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Knowledge, Attitudes and Skills Related to Disabilities Among Psychologists - Are We Competent to Practice In This Multicultural Domain?

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Running Head: KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Knowledge, Attitudes and Skills Related to Disabilities Among Psychologists – Are We Competent to Practice in this Multicultural Domain?

BY

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KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Abstract

This dissertation research was implemented to evaluate the level of multicultural disability competence among practicing licensed psychologists in the United States. This study was executed to ascertain psychologists' exposure to persons with disabilities, training related to persons with disabilities, individual awareness of attitudes and perceptions of persons with disabilities to perceived multicultural disability competence, and engagement in specialized work with clients with disabilities. Eight hundred and twenty-five licensed psychologists were sampled and a path analysis, coupled with three multiple regression analyses, was used to evaluate the relationship among these variables. Results indicated that there was a strong relationship among the variables and all hypotheses were supported. This research supports the fact that psychologists who have exposure to persons with disabilities, and training about persons with disabilities, are more likely to have a higher level of multicultural disability competence, and to seek more specialized engagement and practice in the area of disability.

Knowledge, Attitudes, and Skills Related to Disabilities Among Psychologists- Are We Competent to Practice in this Multicultural Domain?

CHAPTER I

BACKGROUND FOR THE PROPOSED RESEARCH PLAN

Introduction

This chapter describes the research that established the knowledge, skills, and attitudes necessary to appropriately work with individuals with one or more disabilities, a requisite area of multicultural competence for psychologists. Furthermore, this chapter articulates the research questions and hypotheses, defines key terms associated with this research investigation, describes the significance of the study, and mentions briefly the limitations of the study.

Statement of the Problem

In reviewing general information concerning psychology, research on disability, and available statistics, the literature review intends to show the need for the present study. It is hoped that the following review and proposed research will assist the field in addressing competencies critical to the effective treatment of persons who have disabilities. A lack of competence in disability may lead to serious, adverse consequences for clients and their therapists. This study hopes, in some small way, to assist in avoiding the possibility of these negative outcomes in what should be a positive experience for the client in psychotherapy.

Psychology can be defined as “the study of the human mind and behavior”. This field analyzes and treats all aspects of the human experience. This includes understanding the delicate interplay of the internal functioning of the brain, examining and treating psychological problems that may occur during early childhood or during later years of life, and being able to work with individuals in all settings. Some settings might include mental health clinics, correctional institutions, classrooms, and scientific research laboratories (American Psychological Association [APA], 1987).

Furthermore, psychology is a science-based practice which incorporates features of neuroscience and health science. Psychologists study two essential relationships: one between brain function and behavior, and another between the environment and behavior. As behavioral scientists, psychologists follow scientific methods, using precise observation experimentation and analysis to comprehend, and observe the world in which we live and its inhabitants (APA, 2008; APA, 1987).

The professional organization to which psychologists belong in order to establish and maintain their profession is the American Psychological Association (APA) located in Washington, D. C. The mission of this organization is to assist in the progression of the establishment, distribution, and communication of relevant information pertaining to psychological topics. This is done to aid in benefiting society as a whole, and to advance people’s lives (APA, 1987, 1993, 1995, 1999, 2000, 2002a, 2002b, 2003, 2005, 2008).

In 2008, the APA, according to its annual organizational report for that year, was involved in advocacy and governmental affairs, 788 American Psychological Association-approved sponsors of continuing education for all psychologists, 896

American Psychological Association accredited programs in professional psychology, 373 American Psychological Association accredited doctoral programs in psychology, 474 doctoral internship programs, and 49 federally funded postdoctoral residency programs. The American Psychological Association has numerous psychologists in its organization. There are approximately 54 professional divisions in the organization, with a total membership of over 150,000 members, including both domestic and international members. Members of the organization also belong to specialty divisions, including Clinical (Division 12), Counseling (Division 17), School (Division 16), Developmental (Division 7), Social (Division 8,9), Consulting (Division 13), Intellectual and Developmental Disabilities (Division 33), Rehabilitation (Division 22), Health (Division 38), Neuropsychology (Division 40), Experimental (Division 3), Industrial or Organizational (Division 14), and other categories of psychology and study. This organization provides vital quality assurance activities, with respect to continuing education, professional education and training, and graduate doctoral training.

While there are various types of psychologists working in the United States, there are approximately 95,120 practicing psychologists classified as clinical, counseling, and school psychologists working with clients in the United States (United States Bureau of Labor Statistics, 2007). Since there are a vast number of psychologists practicing in the United States using the labels of clinical, counseling, or school psychologist, the next paragraphs provide a more detailed description of what clinical, counseling, and school psychologists do during their everyday practice.

For the purposes of this study, it will be critical for researchers in multicultural competence to understand these three groups of practicing psychologists. The vast majority of our clients with disabilities are likely to be served by one or more of these three types of psychologists. It will be important to review the impact of multicultural knowledge and understanding and its impact on the treatment of their clients, ethical standards, and the subject of diversity to include the minority group of disability.

According to Resnick (1991), the American Psychological Association defines the field of clinical psychology as an interworking of scientific research, theory, and practice. This is then used to comprehend, evaluate and reduce the maladjustment, disability and discomfort experienced by persons dealing with psychological problems. In addition, science-based methods are utilized to encourage individuals to adjust, adapt, and develop attributes that can facilitate an individual to excel in one's environment. Clinical psychology has a strong emphasis on the intellectual, emotional, biological, psychological, social, and behavioral features of human processing. This is addressed from birth to death in all cultures and socioeconomic statuses (Resnick).

In clinical psychology, the psychologist is taught to develop and integrate scientific and professional skills in order to promote psychology as a science-based discipline, to establish an accurate depiction of the practice of psychology, and to insure the overall improvement of the human condition. Additionally, clinical psychologists execute assessments to ascertain the etiology, nature, and possible impact of individual distress. This distress can be characterized as personal, social, and work-related stress coupled with psychological stress that is linked to physical, behavioral, emotional, nervous, and psychiatric disorders (Resnick, 1991). Finally, it is important to note that clinical psychologists practicing across the globe have ethical, professional, and moral obligations to protect and promote standards of defined competency within the profession (Vallis & Howes, 1996).

The American Psychological Association's Division 17 (1999) defined the field of counseling psychology as "a specific branch of psychology that enables the development of personal and interpersonal functioning across the individual's life span." There is a strong emphasis on addressing biological, health-related, emotional, social, vocational, educational, developmental, and organizational issues. This is done through a collaboration of theory, research, and practice. The field of counseling psychology also promotes the importance of identifying and working with multicultural issues. This specialty of psychology works to help individuals improve their day-to-day functioning, reduce distress and maladapted behavior, remediate and eliminate crises, and assist the person to live more independently. Counseling psychology has a double emphasis, which includes addressing normal developmental issues and working with problems linked to physical, emotional, and mental disorders (APA).

Counseling psychology is the specific branch of psychology that primarily focuses on a strength-based and a social-justice model of counseling when evaluating a client's presenting problem. Counseling psychologists are typically trained to work with a diverse population. Additionally, counseling psychologists are taught about the core competences of multiculturalism, which include race, ethnicity, gender, religion, sexual orientation, disability status, age, language, and social economic status (APA, 1999).

According to the American Psychological Association's Division 16 (2009), school psychology is described as using the scientific-practitioner model of psychology, and primarily focuses on working with children and families before and during the schooling process. School psychologists work to provide comprehensive psychological services that will aid in the betterment of the child's development, emotional well-being, behavioral adjustment, and academic progress. School psychologists work with all children, adolescents, and families who comprise diverse racial, ethnic, and economic groups. School psychologists are very aware of up-to-date education and health care legislation reform, because this legislation directly impacts the work that school psychologists engage in with children (APA).

The field of psychology offers a variety of specializations among psychological practitioners. These professionals are trained to provide therapeutic interventions that are ethically bound by a set of code of ethics and principles (APA, 2002a, b). These standards and procedures are issued to provide the delivery of quality and diligent care to clients without putting the client at risk or causing unnecessary harm to the client.

Berry (2005) stated that the Civil Rights Movement precipitated both counseling and clinical psychology graduate programs to vigorously pursue a multicultural framework when preparing graduate students to work with clients who are members of a minority group. The field of psychology recognized the importance of considering the client's multiple identities that could impact the therapeutic process. These identities could consist of one's race, ethnicity, gender, sexual orientation, religious association, socioeconomic status and/or social class, age, and disability status. When the therapist considers the client's total multicultural makeup, the client can obtain the therapeutic interventions needed to address clinical concerns that might be associated with these issues of diversity. To insure that the client receives sound therapy, these psychology programs develop and create clinicians who are skilled at conducting psychotherapy activities, and who are readily able to select the precise diagnostic criteria and instruments needed to make an adequate assessment of a client's presenting issue (Berry). Also, psychology programs are interested in promoting a scientist-practitioner model and its goal is to produce ethical and multicultural competent clinicians (APA, 1999; APA 2002a; APA 2002b).

It is clear that existing ethical standards offer protections to clients, including those with disabilities. It is expected that this study will help us to understand how aspects of diversity have been effectively inculcated into the therapeutic process by practitioners. Primary attention has not been given to persons with disabilities as a distinct minority group in the literature. It would be of benefit to review some of the models that have been employed in studying minority groups, in order to provide perspective on the subject of disability as a distinct group.

Models of Diversity

To address various aspects of diversity, researchers developed models of treatment for psychologists to assist in working effectively with members of minority groups. However, researchers' primary attention has been directed towards issues of diversity pertaining to race, ethnicity, and gender. The instant characteristic markers of difference that therapists can view when the client enters into the counseling session may influence the therapeutic relationship. The psychologist immediately begins to formulate several opinions, ideas, and beliefs of a person when he or she first meets the client. Training models were developed to aid the therapist in working with clients who present attributes and/or traits that differ from those of the therapist in order to assist the multicultural competence of practicing therapist.

The recognition of multicultural differences influenced the establishment of models of racial identity development theory. There are many examples of significant research in this area, including Cross (1971, 1995); Cross and Vandiver (2001); and Helms (1984, 1990a, 1990b, 1990c, 1995). I will focus here on the earliest racial model, which was the racial model of Nigrescence developed by Cross (Cross 1971, 1995; Cross & Vandiver, 2001). This five-stage model asserts that African Americans transition from a White perspective to a positive Black frame of reference. The stages are pre-encounter, encounter, immersion-emersion, internalization, and internalization commitment. According to Cross, the pre- encounter stage implies that somehow Blacks consciously or unconsciously denigrate their own Blackness and, at the same time, value White ideologies and mannerisms. Cross stated that African Americans experiencing this stage would exhibit self-hate and low self-esteem.

Next, Cross described the encounter stage as a two-step process. In the first sequence, or pre-encounter stage, the person experiences a significantly profound crisis or event that brings into question the person's initial mode of thinking and acting. In the second sequence or encounter stage, the person begins to reanalyze the world which subsequently causes a major shift in one's worldview. Cross stated that, during this stage, the Black person succumbs to guilt and anger regarding how White society has brainwashed Blacks.

In the third stage of this model, immersion-emersion, Cross stated that the person gives up the values from the dominant culture and totally immerses oneself in Black culture. Over time, Black pride begins to occur. However, internalization of positive attitudes toward one's own Blackness is notably minimal. Cross further stated that, in the emersion phase of his model, emotions surrounding guilt and anger will begin to decrease and even to dissipate. When this occurs, there is an increasing sense of Black pride.

The next stage of this model, internalization, is defined by the Black person's finding the inner strength to resolve previous conflicts regarding their racial identity. The person becomes more multicultural and further aware of all aspects of culture. The last stage in this model, internalization-commitment, entails the commitment that the Black person has realigned himself or herself to in order to live a life that includes social change and social justice (Cross, 1971, 1995; Cross & Vandiver, 2001).

Many of the broad concepts contained in Cross's model have value in gaining perspective on disability as a minority group. Gender is another marker or identity which has been studied extensively and can be of value in this review.

Few would disagree that gender refers to being male or female. When a review of gender identity theories is undertaken, one's gender is further defined by the roles that men and women assume. Within each gender, there are gender roles that the individual assumes in one's professional work setting, family, residential communities, personal romantic and/or platonic relationships (Anderson, 2000).

Anderson (2000) articulated that sexual identity development initiates approximately six weeks after conception when the embryo transforms into a fetus in the womb. At this time, the sexual organs are formulating. As this process occurs, the fetus is transforming into either a girl (classified by the development of a vagina, female sex hormones, and ovaries) or a boy (classified by the development of a penis, male sex hormones, and testicles).

