Florida, Florida.

Milsom, A. S. (2002). Students with disabilities: School counselor involvement and preparation. *Professional School Counseling, 5*, 331-38. Retrieved from http://www.schoolcounselor.org

Milsom, A. S., & Akos, P. (2003). Preparing school counselors to work with students with disabilities. *Counselor Education & Supervision, 43*, 86-95. Retrieved from http://www.unco.edu/ces

Milsom, A., Goodnough, G., & Akos, P. (2007). School counselor contributions to the individualized education program (IEP) process. *Preventing School Failure, 52*(1), 19-24. Retrieved from http://www.researchgate.net/journal

Milsom, A., & Hartley, M. T. (2005). Assisting students with learning disabilities transitioning to college: What school counselors should know. *Professional School Counseling, 8*, 436-41. Retrieved from http://www.schoolcounselor.org

Milsom, A. (2006). Creating positive school experiences for students with disabilities. *Professional School Counseling, 10*, 66-72. Retrieved from http://www.schoolcounselor.org

Mitcham, M., Portman, T. A. A., & Dean, A. A. (2009). Role of school counselors in creating equitable educational opportunities for students with disabilities in urban settings. *Urban Education, 44*, 465-82. doi:10.1177/0042085909341042

Munley, P. H., Lidderdale, M. A., Thiagarajan, M., & Null, U. (2004). Identity development and multicultural competency. *Journal of Multicultural Counseling & Development, 32*, 283-295. Retrieved from http://www.multiculturalcenter.org/jmcd

National Center for Learning Disabilities (NCLD, 2011). Learning disability basics. Retrieved from http://www.ncld.org

Olkin, R., & Pledger, C. (2003). Can disability studies and psychology join hands? *American Psychologist, 58*, 296-304. doi: 10.1037/0003-066x.58.4.296

Ponterotto, J. G., Gretchen, D., Utsey, S. O., Rieger, B. P., & Austin, R. (2002). A revision of the multicultural counseling awareness scale. *Journal of Multicultural Counseling and Development, 30,* 153-80. Retrieved from http://www.multiculturalcenter.org/jmcd/default.cfm

Ponterotto, J. G., Rieger, B. P., Barrett, A., & Sparks, R. (1994). Assessing multicultural counseling competence: A review of instrumentation. *Journal of Counseling & Development, 72,* 316-22. Retrieved from http://www.counseling.org

Rasch, G. (1960). *Probablilistic models for some intelligence and attainment tests.* Copenhagen, Denmark: Paefagogiske Institute.

Rasch, G. (1980). *Probablilistic models for some intelligence and attainment tests* (expanded ed.). Chicago: University of Chicago.

Remley, T. P., Jr. (2011). Evolution of counseling and its specializations. In D. R. Maki & V. Tarvydas (Eds.), *The professional practice of rehabilitation counseling* (pp. 25-39). New York: Springer.

Romano, D. M., Paradise, L. V., & Green, E. J. (2009). School counselors' attitudes toward providing services to students receiving section 504 classroom accommodations: Implications for school counselor educators. *Journal of School Counseling, 7,* 1-36. Retrieved from http://jsc.montana.edu

Rungta, S. A., Margolis, R. L., & Westwood, M. J. (1993). Training counselors to work with diverse populations: An integrated approach. *Canadian Journal of Counseling, 27,* 50-64. Retrieved from http://cjc-rcc.ucalgary.ca/cjc/index.php/rcc

Satcher, J. (1993). College-bound students with learning disabilities: Role of the school counselor. *School Counselor, 40,* 343-48.