In American culture, gender identity development initiates at the point of birth. Parents are consumed with knowing if it is a boy or girl. They worry about how to decorate their nursery and what color scheme to utilize based on the sex of the unborn fetus. Parents worry about definitively knowing the overall health and sex of the fetus (Anderson, 2000).

With parents becoming so preoccupied with knowing if their unborn child is a girl or boy early in the child-bearing process, there is pressure toward the immediate assignment of gender and its respective role by the family and society. For example, social conditioning promotes the designation of a boy as associating with the color blue and a girl associating with the color pink. At the earliest possible point, often before birth, the gender role assignment is established. After birth and throughout the child's development, more and more responsibilities associated with the male or female gender role are assumed. There are many models of gender identity theory addressing gender differences among men and women; however, the gender similarities hypothesis (Thorndike, 1914; Woolley, 1914; Hollingworth, 1918; Hyde, 1985; Epstein, 1988; Hyde & Plant, 1995; Kimball, 1995) can provide a better depiction of the true gender role identities shared among men and women.

The gender similarities hypothesis states that women and men have similar composition on most, but not all, psychological variables. This theory indicates that women and men, including girls and boys, are more similar than they are dissimilar. In a book on the psychology of sex differences, Maccoby and Jacklin (1974) described over 2,000 studies of gender differences pertaining to specific realms such as abilities, personality, social behavior, and memory. Maccoby and Jacklin said that some accepted beliefs regarding psychological gender differences were not always true among both genders. Some examples of such beliefs were that boys are better equipped to perform higher-level cognitive processing; girls lack achievement motivation; girls are more "social" than boys; girls are more suggestible; girls have lower self-esteem; and girls are better equipped to do rote learning and simple tasks. Maccoby and Jacklin pointed to overwhelming evidence supporting the idea that gender differences existed only in four regions: verbal ability, visual-spatial ability, mathematical ability, and aggression. Additionally, their findings maintain that there are more gender similarities than gender differences (Maccoby & Jacklin).

Psychologists are faced with working with clients who are multidimensional and encompass many visual characteristics. As the American culture has become more culturally diverse, training in multicultural counseling has become critical. Sue and Sue (2008) stated that this is attributed to the diversification of the population of the United States. In addition, Sue and Sue indicated that (a) the clinician's cultural lens may differ from the client with whom he or she is working, (b) all accredited graduate psychology training programs must be continually measured for effectiveness of instruction regarding diversity and inclusion, (c) unethical practices associated with diversity by the therapist may further promote cultural oppression of the client, (d) some psychological problems may be attributed to societal biases, and (e) clinicians may have some prior preconceived notions and stereotypes of specific cultural groups.

As a result of social change in the United States, psychologists must also adapt to the change in order to work effectively with clients who comprise aspects of difference. The field of psychology must continue to respond to societal change in the area of diversity, and so too must its practicing psychologists.

Some examples of such crucial societal shifts may include, but are not limited to, the influx of racial disparity among African American people with regard to access to employment and educational opportunities; the baby boomers aging and, therefore, living longer, with possible health concerns; the social demand for gay and lesbian couples to have the same marital rights and civil liberties as their heterosexual counterparts; or even having a mandate for equal access for all members of society to utilize public transportation. The issue of diversity and the responses of our society to diversity are important. These factors have an impact on the psychological treatment given to a client by a practicing psychologist which cannot be overlooked or underestimated.

It is evident that multicultural competence is required to be an effective psychologist. But what happens if the practicing psychologist received his or her doctoral training prior to the institution of multicultural training competences in graduate training programs? What happens if the practicing psychologist earned his or her doctoral degree prior to a major societal shift with respect to a particular form of diversity? What happens if a psychologist's doctoral training program, even after the multicultural shift, continues to omit instruction regarding issues faced by certain minority groups; for example, persons with disabilities? What happens if a practicing psychologist does not acquire continuing education credits that may inform him or her about the needs of all multicultural minority groups? This is the present concern of this dissertation research.

Disability Demographics

It will be important to consider the definition of disability, define the population, review pertinent legislation, consider types of disabilities, and apply available statistics to assist in providing the reader with a broad framework to be used in gaining appreciation and understanding of the significance of this study. Individuals with disabilities are considered a minority group based on the definition of a minority group developed by Wertlieb (1985). This definition includes features such as the following: persons with disabilities are exposed to majority group discrimination; persons with disabilities are classified on a socially salient feature (e.g., stigma); persons with disabilities demonstrate a joint expression of group solidarity; persons with disabilities have involuntary group status; and persons with disabilities experience strong encouragement from society to marry within disability groups (Wertlieb).

Multicultural concerns addressed by psychologists also include issues of disability. The experience of either acquiring a disability during mid to late life, or being born with a congenital disability, can be an inevitable part of human existence (Banja, 1996). This personal experience of disability in one's life could be a shocking and distressing event. Such an event could result in such an individual seeking psychological assistance to address the personal, familial, societal, and occupational barriers that the disability may cause in the client's life. Practicing psychologists may need to treat these individuals, and must have the knowledge, awareness, and skills needed to work effectively with this minority group.

Based on self-report statistics compiled by the United States Census Bureau (2006), it is estimated that there are 51 million people in the United States who are designated as having a disability. A disability is defined by the Americans with Disabilities Act Amendments Act of 2008 (PL 110-325), Americans with Disabilities Act (ADA, PL 101-336), and the Rehabilitation Act Amendments of 1992 (PL 102-569), as a physical or mental impairment that substantially limit the person in performing a major life activity. Such life activities might include, but are not limited to, breathing, walking, standing, moving, speaking, hearing, seeing, working, or intellectually processing information. Additionally, if the person has an impairment that is substantially limiting because of societal attitudes regarding the specific condition, the person is viewed as having a disability.

According to the Americans with Disabilities Act Amendments Act (2008), a disability can be further shown by the person having a documented impairment or by the person with the disability being regarded as having such impairment. The person only has to have difficulty performing one or more life activities to be classified as having a disability under the Americans with Disabilities Act (ADA-Amendments Act; ADA, 1990).

In addition, the Americans with Disabilities Act Amendments Act of 2008 (PL 110-325) was created to further solidify the protections of persons with disabilities, because the original American with Disabilities Act of 1990 was not utilized legally in the manner in which it was originally intended. This amended act further states the following:

1. This act was implemented to further carry out the ADA's aims of providing a comprehensive national mandate for the elimination of discrimination against persons with disabilities, and precise and enforceable standards addressing discrimination against persons with disabilities, by reinstating a broad scope of protection for persons with disabilities to be available under the ADA;

2. This act was implemented to further reject the requirement articulated by the Supreme Court decision in Sutton v. United Airlines, Inc., 527 U.S. 471 (1999), and its companion cases, that whether an impairment substantially limits a major life activity for a person with a disability is to be determined with reference to the ameliorative effects of mitigating measures;

3. This act was implemented to further reject the Supreme Court's premise in the case of Sutton v. United Airlines, Inc., 527 U.S. 471 (1999) pertaining to coverage under the third prong of the definition of disability, and to reinstate the reasoning of the Supreme Court in the case of the School Board of Nassau County v. Airlines, 480 U.S. 273 (1987), which articulated a broad view of the third prong of the definition of handicap under the Rehabilitation Act of 1973;

4. This act was implemented to further reject the standards stated by the Supreme Court in the case of Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002), which argued that the terms "substantially" and

"major" in the definition of disability under the ADA "need to be interpreted strictly to create a demanding standard for qualifying as disabled," and that to be substantially limited in performing a major life activity under the ADA "an individual must have an impairment that prevents or severely restricts the individual from doing activities that are of central importance to most people's daily lives";

5. This act was implemented to further convey congressional intent that the standard created by the Supreme Court in the case of Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002) for "substantially limits", and applied by lower courts in many court decisions, has established an inappropriately high level of limitation necessary to obtain coverage under the ADA, to convey that it is the intent of Congress that the primary object of attention in cases brought under the ADA should be whether entities covered under the ADA have complied with their obligations, and to convey that the question of whether an individual's impairment is a disability under the ADA should not demand extensive analysis; and

6. This act was implemented to further discern Congress' expectation that the Equal Employment Opportunity Commission will revise that portion of its current regulations that defines the term "substantially limits" as "significantly restricted" to be consistent with this Act, including the amendments made by this Act (Americans with Disabilities Act Amendments Act, 2008).

Hanjorgiris and O'Neill (2006) discussed various disability types. These disability types included individuals with perceptual disabilities which incorporated learning, visual, and hearing impairments; illness-related conditions which consisted of diabetes, cancer, and AIDS; neurological conditions like cerebral palsy or multiple sclerosis; developmental disabilities such as Down's syndrome; psychiatric disabilities as observed in schizophrenia, bipolar disorder, or major depression; mobility-related disabilities like quadriplegia; and environmental concerns as seen in asthma, allergies, and environmental toxins.

Statistics available from the most recent disability reports reflect that there are 41.7 million people, age 5 and above, in the non-institutionalized sector reporting at least one disability (United States Census Bureau, 2005). This translates into approximately 19% of individuals in the population. These individuals make up at least one of the following criteria:

1. The person with the disability is 5 years old or older and reports having a sensory, physical, mental, emotional or self-care disability;
2. The person with the disability is 16 years old or older and finds it arduous to go outside the home independently;
3. The person with a disability is aged 16-to-64 years and reports experiencing an employment disability;
4. When reviewing gender statistics in children, 7% of boys and 4% of girls ages 5 to 15 have disabilities;
5. Adults with disabilities report that about 20% of men and 18% of women ages 16 to 64 have disabilities; and

6. 43% of women and 40% men 65 or older have disabilities (United States Census Bureau, 2005).

Based on these statistics, it is apparent that most psychologists will encounter clients with one or more disabilities in the course of their professional career. Therefore, it is important to ascertain whether practicing psychologists received the competence training with respect to disability during their doctoral training. If they did not receive this important training during the pursuit of their degree, have they obtained supplementary competency training in diversity during their work life? Berry (2005) reported that some graduate psychology training programs experienced some problems offering a comprehensive multicultural core curriculum for students. Moreover, when examining these curricula for the inclusion of disability and its impact, an instructional discrepancy was observed in some graduate psychology programs. When teaching graduate students about the multicultural aspects of diversity, the aspect of disability had a reduced level of priority when compared to other features of diversity (Berry, 2005; Peterson, 2008; Hollimon, 2007; Bernard, 2003; Olkin, 1999a).

This lack of disability instruction and research in psychology is further bolstered by research conducted by Peterson (2008) in Brown and Lent's most recent Handbook of Counseling Psychology. Peterson's chapter discusses the lack of disability research performed in the field of counseling psychology. Peterson further articulated that most of the disability research is primarily done by researchers in the field of vocational rehabilitation counseling and counselor education. Peterson reported that this has been an ongoing trend, as witnessed by Fenderson in 1984. More recently, in 2001, rehabilitation psychologists requested that the American

Psychological Association directly address disability concerns through the accreditation of training and internship programs (Kewman, 2001). Unfortunately, the organization did not act on this recommendation. This inaction is perplexing, because, while psychologists are trained to work with people with diversity, often through programs offered through the organization, many may not be prepared to address concerns related to physical and emotional problems. In short, individuals who have these concerns and can be classified as a person with a disability have been denied the recognition that may result in dramatic improvements to their care. The development of multiculturally competent psychologists with knowledge of disability is paramount to the success of the field.

The lack of disability research by some psychology disciplines may explain the limited attention to disability concerns that arise in clinical settings. According to Hollimon (2007), United States Census Bureau (2006), and Olkin (2002), the largest growing minority group in the United States is the minority group comprised of individuals with disabilities.

Ethical Implications for Practicing Psychologists

The American Psychological Association states that psychologists dispense only psychological treatments and services that the clinician is qualified to deliver to clients (APA, 2002 a, b). In order to do this effectively, psychologists must be knowledgeable about the issues that a member of a minority group will face in society. Psychologists must learn about the concerns that people with disabilities encounter as a result of their disability status. Also, practicing psychologists must acknowledge any preconceived thoughts he or she might have about a person who has a physical or mental disability.

Sue (2001) stated that true multicultural disability competence must consist of insuring equal access to counseling opportunities to all clients, including clients with disabilities. The emphasis should be on inclusion rather than exclusion, and on eliminating all individual and systemic barriers to psychological treatment. Hollimon (2007) reported that, as the number of people with disabilities grows in our population, psychologists are forced to address how they can effectively work with this minority group. The challenges that psychologists face are in the areas of legislative advances, societal norms, dilemmas brought about when working with an individual with a disability in a therapeutic setting, and the psychologist's personal perceptions regarding disability that may affect the psychologist's ability to work effectively and ethically (Hollimon, 2007; Sue 2001; Sue, Arredondo & McDavis, 1992).

As eclectic clinicians, psychologists are quite marketable and hold occupational titles in many client settings. Examples of such settings include private practice, academic institutions, medical hospitals, community-based clinics, criminal justice facilities, military settings, and employment centers (APA, 2009; Hollimon, 2007; APA, 1999). Because psychologists are more likely to work with clients with disabilities in various settings, it is imperative that psychologists stay up-to-date with all legislation, regulations, treatments, guidelines, and other modalities that apply to persons with disabilities.

Continuing Education for Licensure in Psychology

As we move to a new decade, the discussion of American healthcare reform is being debated. As a democratic society, our governmental officials are trying to bridge the disparity among medical services being offered to individuals who are under-insured or uninsured. As practicing psychologists, the need for psychological treatment to be available for all persons in this country is a constant battle. Pressures of day-to-day living which includes the meltdown of the economy attributed to loss of jobs nationally and globally, loss of homes due to foreclosures, alcohol and drug abuse, ongoing domestic and international terror threats, the increase in divorce and single-parent households, domestic violence, school violence, violent crimes on our neighborhood street corners, and so much more, precipitates the cry for the need for psychological help. As societal pressures increase, the need for psychological help becomes more and more a necessity, as we seek to keep those most affected by these pressures emotionally secure.

Mental health clinicians who work with clients must insure that the quality of care is always safe, client-centered, effective, timely, efficient, and equitable for all clients (Daniels & Walter, 2002). These professionals must be trained, with respect to implementing these objectives. This training will take place, both at the degree-based graduate education level, and postgraduate, or postlicensing, continuing education level (Daniels & Walter).

In the mental health profession, there is a myriad of professional disciplines, which consist of psychiatry, psychology, social work, psychiatric nursing, counseling (pastoral, mental health, addictions), marriage and family therapy, and rehabilitation (Peterson et al., 2001). Each discipline has developed and implemented its own mandates for graduate education and formalized practices for accrediting graduate education programs (Daniels & Walter, 2002). Professional education in psychology has two principle types, degree-based training, and postlicensing continuing education. Each of these steps contains a unique set of features.

During the period in which a person is pursuing a graduate degree, educational activities are primarily concentrated on both theoretical and practice-based learning (Daniels & Walter, 2002). This instruction is focused on the implementation of knowledge, skills, and ethics in the practice of mental health (Young, Forquer, Tran, Starzynski & Shatkin, 2000; Daniels & Walter, 2002). During the postlicensing period, continuing education is associated with fine-tuning existing clinical skills, acquiring ongoing competency regarding changes in the knowledge base and clinical techniques, and the enhancement of newly acquired clinical skills (Daniels & Walter).

Graduate degree-based training differs significantly from continuing education. For example, in degree-based training, the training is centered on finishing an explicit curriculum. In contrast, training received through continuing education is usually self-directed by the clinician. The clinician is the one who chooses the topics of interest to follow (Daniels & Walter, 2002).

In general, continuing education has primarily been offered by professional associations like the American Psychological Association for psychologists. This is offered by the association through annual, national conferences, and regional training events. In addition, private and for-profit organizations have also provided continuing education opportunities to mental health providers (Daniels & Walter, 2002).

These continuing education training seminars, by and large, utilize an instructional design that consists of didactic and noninteractive activities. These training sessions typically entail merely a lecture, workshop, or conference. In general, the bulk of the activities do not require repeated exposure to a topic, unlike that witnessed in the instruction conducted by institutes on specific topics; for example, cognitive-behavioral training, psychoanalytic training, and family therapy (Daniels & Walter, 2002). Web-based and technology-based distance-learning programs are also part of the continuing education training module, but the live, didactic continuing education sessions are a preferred method of training by most clinicians (Daniels & Walter, 2002).

Continuing education mandates are also found in licensing and certification requirements for some mental health disciplines. These mandates for licensure are prescribed by each state in the union. Daniels and Walter (2002) reported that continuing education credits are obtained via professional organizations accredited by the state or by a professional association like the American Psychological Association. Each state will mandate the number of hours of continuing education needed over a period of time. The state will specify how many credits are needed in a certain number of years. Satisfaction of this requirement is an important part of the renewal or maintenance of licensure or certification (Daniels & Walter, 2002). In addition, certain states require the practicing psychologist to receive particular training in content areas such as ethics and practice standards (Daniels & Walter).

The purpose of this dissertation research is to evaluate whether or not present practicing licensed psychologists possess multicultural competence with respect to the subject of disability. As members of society live longer, and become more susceptible to acquiring a disability, it is important to determine the level of competence in understanding disability in clinicians in the field of psychology charged with serving these individuals. This research is needed to determine the level of multicultural disability competence among psychologists practicing in the United States.

Research Question

This study investigated the following research question: What are the unique contributions of the variables, exposure to persons with disabilities, training related to persons with disabilities, and individual awareness of attitudes and perceptions of persons with disabilities, to perceived multicultural disability competence and engagement in specialized work with clients with disabilities among practicing licensed psychologists in the United States?

Research Hypotheses

The following research hypotheses were predicted for the proposed research question:

Hypothesis #1: Strike (2001) and Strike, Skovholt and Hummel (2004) indicated that, when deciphering disability competence among mental health providers, there are three essential ingredients needed to determine one's level of multicultural disability competence. These three components are awareness, knowledge, and skills. Therefore, in this research investigation, it is predicted that psychologists who have previous exposure, training, and awareness of persons with disabilities will demonstrate higher levels of multicultural disability competence when working with clients with disabilities.

Hypothesis #2: Based on findings ascertained by Hollimon (2007) on the perceptions and attitudes of graduate students in psychology programs regarding persons with disabilities, psychologists who have previous exposure, training (recently obtained their doctoral degree, and/or postdoctoral training via on-the-job training or continuing education certification), and awareness of persons with disabilities will demonstrate a higher level of positive regard for persons with disabilities.

Hypothesis #3: It is proposed that psychologists who have exposure to persons with disabilities, training about persons with disabilities, awareness regarding individual perceptions, and attitudes about persons with disabilities, will have higher levels of disability competence, and would be more likely to seek specialized training to work specifically with persons with disabilities.

Identification of Variables

Variables used in a research investigation are factors that will be employed to predict or acquire support for a particular study's hypothesis (Green & Salkind, 2003). This research exploration utilized a statistical design that employed a path analysis, a type of Structural Equation Model (SEM). This model was developed by using specific computerized software called LISREL Version 8.8 (Jöreskog & Sörbom, 2006). The variables for this research investigation are:

Independent Composite Variable #1: Exposure

The variable, *exposure to persons with disabilities*, had indicators which are listed as follows:

1. Personal (individual having a disability);
2. Immediate family (someone in the family having a disability);
3. Friends having disabilities;
4. Co-workers having disabilities;
5. Occupational history that includes working with persons with disabilities; and

6. Learning about the concept of disability through legislation, the media, or other social exchange.

Note that this variable, exposure to persons with disabilities, had seven questions taken from the demographic questionnaire that was summed together to obtain a continuous score.

Independent Composite Variable #2: Training in Disability

The variable, *training related to persons with disabilities*, had indicators that included:

1. Doctoral preparation (internships, externships, or coursework obtained during the predoctoral years);
2. Inservice employment-based (training received while in a work setting offered by an employer);
3. Continuing education (certification based on training required to maintain a psychological license); and
4. Postdoctoral coursework offered by a college or university.

Note that this variable, training related to persons with disabilities, had 12 questions taken from the demographic questionnaire that was summed together to obtain a continuous score.

Independent Variable #3: Awareness

The variable, awareness, is the individual personal attitudes and perceptions about persons with disabilities held by persons without disabilities in general. This was measured by utilizing the total score achieved on the Attitudes Toward Disabled Persons Form A Likert measurement scale (ATDP Form A; Yuker & Block, 1986).

Scores received on the scale range from 0 to 180. Higher scores on the scale are indicative of better perceptions and attitudes of persons with disabilities among the respondent.

Dependent Variable #4: Perceived Multicultural Disability Competence

The variable, *perceived multicultural disability competence*, was measured by using the total scale score of the Counseling Clients With Disabilities Survey (CCDS; Strike, 2001), which includes the scores received across the three subscales (e. g., Self-Awareness, Perceived Knowledge, and Perceived Skills) assessed by the CCDS. Total scale scores on the CCDS ranges from 0 to 360. The three subscales ranges from 20 to 120. A higher total scale score means that a psychologist is demonstrating competence when working with this referent group.

Dependent Composite Variable #5: Engagement in Disability Specialization and Practice

The variable, *engagement in disability specialization and practice*, incorporated additional indicators such as the following:

1. Postdoctoral employment specifically working with clients with disabilities;
2. Involvement in professional associations or organizations regarding professional practice with clients with disabilities;
3. Extra certifications or licenses specifically addressing the concerns of persons with disabilities;
4. Percentage of the psychologist's caseload directly dealing with clients with disabilities; and
5. Supervision of cases with clients with disabilities.

Note that this variable, engagement in disability specialization and practice, had six questions taken from the demographic questionnaire that was summed together to obtain a continuous score.

Operational Definitions

This section will highlight the definition of each variable involved and how it was measured in the study. The variable, *disability*, was defined by language, put forth in the Americans with Disability Act Amendments Act of 2008 and the Americans with Disability Act of 1990. This means that a disability is denoted as a physical or mental impairment that substantially limits a person's ability to perform one or more major life activity. Such life activity includes seeing, hearing, working, walking, breathing, talking to name a few (Americans with Disability Act Amendments Act, 2008; Americans with Disabilities Act, 1990).

Multicultural disability competence was measured on three levels. These levels included: (a) a practicing psychologist's self-awareness regarding the aspect of disability; (b) the perceived knowledge of disability related issues; and (c) the perceived clinical skills he or she may possess when working with individuals with disabilities. Multicultural disability competence was evaluated by utilizing the total score achieved on the Counseling Clients with Disabilities Survey (CCDS) (Strike, 2001). This instrument was constructed by using the Multicultural Counseling Competencies and Standards (Sue et al., 1992; Arredondo et al., 1996), coupled with tenets from the minority model of disability (Hahn, 1985). The CCDS score that falls in the high range depicts a greater level of perceived disability competence when working with clients with disabilities (Strike).

To define the variable, *attitude*, the research definition proposed by Antonak and Livneh (1988) was used here. This definition stated that the word "attitude" has a multidimensional conceptualization. This conceptualization stated that an attitude is a formal thought with great emotional context that influenced one's reaction(s) to a specific cluster of social dilemmas (Antonak & Livneh). Basically, an attitude is a preconceived opinion about a certain act or behavior. Yuker (1965) conducted extensive disability research from the 1960's through the 1990's on attitudes and perceptions of people without disabilities regarding individuals with disabilities in the United States. Yuker (1965) conceptualized two aspects of attitudes toward individuals with disabilities, which are: (a) acceptance or rejection; and (b) prejudice or lack of prejudice.

Yuker (1965) stated that acceptance of individuals with disabilities by persons without disabilities must have the essential ingredient of having a desire to associate and relate to the individual with the disability. Additionally, Yuker defined prejudice as the manner in which a person views certain individuals based merely on an association to a specific group or category, rather than viewing the person as a distinct individual. The variable, *attitude*, was measured by using the achieved total score of the Attitudes Toward Disabled Persons Scale Form A (ATDP Form A; Yuker & Block, 1986; Yuker, Block & Young, 1970; Yuker, Block & Young, 1966; Yuker, Block & Campbell, 1960). Yuker and Block proposed that achieving a higher score on the ATDP Form A denotes a more positive attitude regarding individuals with disabilities.

For this research investigation, the research participant was asked to complete an electronic research packet only once, through an online survey tool called Asset

Programming (2011). It consisted of three research items. These research items contained the biographical sheet developed by the researcher, the ATDP Form A, and the CCDS in this order. The operational definition of the word "disability" was provided to the participant prior to completing the CCDS.

Significance of the Problem

The following five essential ingredients are proposed, and further discussed in Chapter II, to demonstrate the significance of researching this critical area. First, the theoretical foundation regarding minority status concerning aspects of difference in the United States' culture will be discussed. Second, the definition of disability and demographic information regarding the prevalence of disability in the United States are mentioned to display practical significance. Third, information on disability rights legislation is offered to demonstrate legal and ethical significance. Fourth, the minority model of disability will be reviewed to convey multicultural significance for this diverse group. Fifth, a discussion regarding psychologist ethical codes of ethics and competence when working with diverse groups will be presented as means of indicating practical, empirical, and academic significance. In total, these five points emphasize the magnitude and importance for researchers to study therapist's training to react competently to individuals who have disabilities.