Scarborough, J. L., & Deck, M. D. (1998). The challenges of working for students with disabilities: A view from the front lines. *Professional School Counseling, 2*, 10-15. Retrieved from http://www.schoolcounselor.org

Scarborough, J. L., & Gilbride, D. D. (2006). Developing relationships with rehabilitation counselors to meet the transition needs of students with disabilities. *Professional School Counseling, 10*, 25-33. Retrieved from http://www.schoolcounselor.org

Sciarra, D., Chang, T., McLean, R., & Wong, D. (2005). White racial identity and attitudes toward people with disabilities. *Journal of Multicultural Counseling and Development, 33*, 232-242. Retrieved from http://www.multiculturalcenter.org/jmcd

Smart, J. F., & Smart, D. W. (2006). Models of disability: Implications for the counseling profession. *Journal of Counseling & Development*, *84*, 29-40. Retrieved from http://www.counseling.org

Smith, L., Foley, P. F., & Chaney, M. P. (2008). Addressing classism, ableism, and heterosexism in counselor education. *Journal of Counseling & Development, 86*, 303-09. Retrieved from http://www.counseling.org

SPSS Statistics (Version 18.0) [Statistical software]. Chicago: SPSS.

Strike, D. L., Skovholt, T. M., & Hummel, T. J. (2004). Mental health professionals' disability competence: Measuring self-awareness, perceived knowledge, and perceived skills. *Rehabilitation Psychology, 49*, 321-27. doi: 10.1037/0090-5550.49.4.321

Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development, 70*, 477-486. Retrieved from http://www.counseling.org

Wallick, W. G., & Bruch, L. A. (2003). Disability and work topics in graduate human resources curricula: Recommendations for rehabilitation counselor educators. *Rehabilitation Education, 17*, 237-47. Retrieved from http://www.rehabeducators.org/publications.html

Wolfe, P. S., Postal, V., Wehman, T., Wehman, P., & Turner, E (2005). Service delivery. In P. Wehman, P. J. McLaughlin, & P. Wehman (Eds.), *Intellectual and developmental disabilities: Toward full community inclusion* (3rd ed.; pp. 7-49). Austin, TX: Pro-ed.

Yocom, D. J., & Coll, K. M. (1995). Community college students with learning disabilities: A national survey of perceptions and procedures. *Community College Journal of Research and Practice, 19*, 571-81. Retrieved from http://www.tandf.co.uk/journals

DEMOGRAPHIC QUESTIONNAIRE

Age: _____

State of Residence: _____

Gender: Female Male Transgender

Ethnicity: Hispanic/Latino Non-Hispanic/Latino

Race:

African-American/Black American Indian or Alaskan Native Asian-American

White/European American Native Hawaiian/Pacific Islander Biracial/Multiracial

Other not specified: _____

Do you consider yourself to have a disability?

Yes No

Do you have a close friend, relative, and/or loved one whom you consider to have a disability?

Yes No

Highest Degree Completed:

Bachelors Masters Educational Specialist Doctorate

Other:_____

Check the accreditations your counseling master's program possessed when you completed the program (check as many as apply or none, if appropriate)?

CORE CACREP AAMFT Other: _____

Did you complete a master's level or doctoral level practicum/internship experience where you worked primarily with clients who had disabilities?

Yes No

Have you held a job (20 hours a week or more) where you worked primarily with clients who had disabilities?

Yes No

Counseling Experiences (before masters): _____ Years _____Months

Counseling Experiences (post-masters): _____ Years _____Months

Credentials (check all that you hold):

Licensed by state as counselor (Licensed Professional Counselor, Licensed Mental Health Counselor, Licensed Professional Clinical Counselor, etc.)

Certified or licensed by state as a school counselor

Certified or licensed by state as a substance abuse counselor

Certified Rehabilitation Counselor (CRC)

National Certified Counselor (NCC)

Other (Please List): _____

Current Work Setting

Private Practice Community Mental Health School Hospital

University/College Vocational Rehabilitation Residential Setting

Other: (please indicate): _____

IRB APPROVAL LETTER

OLD DOMINION UNIVERSITY
DARDEN COLLEGE OF EDUCATION

October 4, 2011 Proposal Number __201101013__

Professor Remley:

Your proposal submission titled, "Assessing the Attitudes and Perceived Knowledge of Counselors Regarding Clients with Learning Disabilities" has been deemed EXEMPT from IRB review by the Human Subjects Review Committee of the Darden College of Education. If any changes occur, especially methodological, notify the Chair of the DCOE HSRC, and supply any required addenda requested of you by the Chair. You may begin your research.