This study is significant because it will assist practicing psychologists in keeping up-to-date on multicultural competencies necessary to provide effective services to our diverse population in the United States, including persons who have disabilities. It could provide an impetus for psychologists to maintain a level of current theoretical research, knowledge of legislative implications, and current clinical practice and ethics to be applied when working with clients with disabilities.

Additionally, if the research findings indicate that there is a lack of multicultural disability competence among practicing licensed psychologists in the United States, it could be used to encourage professional licensing boards that mandate continuing education for psychologists to redesign continuing education credits requirements for renewal of a psychological license. The added requirement for renewal of a psychological license could include some training in disability-related issues, along with the specialized services, pertinent legislation, and unique needs that may be presented to psychologists serving this minority group.

Finally, the goal of this study is to demonstrate the relevance of training in issues of disability as one recognizes the place of disability in the United States. Our population is growing older, and with the addition of age, it becomes a more likely probability for a person acquiring a disability. Therefore, a psychologist who receives appropriate disability training can positively affect the perceptions of people with disabilities in our culture. They can have better attitudes regarding this client group, and also can obtain better therapeutic outcomes when working with this minority group.

Limitations of the Study

In executing any type of research investigation, validity can be increased through careful design, including appropriate control, manipulation, statistical control, and randomization. In a non-experimental design, sampling is often based on self-selection. Therefore, it is likely that the findings of a non-experimental design may not represent the underlying target population (which needs to be accurately defined). Although, some research studies do attempt to obtain representative samples. The best that a researcher can do, in most cases, is to describe the sample as thoroughly as possible on all attributes known to affect your dependent variable, so the study can be tested through replication.

In this nonexperimental, web-based research investigation, I used a criterion purposeful sampling method. I understood that a simple random sampling method would aid the validity of the research findings. For this study, it was impossible for me to number all the members of the population (all practicing licensed psychologists in the United States) in order to select a sample of the desired size using a random number table or computer program. Most populations are not listed in a way that allows the application of a random sampling process, so that each member has an equal chance of being selected. Even with a census study, the study is still vulnerable to measurement error, nonresponse, and errors in recording and coding.

A criterion sampling method involves the researcher's establishing a specific criteria for cases in the study to follow, and then selecting all cases that satisfy that particular criteria (Meyers, Gamst & Guarino, 2006). Psychologists selected for the study had to satisfy the following designed criteria:

1. Participants had to be licensed in the state in which they are currently working with clients as a psychologist, and this was denoted by passing their home state licensure exam for all psychologists;
2. Participants had to be practicing in the field of psychology as a licensed psychologist for either zero to 20 years or more after their doctoral training;

3. Participants had to be working with clients either directly or indirectly (i.e., teaching);
4. Participants had to work as a psychologist in the United States;
5. Participants were selected from all geographical regions of the United States representing the north, south, east, and west;
6. Participants were either male or female;
7. Participants were from any racial or ethnic background; and
8. Participants were aged 27 and older. This insured that a person who obtained his or her undergraduate and graduate doctoral degree contiguously was included in this sample of practicing psychologists.

For the purpose of this study, I elected to work with the number of practicing licensed psychologists in the United States. Practicing licensed psychologists are composed primarily of clinical, counseling, and school psychologists. There are approximately 95,120 psychologists classified as clinical, counseling, and school psychologists practicing in the United States (United States Bureau of Labor Statistics, 2007). I contacted the psychology licensing boards in each individual state to obtain a current and accurate number of licensed psychologists. This was done in the month of September of 2011. Please refer to Table #1 for more details.

Table 1

Number of Licensed Psychologists in the United States

State	Number of Licensed Psychologists as of September 2011
Alabama	973
Alaska	170

State	Number of Licensed Psychologists as of September 2011
Arizona	1536
Arkansas	554
California	21682
Colorado	Request denied
Connecticut	1850
Delaware	444
District of Columbia	1285
Florida	4441
Georgia	2151
Hawaii	898
Idaho	288
Illinois	Request denied
Indiana	1684
Iowa	566
Kansas	876
Kentucky	Request denied
Louisiana	650
Maine	424
Maryland	2700
Massachusetts	5433
Michigan	2837
Minnesota	3600
Mississippi	1849
Missouri	1887
Montana	233
Nebraska	470
Nevada	390
New Hampshire	576
New Jersey	3074
New Mexico	694
New York	10207
North Carolina	2503
North Dakota	220
Ohio	3000
Oklahoma	600
Oregon	1446
Pennsylvania	999
Rhode Island	709
South Carolina	670
South Dakota	199
Tennessee	1400
Texas	5000
Utah	848
Vermont	407

State	Number of Licensed Psychologists as of September 2011
Virginia	Request denied
Washington	2186
West Virginia	600
Wisconsin	1470
Wyoming	213
Total	90874

Requests for psychologists to participate in this study were tendered electronically. Participation requests were sent via e-mail to list serves of all the divisions of the American Psychological Association, individual state psychological associations, and finally to each state licensing board. Each state licensing board had a particular protocol to follow when requesting e-mail addresses for licensed psychologists. Most states published contact information, including e-mail addresses, of licensed psychologists for a fee, and other states render no charge. However, not all states had e-mail information readily available for their licensed psychologists and; therefore, I could not obtain this information for some states.

This was an anonymous, voluntary, web-based survey study with no monetary gain for the participant. Therefore, the response rate was low, and not all 50 states were represented in the final sample. Sample details will be further discussed in Chapter IV.

Aside from sample size and quality, another threat to validity could be the impact of self-report instruments such as social desirability scales and monomethod bias. To resolve this issue, I utilized instruments with demonstrated reliability and validity statistics that can best address the research question. It is critical to keep in mind that this study is questioning a psychologist's multicultural competence with respect to his or her practices concerning disability and related ethics. However, it is possible that social desirability will influence the participant's responses. The responses could be influenced by a psychologist's not truly admitting his or her negative perceptions and attitudes regarding persons with disabilities so that he or she is not viewed in a negative manner. Additionally, a psychologist might not want to admit to the fact that he or she could be providing treatment to a client with a disability without having the appropriate skills, awareness, and knowledge needed to work effectively with this specialized minority group. However, this research investigation used an assessment tool (CCDS) that was validated by using a social desirability scale to gauge the participant's tendency to respond in a socially acceptable manner.

Another limitation to this study was that the definition of the word "disability" was given to the research participants prior to completing the third assessment tool (CCDS). For the completion of the biographical sheet and the ATDP Form A, participants were not provided the definition of disability. Participants had to decide if they defined a disability as including both physical and mental impairments. This action was done to evaluate whether or not a practicing licensed psychologist could use his or her occupational and/or personal experience to interpret the meaning of disability when completing the biographical questionnaire and the ATDP Form A.

Summary

To conclude, this research investigation is important because persons with disabilities are increasing in numbers within our ever-growing population. Therefore, this reference group could become the largest minority group in the country. The emerging prominence of this group has forced us to explore the need for multicultural disability competence among the mental health professionals who are tasked with helping these individuals address their psychological needs. This research investigation hopes to add to the limited research literature currently available in this multicultural domain.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter will discuss relevant research findings that bolster the proposed research plan for this dissertation. The chapter will begin with a look at how other identities or features of multiculturalism were treated in the field of psychology. These traits of human difference with respect to membership in a minority group in the United States will be compared to the aspect of disability. Then, the chapter will explain the definition of a disability, and discuss the impact of disability in the United States. From this point, the chapter will address multicultural disability competence in the field of psychology, and the need for it.

Multiculturalism and Minority Status

When an extensive examination of the multicultural literature is conducted in the field of psychology, there have been countless writings addressing concerns of diversity that persons who have differences face in our culture (Harrell & Bond, 2006). Extensive efforts have been made to understand the impact of difference when working with clients. There have been numerous published articles addressing this issue in the literature. Some of these studies have appeared in important journals in the field of psychology including the Journal of Multicultural Counseling and Development, Rehabilitation Psychology, Journal of Consulting and Clinical Psychology, Journal of Applied Social Psychology, the Journal of Personality and Social Psychology, the Journal of Professional Psychology: Theory and Practice, Journal of Counseling and

Development, Journal of Prevention and Intervention in the Community, American Journal of Orthopsychiatry, The Counseling Psychologist, and the American Journal of Community Psychology (Harrell & Bond, 2006). In addition, the establishment of a specialty journal to specifically address concerns of ethnic minorities was implemented in 2000. The journal's name was the Cultural Diversity and Ethnic Minority Psychology. It is published through Division 45 (Society for the Psychological Study of Ethnic Minorities) of the APA (APA, 2000).

Other publications that have covered multicultural issues in the last 20 years are briefly mentioned below to demonstrate how the field of psychology has tried to address issues of diversity. They were as follows:

1. In 1982, Division 17 (the Society of Counseling Psychology of the American Psychological Association), Committee on Counseling Psychology Education and Training issued a comprehensive report that outlined and defined counselor multicultural competencies (Sue et al., 1982);
2. The American Psychological Association has developed and distributed comprehensive guidelines and competences required of psychologists when working with racial/ethnic groups (APA, 1993);
3. Diversity issues are included in the Domain D of the accreditation criteria (Cultural and Individual Differences and Diversity) for all American Psychological Association's accredited doctoral programs in psychology (APA, 1995);

4. In 1999, the biannual American Psychological Association National Multicultural Conference and Summit was established to discuss concerns of multicultural counseling;
5. In 2000, Division 44 was established to accentuate counseling and clinical applications when working with clients addressing their sexual orientation;
6. In 2000, the Council of National Psychological Associations for the Advancement of Ethnic Minority Interests put forth the American Psychological Association's Guidelines for research in ethnic minority communities (Council of National Psychological Associations for the Advancement of Ethnic Minority Interests, 2000);
7. In 2001, the Department of Health and Human Services wrote an all-inclusive mental health manuscript, called *Culture, Race, and Ethnicity,* for all clinicians (Department of Health and Human Services, 2001);
8. In the 2002 revision of the Ethical Principles for Psychologists, there are specific criteria mentioned regarding diversity concerns for psychologists who work with members of a minority group (APA, 2002a, b);
9. In 2003, the American Psychological Association distributed wide-ranging multicultural guidelines, which included attention to research and organizational applications (APA, 2003);
10. In 2005, the American Psychological Association developed and distributed comprehensive guidelines and competences required of psychologists when working with women and girls (APA, 2005); and

11. In 2007, the American Psychological Association implemented a task force to create guidelines for conducting and administering psychological assessments for individuals with visual disabilities (APA, 2008).

The practicing psychologist tries to heal clients harmed by prejudice, bigotry, and discrimination that they encounter as members of minority groups. Sue and Sue (1999) described seminal events in the history of multiculturalism (i.e., the 1973 Vail Conference, 1975 Austin Conference, 1978 Dulles Conference, and the 1978 President's Commission on Mental Health), when professionals in the field of psychology were trying to find ways to address social discrimination and prejudice against persons who have differences. These conferences were aimed at providing information designed to assess and strengthen multicultural competence in professionals providing mental health services (Sue & Sue).

In psychology, there have been some theorists who have discussed the importance of therapists addressing disability-related concerns in psychotherapy. Some chief psychological theories that have been applied when working with individuals who have disabilities include psychoanalytic (Asch & Rousso, 1985; Thomas, 1997), rational-emotive (Sweetland, 1990; Ellis, 1997), and humanistic (Garske & Soriano, 1997). Additional psychological ideologies that have been successfully applied when working with clients with disabilities consist of feminist thought (Fowler, O'Rourke, Wadsworth & Harper, 1992; Freeman, 1993), somatopsychological (Kerr & Bodman, 1994), sexuality counseling (Linton & Rousso, 1988), and eclectic frameworks (Livneh & Sherwood, 1991; Brodwin, Orange & Brodwin, 1994).

To fully use the above-mentioned methods to address social oppression regarding diversity, the starting point of this discussion will begin with describing the minority culture established in our society based on human categorization of difference. In defining culture, the definition developed by Sue et al. (1982) will be used. Initially, culture was viewed as the customs, values, traits, and beliefs that shaped one's world view with respect to gender, race, and ethnicity. The definition was subsequently revised to include sexual orientation, physical disability, and socioeconomic status (Sue et al., 1992). It was stated by Fuertes, Bartolomeo and Nichols (2001) that culture can be viewed as a comprehensive and psychological representation of one's identity.

Also, it is important to document that researchers in multicultural counseling competence have focused a significant amount of attention on aspects of difference that relate to race, ethnicity, gender, and sexual orientation. For instance, when discussing the characteristic of race, a great body of research has been conducted to demonstrate the racial discrimination and disparity experienced by persons who had membership in the minority racial group. Examples of these research investigations include Behrens, Leach, Franz and LaFleur (1999); Cross and Vandiver (2001); Helms (1990a, 1990b, 1990c, 1995); Helms and Carter (1990); Helms and Cook (1999); Helms and Parham (1996); Sellers, Rowley, Chavous, and Shelton and Smith (1997). Studies regarding ethnicity include Phinney (1992); Gao, Schmidt and Gudykunst (1994); Kwan and Sodowsky (1997); Lysne and Levy (1997); and Oyserman and Sakamoto (1997). Research investigations associated with gender are those of of Thorndike (1914); Woolley (1914); Hollingworth (1918); Maccoby and Jacklin (1974); Hyde (1985); Downing and Roush (1985); Epstein (1988); Vasquez and Eldridge (1994); Hyde &

Plant (1995); Kimball (1995); Fischer et al., (2000); Moradi and Subich (2002a, 2002b); and Daniels (2006). Studies in sexual orientation were conducted by Troiden (1988); Cooley (1998); Paxton, Guentzel and Trombacco (2006); Miller, Forte, Wilson and Greene (2006); and D'Augelli (2006). Multicultural counseling research has also included other categories of study, such as social class (Chronister, 2006; Kluegel, 1990), age (Clark & Griffin, 2008; Roscigno, Mong, Byron & Tester, 2007; Kimmel, 1988), and religion (Plante, 2008; Levine, 2006; Schlosser, 2003). However, the majority of the multicultural research on race, ethnicity, gender, and sexual orientation has been focused through the lens of the interplay between the dominant and the nondominant group.

Researchers have proposed that, in the United States, people are mostly characterized by a visible feature which allows them to obtain membership either into the dominant or the nondominant group. The most common marker used for membership is one's race (Carter, 1995; Gushue & Sciarra, 1995; Sue & Sue, 1999; Gushue & Carter, 2000). The conviction that race can be the most important cultural variable when considering majority and minority status has been evident in the research of racial identity development theory developed by Cross (1971, 1995), Cross and Vandiver (2001), and Helms (1984, 1990a,1990b, 1990c, 1995). Additionally, Helms used models of racial identity to explain the person's psychological development attributed to socioracial environment. Helms further articulated several sequential ego-identity steps for people who are members of both White and Black racial groups. In Helms' multiracial models, each phase of identity is denoted by various attitudes, beliefs, and values that can eventually affect the cultural world view of the person with respect to race.

Psychologists' Multicultural Racial Competence

Stanhope, Solomon, Pernell-Arnold, Sands and Bourjolly (2005) stated that the diversity within the population of the United States is causing great transformation of the groups served by behavioral health specialists. It was predicted that, by 2025, the non-White racial and ethnic groups in the United States will represent 40% of the population living in the country (Bureau of the Census, 2001). In the current psychological treatment system, there is a disparity between racial and ethnic minorities and majorities in accessing and using psychological services (Stanhope et al., 2005). This is a strong indication that the behavioral health system is in crisis, with respect to effectively working with, and treating, the psychological needs of diverse minority groups of people living in the United States (Stanhope et al.). These disparities in treatment are the following:

1. There is limited access to qualified mental health services for persons with a minority status;
2. It is noted that a larger number of individuals from minority groups are seen in state or city inpatient programs who have limited funding to adequately treat the psychological needs of this referent group;
3. Members of the majority group are represented more in outpatient programs than in public inpatient programs;
4. There is a significant presence of psychological missed diagnosis of members from minority groups; and

5. Within minority groups, there is a difference in treatment utilized, as well as types of medication prescribed (Stanhope et al., 2005; Snowden, 2003; Department of Health and Human Services, 1999).

Practicing psychologists must have both traditional therapeutic competencies and multicultural competencies in order to work effectively with clients. Fuertes et al., (2001) stressed that counseling professionals should be familiar with basic techniques such as the Rogerian stance, the use of empathy and paraphrasing skills, and the effective utilization of counseling skills. In addition to these counseling techniques, psychologists should be culturally competent and retain a vigilant awareness of the impact that their client's cultural identity may have on the therapeutic process. Practicing psychologists should understand client's strengths and weaknesses, especially if they cause problems with the client's cultural value system. Practicing psychologists should be comfortable with discussing topics of difference and culture with clients, especially when their cultural makeup is different from their clients' (Fuertes et al., 2001). Failure to do so could result in therapists' providing therapeutic interventions that may not be effective with their client (Fuertes et al.; Sue et al., 1998; Sue & Sue, 1999).

Fuertes and Brobst (2002) reported that research studies in therapists' multicultural racial competence demonstrated that the therapist's level of competence can impact the client's satisfaction in therapy. It was noted that, if the client is racially different from the therapist and thinks that the therapist has cultural insensitivity and/or racial prejudice towards him or her, the client may have a negative experience with the overall therapeutic process. Therapists may inadvertently or unconsciously convey denigrating messages to clients with membership to minority groups. This may occur when the therapist minimizes the significance of racial–cultural concerns for a client who shares membership to a minority racial group (Sue, Bucceri, Lin, Nadal & Torino, 2007). In addition, the therapeutic alliance can be further compromised when a therapist with majority status starts to minimize cultural values, rituals, language, communication style, or normalizes dysfunctional conduct on the foundation of one's racial or cultural group (Sue et al, 2007).

Researchers in mental health issues have dedicated a significant amount of time and effort in investigating the impact of racial identity among clients, clinicians, and supervisors. In one of these studies, Whitfield, Venable and Broussard (2010) examined Vocational Rehabilitation counseling outcomes specifically associated with client-counselor ethnic/racial matches and mismatches. The researchers had the four following research questions for which they were trying to find answers:

1. "Are there significant differences in acceptance rates for applicants when there is a client-counselor match versus mismatch on the basis of race?
2. Are there specific reasons for case closure that are significantly associated with client-counselor matches on the basis of race?
3. Among cases closed with employment outcomes, are there significant differences between client-counselor matches and mismatches on the basis of race in the amount of time counselors take to determine eligibility, the amount of funds counselors expend on client services, the length of time applicants are in the VR program, and applicant weekly wages at case closure?

4. Is there a significant difference in rehabilitation rates for client-counselor matches and mismatches on the basis of race?" (Whitfield et al., 2010, p. 98).

For the purposes of this research investigation, outcome measures were defined as the total amount of time counselors take to decide eligibility, the amount of resources and funds counselors disburse on client services, the length of time clients are in the vocational rehabilitation program, and the client weekly earnings at the point of case closure. Data from the Texas Department of Assistive and Rehabilitative Services was used to ascertain data on 4,481 clients during the fiscal years of 2003 and 2004. The extraneous variables of education and disability were controlled by only using cases in which clients had finished high school or achieved an equivalency certificate at the time of the application. Additionally, cases of clients who had a primary disability of alcohol (n = 223) or drug abuse (n = 663) were used, because these disability types had the greatest number of clients available to execute the study (Whitfield et al., 2010).

When reviewing secondary disabilities for this sample group, Whitfield et al. found that there were 247 (30.7%) clients who had reported secondary disabilities. The largest disability categories reported were alcohol abuse or dependence (n = 67, 8.3%), depressive and other mood disorders (n = 64, 8%), drug abuse or dependence (other than alcohol) (n = 42, 5.2%), mental illness (not listed elsewhere) (n = 12, 1.5%), and schizophrenia and other psychotic disorders (n = 10, 1.2%). After screening for racial and ethnic differences among the client and counselor, the total number of cases used for the study was 804 applicants and 14 counselors (Whitfield et al., 2010).

In addition, the sample was comprised of clients whose cases were closed successfully (n = 216), unsuccessfully without an Individualized Plan for Employment (IPE) (n = 40), unsuccessfully with an IPE (n = 457), and determined ineligible (n = 91). Overall, this amounts to a rehabilitation rate of 32.1% (Whitfield et al., 2010).

The racial makeup of this sample included 364 (45.3%) White clients, 418 (52%) African American clients, 7 (0.9%) American Indian/Native Alaskan clients, 1 (0.1%) Asian clients, 2 (0.2%) Pacific Island clients, and 56 (7%) clients of Hispanic origin (Whitfield et al., 2010).

Gender demographics for this sample indicated that 600 (74.6%) were male and 204 (25.4%) were female. Clients were aged 17.36 years to 64.47 years, with a mean age of 37.49 years (SD = 9.50) (Whitfield et al., 2010).

Demographics for the counselors involved in this study indicated that there were 9 (64.3%) African American counselors, 1 (7.1%) Hispanic counselor, and 4 (28.6%) White counselors. As a result, 10 (71.4%) counselors had membership to a minority group and 4 (28.6%) counselors had membership in the majority group. Counselors who shared membership in a minority group served 615 (76.5%) clients, while White counselors served 189 (23.5%) clients (Whitfield et al., 2010).

Pearson chi-square tests were utilized to observe differences in acceptance rates for clients in client-counselor matches and mismatches. Additionally, this statistical procedure was used to look at rehabilitation rates for the predicted variables. Logistic regression was used to evaluate if there were particular reasons for case closure that were significantly related to client-counselor matches. Multivariate analysis of variance (MANOVA) was employed to explore differences in the amount of time counselors took to determine client eligibility, the amount of resources and funds spent on client services, the length of time clients were in the vocational rehabilitation program, and the client weekly earnings at the point of case closure (Whitfield et al., 2010).

Significant results were found only for Research Question Number 2 and Research Question Number 4. Findings from this study showed that there were considerably more client-counselor ethnic/racial matches compared to mismatches. When examining client-counselor matches and mismatches, client-counselor matches (n = 435, 54.1%) outnumbered client-counselor mismatches (n = 369, 45.9%). This difference was found to be statistically significant, $X^2(1, n = 804) = 5.42$, $p = .02$ (Whitfield et al., 2010).

Client-counselor ethnic/racial matches had a notably higher rehabilitation rate, compared to client-counselor mismatches. The rehabilitation rate for client-counselor matches was 35.4%, while the rehabilitation rate for client-counselor mismatches was 28.1% showing a significant difference between matches and mismatches. This demonstrated a statistical significance of $X^2(1, N= 673) = 4.1$, $p = .04$ with a small effect size (phi- coefficient, $O = -.078$). In addition, $O^2 = .006$ demonstrating that 0.6% of the variance in rehabilitation rate is explained by client-counselor matches (Whitfield et al., 2010).

When examining the reasons for case closure, significance was found among client-counselor matches $X^2(1, N = 800) = 25.58$, $p = .001$. The Negelkerke R^2 was .042 with a medium effect size. This means that 4.2% of the variance for the variable, reasons for case closure, is explained by client-counselor ethnic/racial matches. Causes for closure (achieved an employment outcome, individual in institution, and closure for all other reasons) were significantly connected to client-counselor ethnic/racial matches. The closure category, achieved employment outcome, was significant (F = 1.51; p = .003). This suggests that clients who matched the race of their counselor were 1.51 times more likely to obtain an employment outcome, compared to clients who did not match the race of their counselor. The closure category, individual in institution, was significant (F = 2.6; p = .01). The closure category, all other reasons, was significant (F = 2.21; p= .01) (Whitfield et al., 2010)}.

Overall, this research investigation also supports the notion that race can impact the therapeutic outcome when working with clients that are racially different from the counselor or therapist. When racial differences are present in both parties involved, the differences should be broached in a healthy way that can insure a good working alliance between both client and counselor. Therapists and/or counselors must acknowledge their racial differences and obtain and develop the awareness, attitudes, and skills needed to become more competent when working with clients from racially and culturally different backgrounds.

In another extensive study examining racial impact, Chang and Berk (2009) conducted a qualitative research investigation of clients' experiences of cross-racial therapy, specifically examining the psychological and social significance of race during the therapeutic process. Researchers wanted to know whether, how, and under what conditions, does race impact the therapeutic process. The researchers' aim was to precisely name the therapeutic and extra-therapeutic facets that distinguished client descriptions of satisfying and unsatisfying experiences of crossracial therapy. This research exploration utilized a qualitative technique comprising phenomenology and consensual qualitative research (CQR).