We have approved your request to pursue this proposal indefinitely, provided no modifications occur. Also note that if you are funded externally for this project in the future, you will likely have to submit to the University IRB for their approval as well.

If you have not done so, PRIOR TO THE START OF YOUR STUDY, you must send a **signed** and dated **hardcopy** of your exemption application submission to the address below. Thank you.

Sabra Gear, PhD

Sabra Gear, PhD
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Interim Chair, DCOE Human Subjects Review Committee
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COUNSELORS' BELIEFS AND PERCEIVED KNOWLEDGE REGARDING LEARNING DISABILITIES INSTRUMENT (CBPKLDI)

Listed below are a series of statements sometimes associated with personal beliefs, attitudes, and knowledge regarding learning disabilities. A learning disability is defined as "a group of neurological disorders that affect the brain's ability to receive, process, store, respond, and communicate information" (National Council on Learning Disabilities, 2011). Please rate how well each statement applies to you on a scale from 1 (Strongly Disagree) to 6 (Strongly Agree). Please do not leave any statements blank and only select one choice for each statement.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

1. I believe it is difficult to empathize with the daily obstacles faced by a person living with a learning disability.
2. I believe people with learning disabilities are just as likely to achieve their career goals as people without learning disabilities.
3. I believe people with learning disabilities are generally less independent than people without learning disabilities.
4. Most people with learning disabilities wish they did not need extra support.
5. A learning disability should be considered when selecting appropriate counseling interventions.
6. I do not possess knowledge about federal regulations protecting those with learning disabilities.
7. I am comfortable with my level of knowledge regarding learning disabilities.
8. I know which counseling interventions are effective for clients with learning disabilities.
9. I am aware of additional services within the community for my clients with learning disabilities (e.g. vocational rehabilitation center and the disability services office)
10. People with learning disabilities are at an advantage because of their access to extra support.
11. A learning disability is a curable medical condition.

12. I am unfamiliar with effective counseling strategies for clients with learning disabilities.

13. I do not know enough about the different types of learning disabilities.

14. I believe it is important to seek out professional development opportunities related to counseling clients living with learning disabilities.

15. Counselors should work to reduce the stigma that clients living with learning disabilities encounter.

16. I believe it is offensive to inquire about a person's learning disability.

VITAE

Tamekia R. Bell earned her Associates Degree in General Studies from the University of South Carolina in Lancaster in 2002. She then transferred to Winthrop University where she received her Bachelor of Arts Degree in Psychology in 2004. She earned her Master of Arts Degree in Counseling with a concentration in Marriage and Family Therapy at East Tennessee State University in 2006.

Ms. Bell is a Ph.D. student in counseling at Old Dominion University in Norfolk, Virginia. She received a graduate assistantship for two years and was awarded a fellowship in her third year. In her final year of doctoral studies, she supervised counseling graduate practicum and internship students, co-taught graduate counseling course, and submitted two manuscripts for review in peer-reviewed journals.

During Ms. Bell's time in the Ph.D. in Counseling program, she supervised graduate counseling students, taught undergraduate courses, co-taught graduate courses, presented at conferences at the state, regional, and national levels, was actively involved in Chi Sigma Iota (CSI), Omega Delta Chapter, and volunteered as a clinician at local mental health agencies to expand her clinical knowledge. Ms. Bell is actively involved in professional counseling associations including the American College Counseling Association (ACCA), where she serves on the Lesbian, Gay, Bisexual, and Transgender (LGBT) Task Force, and the Southern Association for Counselor Education and Supervision (SACES), where she serves as the Graduate Student Newsletter Editor.

Ms. Bell has three years of professional work experience in student affairs, serving in the roles of Admissions Counselor, Residence Hall Director, and Residence Hall Area Coordinator.