Chang and Berk (2009) indicated that participants for this study were obtained via electronic postings and advertisements in local newspapers distributed throughout the New York City area. The research sample was achieved via a stratified, matched pairs design. It was comprised of 16 participants (8 women and 8 men). Demographical information for this sample showed that ages for the participants ranged from 19 years to 50 years, with a mean of 33.5 (SD = 8.8). Level of education for the sample consisted of 5 participants who had an advanced degree, 2 participants who had an undergraduate degree, 6 participants who completed some college courses, and 3 participants who had obtain only a high school diploma. Five participants (32%) were not born in the United States. Obtaining information regarding one's sexual orientation was not methodically evaluated prior to the initiation of the research project. However, during the interviewing process, 6 participants (38%) self-identified as lesbian, gay, transgender, bisexual, or queer. All participants were seen by non-Hispanic, White therapists. In addition, 12 of the 16 therapists seen by the participants were female (Chang & Berk, 2009).

When examining the length of treatment for the participants, length ranged from six weeks to six years. This included seven participants who remained in treatment for one year or more, seven participants who remained in treatment for six months to one year, and two participants who were in treatment for less than six months (Chang & Berk, 2009).

Themes associated with treatment problems were recorded. They included 9 participants who reported loneliness, 9 participants who reported issues with depression and/or mood swings, 9 participants who reported concerns with career/work-related stress, 8 participants who reported issues with family conflicts, and 5 participants who stated their concerns with feeling anxious for various reasons. When examining issues with respect to race and culture, 7 participants (44%) talked about their presenting problems in terms of racial or cultural concerns (Chang & Berk, 2009).

Some racial themes included feelings about resentment toward their families, because participants believed that their childhood traumatic experiences were made more difficult by cultural norms and values about gender and familial roles. Additionally, some participants had increased anxiety levels at school and/or work because they viewed discrimination from superiors and peers as attacks against their cultural value system. Finally, some participants reported experiencing acculturative stress based on their immigration status (Chang & Berk, 2009).

Chang and Berk (2009) described the procedural steps for this research investigation to include extensive training for master's- and doctoral degree level counseling and clinical psychology students selected to execute the interviews for the project. These interviewers were matched with the study's participants based upon their gender, race, ethnicity, and language specificity. There were 11 interviewers involved in the project, and all interviews were conducted in English. These semistructured face-to-face interviews took approximately one to three hours to complete. Informed consent was obtained from all participants prior to the interview. Each participant was requested to provide the interviewers with essential demographic information and to complete a checklist of the concerns that precipitated the participant's seeking psychological treatment. All interviews initiated with the grand tour question, "Can you tell me your experience of therapy, starting from the very beginning and taking me through that experience until the very end?" (Chang & Berk, 2009, p. 522)

To control for individual differences among participants recording their therapeutic story, a semistructured interview was utilized. This semistructured interview investigated essential treatment stages. The three stages addressed were the initial session, the early phase of treatment, and the termination phase of treatment. Additionally, the semistructured interview allowed for the researchers to gather information regarding the perceptions of the therapist traits, the working alliance, and the particular treatment interventions and activities deemed beneficial or unhelpful to the patient (Chang & Berk, 2009).

Chang and Berk (2009) reported results that indicated that participants who were generally satisfied with their psychotherapy treatment experience reported the following:

1. Participants reported that their goals for treatment were met (general recording);
2. Participants reported that they were emotionally connected to their therapist (typical recording);
3. Participants reported that they believed that they had a satisfactory termination with their therapist (typical recording); and

4. Participants reported that they were very interested in sustaining ongoing contact with their therapist, or even recommencing treatment in the future (typical recording).

On the other hand, Chang and Berk (2009) reported that participants who stated that they were unsatisfied with their psychological treatment experiences recorded the following:

1. Participants reported that they did not emotionally connect with their therapist (general recording);
2. Participants reported that the overall treatment was not beneficial (typical recording);
3. Participants reported that the therapist was not capable of satisfying or carrying out their treatment needs (typical recording);
4. Participants reported that the therapist did not appear betrothed, or invested, in the working alliance (typical recording); and
5. Participants reported that the working alliance deteriorated over time (typical recording).

When reviewing therapy techniques, specifically active versus passive style, 5 unsatisfied participants reported their therapists as passive or as not proactive enough compared to 2 satisfied participants. Two-thirds of the satisfied participants reported that their therapist used an active or directive style. This active style included putting forward real, solid guidance, suggestions, and skill development; posing provocative questions and challenging the patient's thinking; and giving the patient psychoeducational treatment (Chang & Berk, 2009).

When examining cultural competence in therapy, 8 unsatisfied participants (50%) complained that their therapists used cultural interventions, and that their therapists had inadequate knowledge of various cultural groups. These therapists did not consider the individuality of their client with respect to their culture. Culture-specific concerns discussed by research participants included racism and discrimination, oppression related to numerous minority statuses, cultural stigmas associated with psychological dilemmas and help-seeking, racial/cultural and multiracial and/or multicultural identity development, being a sexual minority, differences with communication patterns, and familial cultural relationships. In particular, 6 unsatisfied participants (75%) expressed unique occurrences when their therapist exhibited limited awareness of the power of white racial privilege in therapy and how race can impact the quality of life for a person who is a racial minority (Chang & Berk, 2009).

When looking at self-disclosure in therapy, about 50% of self-disclosure instances dealt with racial/ethnic/cultural (REC) matters, such as the therapist REC identity and situations concerning discrimination or oppression. The other self-disclosure instances by the therapist addressed personal demographical information such as marital status. Seven out of 8 satisfied participants stated that the self-disclosure on the part of the therapist was helpful in establishing a working alliance with the therapist. The 2 unsatisfied participants who mentioned the therapist self-disclosure stated that they believed that the self-disclosure was harmful to their working alliance with their therapist (Chang & Berk, 2009).

Of the eight unsatisfied participants, five stated that their therapist demonstrated unprofessional or unethical conduct. Examples of unprofessional conduct included arriving to sessions late, canceling sessions, answering the phone during sessions, completing paperwork during sessions, and breaching the rules of confidentiality. This behavior caused the client to think that his or her therapist was poorly trained and did not care about his or her psychological problems (Chang & Berk, 2009).

Racial impact was observed in this study, finding that 13 out of 16 participants indicated that race was a factor in their overall treatment experience. Specifically, of the 13 participants who reported on this topic, 5 participants were in the satisfied group and 8 participants were in the unsatisfied group. This confirms that racial differences were relevant for the majority of the research sample, in spite of treatment satisfaction. Additionally, 11 out of 16 participants confirmed that REC disparities posed a barrier to the establishment of a strong working alliance (Chang & Berk, 2009).

The above research study teaches us that incorporating a more directive therapeutic approach may be a significant practice for enhancing treatment results with racial/ethnic minority patients. Suggestions for therapists who possess membership in majority and minority racial groups include posing probing questions about the patient's verbalized feelings and actions regarding their culture. Successful therapy would also include skills training and psychoeducation following a relaxed and honest discussion during the beginning phase of treatment about the client's expectations of therapy. Providing ongoing process evaluations and discussions could assist the therapist in determining the most appropriate treatment options for the client (Chang & Berk, 2009).

In addition, therapists should feel comfortable with resistance from clients, and should feel free to discuss the resistance with the client. Also, the therapist should acknowledge the power differential in therapy, especially present among clients from racial minority groups. Therapists who work with clients who are racial minorities may consider making useful and therapeutic self-disclosures. Such disclosures could assist in reducing the effect of cultural and power distances between a therapist with racial majority status and a client with racial minority status (Chang & Berk, 2009).

The demonstration of professional conduct is critical to successful therapeutic intervention. Professional conduct such as displaying warmth and caring, beginning sessions on time, returning client's phone calls without delay, and being conscientious during sessions are good practices when working with all clients, including those clients who represent racial minorities. Showing signs of cultural incompetence can further add to the distrust that racially diverse clients may have towards therapists with majority status. Signs of incompetence might include, but are not limited to, using textbook interventions that do not consider the client's individual experiences, focusing one's treatment merely on certain aspects of the client's multifaceted cultural selves, and not considering the social implications of being a racial minority in this society (Chang & Berk, 2009).

The client should be viewed as a whole person with many interconnecting cultural identities. These identities are race, ethnicity, disability status, gender, family role, immigration status, religion, age, socioeconomic status, and sexual orientation. Therapists should understand their clients' internal and external difficulties in the context of their cultural identities (Chang & Berk, 2009). This is why it is essential to study the aspect of disability as a unique cultural characteristic that requires more scholarly attention in the psychological arena.

In another study looking at this subject area, Maxie, Arnold and Stephenson (2006) performed a research investigation to ascertain ethnic and racial differences when conducting psychotherapy. They had five goals in their study, which included the following:

1. Researchers wanted to investigate the degree to which psychotherapists and patients talk about ethnic and racial differences in psychotherapy and, more importantly, who begins this type of conversation.
2. Researchers wanted to provide a full description of reasons for these types of discussions.
3. Researchers wanted to look at psychotherapists' perceptions about their comfort level and skill level when talking about diversity issues with patients and the advantage of having these types of conversations.
4. Researchers wanted to assess the impact of psychotherapists' theoretical orientation, experience working with diverse patients, age, and gender on the conversation.
5. Researchers wanted to explain the traits of psychotherapists who stated that they were influenced by their multicultural training (Maxie et al., 2006).

The research participants for this study were 689 practicing licensed psychologists who are members of the APA and living in the United States. Demographics for this group included age, averaging 51.8 years (*SD* = 9.1) and 23.6 years of practical experience (*SD* = 8.3). There were 52.4% female participants and

47.6% male participants. Ethnic and racial statistics consisted of 93.3% White, 1.6% Asian, 1.3% Latino/a, 1.2% African American, and 2.6% denoted as other. Theoretical orientation statistics comprised participants describing themselves as cognitive–behavioral (32.2%), eclectic (22.6%), psychodynamic (22.1%), integrative (9.3%), psychoanalytic (3.9%), humanistic (2.9%), or behavioral (1.2%) (Maxie et al, 2006).

The researchers employed an anonymous survey design. This was done in order to optimize a representative sample. It was also done to further promote truthful reporting and insure that the findings were generalizable. The researchers developed a survey instrument for this project. It had three sections. They included: (a) 14 questions addressing the psychotherapist experience in working with patients from diverse backgrounds; (b) questions requesting information about the psychotherapist's ethnic and racial membership, sexual orientation status, gender, age, work experience, region of residence, work setting, and theoretical orientation; and (c) an optional open-ended question used to request descriptions and examples of techniques utilized when discussing diversity issues with patients (Maxie at al., 2006).

In addition, Maxie et al., (2006) executed a narrative analysis. This was done by using the findings procured from the optional open-ended question. The analysis was comprised of responses from 278 psychologists (36% of the sample). Significant findings for this study included the following: Therapist diversity experience was related to having more discussions of differences between therapist and patient, $r(549) = -.20, p < .001$. A higher percentage of years of work experience was slightly related to therapists' reporting more comfort with discussing diversity issues with patients, $r(636) = .10, p = .03$, and skill, $r(689) = .12, p = .003$, and with the perception that conversations were less facilitative, $r(656) = -.14$, $p < .001$. The factor of age was mildly associated with the probability of difference discussions, $r(571) = .09$, $p = .04$, and to therapists' reported comfort level, $r(686) = .13$, $p = .001$, and skillfulness $r(689) = .18$, $p < .001$ (Maxie et al., 2006).

With respect to gender, women were significantly more likely to discuss issues with diversity with patients than men were (48% vs. 37% of their cases; $t = -3.9$ $p < .01$), and to account that diversity discussions facilitated therapy sessions, $t = 2.3$, $p = .02$. A one-way ANOVA was used to ascertain the impact of theoretical groups. These groups differed in the percentage of cases in which diversity discussions occurred, $F(7, N = 672) = 4.6$, $p < .001$. Eclectic and cognitive–behavioral therapists were noted to have fewer discussions about difference than the total group (38.4% and 36.8% of their cases). The following therapists stated more recurrent discussions pertaining to diversity: psychodynamic (46.6%), psychoanalytic (74.1%), humanistic (46.8%), and integrative (45.8%). Perceived utility of diversity discussions were associated with the proportion of cases in which difference discussions transpired, $r = .30$, $p < .001$, and were therapist began these discussions, $r = .14$, $p = .001$ (Maxie et al., 2006).

Discussions of differences were related to diversity experience, gender, therapist age, and ethnic/racial minority status. Therefore, a multiple regression analysis was used to determine their independent impact on discussion frequency. This model was significant, $R = .26$, $F(4, 526) = 9.8$, $p < .001$. Gender ($b = 11.60$, $SE = 3.03$, $p < .001$) and diversity experience ($b = -.09$, $SE = .02$, $p = <.001$) were found to be better predictors than age ($b = .40$, $SE = .17$, $p = .02$). However, all three independently predicted discussions of differences (Maxie et al., 2006).

This study, once again, educates us on the importance of addressing one's difference in the therapeutic process. In this study, most therapists (85%) stated that they had some discussions pertaining to multicultural concerns with their clients. This is a positive finding because therapists were apprised of the power differential in therapy that may cause their clients to feel uncomfortable with broaching cultural differences. It is noted that minority therapists in the mental health field are underrepresented. As a result, this could cause a client from a minority background to have limited therapy choices, when attempting to find a therapist with a similar racial and/or ethnic background. Consequently, it becomes imperative that European American therapists become more competent and comfortable with talking about diversity issues and cultural differences with clients from minority backgrounds when therapeutically necessary.

More seasoned therapists may benefit from widening their expertise when working with diverse clients. Therapist may have their own personal cultural experiences to rely upon. However, further information about different cultural worldviews will assist even experienced therapists in understanding clients' fears and concerns pertaining to social dilemmas, and in recognizing the level of multicultural competence he or she has when working with diverse clients (Maxie et al., 2006).

Another study helps us to understand the powerful effect of multicultural competency. Cumming-McCann and Accordino (2005) stated that the purpose of their research investigation in multiculturalism was to determine whether or not racial attitude would explain multicultural competency differences that are not solely based on demographic and educational variables. The study's hypothesis was that White racial attitude status (assessed by the Oklahoma Racial Attitude Scale–Preliminary; ORES-P; Form subscales) would be more strongly related to multicultural competence, multicultural awareness, multicultural knowledge, multicultural relationships, and multicultural skills (assessed by the total Multicultural Counseling Inventory; MCI) than education, caseload, multicultural workshops, multicultural experiences, and percentage of minorities on one's caseload (Cumming-McCann & Accordino, 2005).

The study had a sample size of 115 White practicing vocational rehabilitation counselors (n=64; 56% of the participants were male, and n=51; 44% were female). Of the sample size, 37% were between the ages of 51 and 60, 36% between 41 and 50 years, and 17% between 31 and 40 years. The average number of years the participants had worked as vocational rehabilitation counselors were 14.75 (ranging from 8 months to 32 years). A majority (76%) of the respondents were married. Approximately 53% of the participants indicated they worked in urban areas of the state. On average, participants in the study had attended 4.5 multicultural workshops, 1.71 college classes on multiculturalism, and 64% of the participants reported having at least three multicultural experiences other than course work or workshops related to multiculturalism (Cumming-McCann & Accordino, 2005). Internal consistency (i.e., Cronbach's alphas) statistics were executed for both instruments. The MCI (total scale .88; subscales awareness .75, knowledge .73, relationship .73, and skills .68) and ORAS-P's (total scale .80; subscales conflictive .80, Dominative .59, Integrative .56, Avoidant .65, Dependent .77, Dissonant .73, and reactive .75). Alphas for the Dominative, Integrative, and Avoidant subscales were very weak and as a result, were not included in the final analyses. This was done because the researchers did not want to skew the statistical findings for these measures (Cumming-McCann & Accordino, 2005).

Results indicated that the dissonant subscale was a significant predictor of multicultural competence and, for every one-unit increase in the scale, subjects had an average decrease of 1.26 in their multicultural competence. The dissonant subscale was a significant predictor of multicultural awareness in that for every one-unit increase in the scale, subjects demonstrated an average decrease of .42 in their multicultural awareness. Additionally, the reactive subscale was a significant predictor; for every one-unit increase in the subscale, subjects had an average increase of .34 in their multicultural awareness. The dissonant subscale was a significant predictor of multicultural knowledge; for every one-unit increase in the scale subjects had an average decrease of .44 in their multicultural knowledge. The dependent subscale significantly predicted relationships in that with every one-unit increase, subjects illustrated an average decrease of .46 in their multicultural relationships. Lastly, the dissonant subscale was a significant predictor of multicultural knowledge for the reason that with every one-unit increase, subjects showed an average decrease of .24 in their multicultural relationships (Cumming-McCann & Accordino, 2005).

Additional findings ascertained from this study suggest that the therapist's racial multicultural competence encompass aspects of awareness, knowledge, and relationships. These elements can assist in the development of the therapist's skill level when addressing the aspect of racial identity with clients in therapy. These results are important and significant, because they suggest that racial perceptions can impact one's multicultural competence when working with clients that present backgrounds that differ from the therapist.

Additional research on cultural markers and their impact on supervision are useful in exploring the potential impact of disability on such professional relationships. Gatmon et al. (2001) tried to evaluate dialogues pertaining to cultural markers in supervision and their power on supervisory satisfaction and working alliance. The project's aim was to find solutions to the following questions:

> 1. Are similarities and differences in terms of ethnicity, gender, and sexual orientation discussed in supervision? If so, who initiates these discussions, the supervisor or the supervisee?
> 2. Do trainees who discuss supervisor-supervisee similarities and differences report higher satisfaction rates with supervision and enhanced working alliance with their supervisors than trainees who do not discuss similarities and differences?
> 3. Does the quality of the supervisory discussions (e.g., level of safety and depth of discussions) relate to the supervisory working alliance and intern satisfaction with supervision?
> 4. Does supervisory match on the cultural variables studied (ethnicity, gender, and sexual orientation) relate to the supervisory working alliance and intern satisfaction with supervision? (Gatmon et al., 2001, p. 104)

Eight hundred and two protocols were mailed to 206 randomly chosen training directors at the American Psychological Association accredited internship sites listed in the Association of Psychology Postdoctoral and Internship Centers catalog for the academic year 1996-1997. The directors were requested to hand out the protocols to their interns if they so desired. The sample for this study had 289 (N=203 females and N=86 males; N=212 European American; N=19 African American; N=1 Arab American; N=17 Asian American; N=15 Chicano/Latino; N=15 Jewish/Caucasian; N=9 Multiracial; N=15 Bisexual; N=254 Heterosexual; N=18 Homosexual) pre-doctoral psychology interns, resulting in a 36% participation rate (Gatmon et al., 2001).

One instrument used for this study was the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), which is a 36-item self-report instrument that employs a 7-point Likert scale with responses that range from (1) never to (7) always. It has three subscales, which are bond (how much the supervisee is feeling comfortable with the supervisor), tasks (what activities are being done during supervision), and goals (what are the central aims of the supervisory process) in supervision. Cronbach's coefficient alpha of .93 for the full scale was noted, and the individual subscales were not reported here. The second instrument used was The Supervision Questionnaire-Revised (SAR) (Worthington & Rohlke, 1979), which contains three questions that appraise the supervisees' views of supervisory efficacy and satisfaction. Subjects also completed questions that asked if they discussed aspects of ethnicity, gender, and sexual orientation during supervision. Finally, participants in the study were asked to supply information about their gender, ethnicity, and sexual orientation, along with the participants' perceived differences/similarities with their supervisors on these variables (Gatmon et al., 2001).

Results of this study were that that Chi-square analysis showed that supervisees and supervisors were more apt to discuss ethnicity, $x^2(2, N = 285) = 28.27, p < .000$, gender, $x^2(2, N= 285) = 7.55, p < .006$, and sexual orientation, $x^2(2, N= 280) = 9.76$, $p< .008$, concerns when there were a presence of these cultural supervisory differences. Supervisees and supervisors were more likely to discuss aspects of ethnicity, gender and/or sexual orientation during supervision when both parties involved shared a common characteristic compared to those who had clear differences (Gatmon et al., 2001).

A multivariate analysis of variance (MANOVA) was done to quantify differences in enhanced working alliance between supervisees and supervisors who talked about similarities and differences and those who did not discuss them. Results of this procedure demonstrated that supervisees who talked about similarities and differences associated with their ethnicity accounted for higher supervisory working alliance with their supervisors, $F(1, 137) = 2.68$, $p< .047$. Results of the univariate tests displayed higher levels of supervisory working alliance on the bond subscale, $F= (1, 137) = 6.24$, $p< .013$. Results of gender and sexual orientation depicted no significant difference between the two groups. Supervisees who talked about gender similarities and differences stated higher levels of overall satisfaction with supervision, $F= (1, 284) = 4.43, p < .036$. Additionally, supervisees who talked about similarities and differences in sexual orientation reported higher levels of overall satisfaction with supervision, $F= (1, 279) = 5.50, p < .020$, and considered their supervisors more competent with giving good supervision, $F= (1, 279) = 5.01, p < .026$ (Gatmon et al., 2001).

The results of this study support the notion that supervisors who are willing to discuss diversity issues in supervision can create a better working alliance with the supervisee. If supervisors are uncomfortable with discussing diversity issues during supervision, it is possible to infer that some supervisors may also have difficulty discussing cultural variables with a client who comes for treatment. The cultural differences could be part of the presenting issue in therapy or not. The point here is for the therapist, as well as the supervisor, to consider the relevance of the cultural trait, and to be comfortable in bringing up these concerns in therapy with the client or in supervision with the supervisee. Supervisors who take the initiative to raise these cultural differences in a safe and non-judgmental manner can further enhance the working alliance established between the supervisor, the supervisee, and the client (Gatmon et al., 2001).

In a similar study, Daniels, D'Andrea and Kim (1999) stated that the purpose of their research exploration was to examine conflicts and communication problems that can develop in cross-cultural supervisory relationships when cultural issues are not addressed between the supervisee and supervisor. This was a single case study analysis that explored the cultural differences of a student who was Asian American and a supervisor who was European American. Both individuals in the supervisory relationship were men. One of the researchers of this study served as the school internship instructor, liaison between the internship site and the school program, and author of this project.

The trainee was placed at a public high school that was comprised of a diverse student body. The cultural makeup of the students at the high school included cultural backgrounds from African American, European American, Hawaiian, Japanese, and numerous other Asian and Pacific Island descents. The trainee was a first-semester counseling intern student. At his site, he was responsible for giving numerous counseling services to students at the school. All services were delivered with supervisory aid from an experienced school counselor (Daniels et al., 1999).

This review documented how cultural differences among clinicians can really cause an inadequate working relationship. Problematic issues witnessed in this review included different cultural values between supervisor and supervisee, different views on the goals of counseling, and different expectations of the role of supervision (Daniels et al., 1999).

The trainee's interpersonal style included being more reserved, indirect, uncomfortable with speaking first, and displaying deference to those with more experience than the trainee. The trainee spoke in soft tones, and tried to make positive statements despite a difficult situation (i.e., trainee did not criticize his supervisor when asked to discuss the problems in supervision). On the other hand, the supervisor's interpersonal style consisted of being more confrontational, direct, pushy, and loud. The supervisor demanded that the trainee be independent, and felt that he was not there to foster hand-holding (Daniels et al., 1999).

The trainee's cultural makeup influenced his counseling goals. The trainee believed that he had to center on developing trust and creating positive rapport with clients prior to helping clients investigate their problems and to discover solutions, whereas the supervisor was pressed for time and let his large caseload dictate the quality and quantity of his counseling relationships with students. The supervisor believed one needed to identify the student's problem quickly and help the student find an answer to the problem so that the student can get back to his or her school work (Daniels et al., 1999).

The trainee viewed supervision as a teaching process, since he was new to the field. His cultural world view made him show reverence to people in a position of authority. He struggled to view his supervisor as anything less than an instructor or teacher. The supervisor wanted the trainee to be more assertive during the supervision meetings. Before coming to the supervision, the supervisor wanted to the trainee to have a precise plan about what to do with the students on his caseload. The supervisor also wanted the trainee to view him as a colleague, and not a teacher. The trainee was shy and not aggressive or assertive. The trainee had collectivistic views, while the supervisor had individualistic views. The trainee wanted to learn from the supervisor, while the supervisor wanted the trainee to learn on his own. These cultural traits must be considered when working with culturally different clients and staff (Daniels et al., 1999).

This research exploration further shows how important it is to address cultural differences in therapy. Having different styles does not make the process wrong, as long as the client is benefiting from the process. It becomes problematic when the differences are not recognized and not treated as part of the process (Daniels et al., 1999).

An outstanding study related to training in multiculturalism helps bring attention to the need for education of practitioners to achieve optimal results with clients of minority groups was done by Sodowsky, Kuojackson, Richardson and Corey (1998). This study explored the specific relative involvement of select multicultural training activities, compared to self-reported multicultural counseling competencies (MCC). The study's first research hypothesis was that self-reported MCCs would overall and individually significantly predict the relationships of multicultural social desirability and race. The self-reported MCC of each participant was taken into account. Respondents' locus of control racial ideology and feelings of social inadequacy were also considered. The second hypothesis was that the participants' multicultural training activities would overall and individually significantly predict self-reported MCCs.

The participants for the study (N = 224) were clinical staff from American Psychological Association approved university counseling centers nationwide. Approximately, 114 subjects were from midwestern and mountain states, and 110 subjects originated from the eastern, western, and southern states. Eighty seven (39%) subjects were doctoral level psychologists, 51 (23%) were pre-doctoral interns, 31 (14%) were master's level counselors, 30 (13%) were doctoral practicum students, 21 (9%) were master's practicum students, and 4 (2%) were bachelor's level counselors. Other demographics of the study included 63% of the subjects were women, 37% were men. Ages of all subjects ranged from 22 to 66 years. Diversity of the sample was comprised of 71% White, 11% Asian, 7% Black, 6% Hispanic, 2% interracial, and there was 1 Native American subject. The researchers also collected information regarding marital status, type of relationship, either being in a same-sex or heterosexual relationship, specific training in psychology, psychology license, type of diversity seen in clients, type of multicultural coursework or training taken prior to this study, types of multicultural experiences, type of multicultural research projects, and current salary (Sodowsky et al., 1998).

The measures used in the investigation were:

1. Multicultural Counseling Inventory (MCI) developed by Sodowsky, Taffe, Gutkin and Wise (1994). This instrument was created "in order to operationalize some of the proposed constructs of multicultural counseling competencies" (Sodowsky et al., 1994, p. 139).
2. Multicultural Social Desirability Scale (MSDS) developed by Sodowsky, O'Dell, Hagemoser, Kwan, and Tonemah (1993) to assess an individual's inclination to make a good impression on others by self-reporting that he or she is in favor of all personal and social interactions with minorities. This includes that the person always supports institutional policies for diversity.
3. Locus of Control Race Ideology factor (LCRIF) developed by Gurin, Gurin, Lao and Beattie, (1969) to assess convictions held about the operation of personal and external forces regarding race relations in the United States.
4. Revised Janis–Field Feelings of Social Inadequacy Scale (RJFFSIS) was created by Eagly (1967) to assess social self-esteem. This measure is used to analyze a person's propensity for receiving favorable or unfavorable information and social influence and a person's lateral thinking and attitude change as an effect of situational variables (Eagly).

The procedure for executing this study was that a letter was sent to the directors of 68 American Psychological Association approved university counseling centers in the United States. The letter asked for the directors to release the names of their clinical staff. In total, 38 directors released 450 names and from the names provided, 325 individuals were randomly selected to participate in the study. This led to 224 anonymous participants, but only 176 participants completed the two parts of the study and 54% completed protocols. The researchers elected to send out the protocols in two phases because it was a very long protocol and fatigue was a concern. Nevertheless, this design did lead to attrition (Sodowsky et al., 1998).

First, results of the study indicated that there were three groups: participants with no multicultural training, either through course work, research, or workshop (MCT_0 , $n = 19$); participants with some multicultural training, stating at least one of the three types of training (MCT_1 , $n = 127$); and participants who engaged in all three alternatives of multicultural training (MCT_2 , $n = 30$) {(Sodowsky et al., 1998)}.

Second, statistical analysis on the participants' responses in this study indicated that for the MCI, Cronbach's alphas were .87 for the full scale, .76 for Multicultural Skills, .75 for Multicultural Awareness, .62 for Multicultural Relationship, and .73 for Multicultural Knowledge. The interfactor correlations ranged between .33 and .59, with the lowest for Multicultural Relationship, which had a mean correlation of .35. Next, the locus of control Race Ideology factor demonstrated a Cronbach's alpha of .74, the Revised Janis–Field Feelings of Social Inadequacy Scale illustrated an alpha of .89, and the Multicultural Social Desirability scale indicated an alpha of .88 (Sodowsky et al., 1998).

Third, results further demonstrated that self-reported Multicultural Skills, Multicultural Awareness, and Multicultural Knowledge increased with training. Moreover, as training increased, the Multicultural Social Desirability and Feelings of

Social Inadequacy Scales showed decreased scores, and locus of control Race Ideology scores drifted toward externality. Blacks had the highest mean Multicultural Relationship score, and Whites the lowest. Blacks, Hispanics, and Asians had higher scores than Whites in Multicultural Awareness, and Hispanics, and Asians had higher scores than Whites in Multicultural Knowledge. All the minority groups had lower scores than Whites on Feelings of Social Inadequacy and locus of control Race Ideology (Sodowsky et al., 1998).

Fourth, the four-step multiple regression analysis indicated that the Multicultural Social Desirability scores to the MCI were significant with a medium effect size, $F(1, 163) = 10.71, p < .001$; with $R^2 = .06$ (adjusted $R^2 = .06$). Race accounted for some significant variance with a large effect size in the second block, R^2 change = .07, $F(4, 160)$ change = 5.25, $p = .048$; with $R^2 = .13$ (adjusted $R^2 = .11$). Feelings of [Social] Inadequacy and locus of control Race Ideology combined accounted for added significant variance with a large effect, R^2 change = .11, $F(6, 158)$ change = 10.45, $p = .0001$; with $R^2 = .24$ (adjusted $R^2 = .21$). MC training variables (ethnic minority and international client load, number of research projects, number of courses, and number of workshops) combined explained supplementary significant variance with a large effect size R^2 change = .10, $F(9, 155)$ change = 8.96, $p = .0001$; with $R^2 = .34$ (adjusted $R^2 = .30$). Only minority client load, number of research projects, and number of courses made a significant contribution to the MCI, but not number of multicultural workshops (Sodowsky et al., 1998).

Fifth, the significance of multicultural training, especially when examining self-reported MCCs, is serious information for the overall development of all psychologists.

This is quite evident when training professionals are trying to implement coursework and opportunities for students to explore their attitudes and perceptions on cultural diversity. Therapists in and out of the classroom need to reflect and address their personal concerns regarding their socialization, power status, and world view if their racial membership does not match the client in question (Sodowsky et al., 1998).

Further research in this area has supported the need for practitioners to pay close attention to diversity in the relationship. The diversity of the individual, no matter what the minority group identity or identities, has impact on the relationships he or she forms with others. Ladany, Inman, Constantine and Hofheinz (1997b) stated that the purpose of their research project was to evaluate the hypothesis that supervisees' multicultural case conceptualization ability and self-reported multicultural competence are functions of their racial identity and their supervisors' instruction to focus on multicultural issues.

The demographical data for this sample demonstrated that 116 counselor trainees took part in the study. There were 45% doctoral and 55% master's level students (N=84 women; N=30 men; 2 did not indicate their gender). The age of the participants were from 21 to 58 years (*M* = 30.67 years, *SD* = 7.9). The racial diversity of the students were as follows: 75 (65%) White, 20 (17%) African American, 11 (10%) Asian American, 8 (7%) Latino, 1 (1%) Native American, and one (1%) bi-racial. Program concentrations included counseling psychology (77%), social work (11%), clinical psychology (4%), and school psychology (3%). Work experience with supervision consisted of a median of 18 months and a median caseload of 50 clients.

Participants further stated that 72% took at least one course on ethnic and racial diversity matters (Ladany et al., 1997b).

Several instruments were used for the study. One was the Cultural Identity Attitude Scale (CIAS) developed by Helms and Carter (1990b). They reported internal consistency coefficients for the subscales to range from .72 (Dissonance) to .82 (Awareness). Within the current study, Cronbach's alpha coefficients were .66 (Conformity), .67 (Dissonance), .81 (Resistance), and .70 (Awareness).

White Racial Identity Attitude Scale (WRIAS) was developed by Helms and Carter (1990a). They indicated that internal consistency for the subscales ranged from .55 (Contact) to .77 (Disintegration). The present sample Cronbach's alpha coefficients were .66 (Contact), .66 (Disintegration), .62 (Reintegration), .59 (Pseudo-independence), .70 (Immersion–Emersion), and .32 (Autonomy). Cross-Cultural Counseling Inventory—Revised (CCCI-R) developed by LaFromboise, Coleman and Hernandez (1991). The researchers revised CCCI–R for this investigation. Subjects were requested to rate their own cultural competence when working with clients from a different racial or ethnic background. In doing this, the researchers followed all procedures indicated by the scale developers. Three components encompassed the CCCI–R: cross-cultural counseling skill, sociopolitical awareness, and cultural sensitivity. With the current sample, a sum score of all the items was used, resulting in a Cronbach's alpha coefficient of .88. Researchers also evaluated multicultural case conceptualization ability and created a demographic sheet (Ladany et al., 1997b).

A mailing was sent to training directors in various psychology graduate programs including counseling psychology, clinical psychology, and social work programs across the country. Of the 235 protocols mailed, 117 were returned and 116 were fully completed which resulted in a 50% return rate (Ladany et al., 1997b).

This study supports findings procured by Ottavi, Pope-Davis and Dings (1994), which stated that White racial identity statuses together were associated with self-reported multicultural competence. Ladany et al.'s study executed multivariate multiple regression analyses, which exemplify the fact that the racial identity of participants was significantly connected to self-reported multicultural competence. Also, it was noted that supervisors' instruction to focus on multicultural issues was significantly linked to conceptualizations of a multicultural treatment plan (Ladany et al., 1997b). Racial identity for both groups was not significantly associated with multicultural case conceptualization ability. In addition, self-reported multicultural competence did not illustrate a significant finding with multicultural case conceptualization ability (Ladany et al). However, the essential point this study makes is that race is a relevant factor when exploring multicultural competencies for therapists working with diverse clients. Racial differences are visual markers that are seen by both client and therapist. These differences can affect the perceptions and attitudes of persons who have either racial majority or minority status.

Ladany, Brittan-Powell and Pannu (1997a) reported that the aim of their research study was to explore the impact of supervisory racial interactions on the supervision process and supervisee outcomes. The researchers wanted to know how supervisees' opinions regarding their personal racial identity and their supervisors' racial identity jointly related to the supervisory working alliance and the supervisees' development of multicultural competence. In addition, the researchers wanted to explore the impact of racial matching between the supervisor and supervisee, with respect to the working alliance in supervision and how it influenced the ability of the supervisee to acquire multicultural competence (Ladany et al., 1997a).

Participants for the study were obtained nationally through professional contacts in counselor education and counseling psychology graduate training programs. Approximately 156 protocols were dispensed, 108 participants completed and returned the protocols, and 105 protocols were fully completed resulting in a 67.3% completed return rate. Data from 105 counselor trainees (N= 81 women, N=23 men) and 1 unspecified gender was obtained. Further demographics indicated that the sample mean age was 29.85 years, SD = 7.63. The racial breakdown of the subjects were 70.5% White, 10.5% African American, 4.8% Asian, 11.4% Latino, 1.0% Native American, 1.0% Pacific Islander, and 1.0% Latino/Indian (Ladany et al., 1997a).

Ladany et al. (1997a) noted that the psychology program breakdown was counselor education or counseling psychology (N=71.4%), clinical psychology (N=17.1%), and school counseling (N=9.5%). The location of clinical supervision training programs was distributed among college counseling centers (N=38.1%), schools (N=26.7%), and community mental health centers (N=21.9%). The type of degree level indicated was doctoral (N=42.9%) or master's (N=49.5%).

Supervision demographics was indicated by months of prior supervised counseling experience with a mean of 23.66 (Mdn = 12.00, SD = 23.85), length of time for individual supervision M = 88.78 minutes per week (SD = 45.42), with the group being primarily female (57.1%) versus male (42.9%) supervisors, and having a racial breakdown of the supervisors of 76.2% White, 20.0% African American, 1.9% Latino, 1.0% Asian, and 1.0% Middle Eastern (Ladany et al., 1997a).

Ladany et al., (1997a) used several instruments for this study. In the present study, the first two subscales (i.e., Conformity and Dissonance) of the Cultural Identity Attitude Scale (CIAS), as developed by Helms & Carter (1990a), were added jointly to generate Phase I Person of Color Racial Identity (POC Phase I) scores. The last two subscales (i.e., Resistance and Awareness) were added together to create Phase II Person of Color Racial Identity (POC Phase II) scores. In this sample, the Cronbach's alpha coefficients were .86 (POC Phase I) and .76 (POC Phase II).

Additionally, Ladany et al. (1997a) conducted statistical combinations on the subscales of the White Racial Identity Attitude Scale (WRIAS) developed by Helms & Carter (1990b). For the purposes of this study, the subscales, Contact, Disintegration, and Reintegration, were added together to create Phase I White Racial Identity scores. The last three subscales, Pseudoindependence, Immersion/Emersion, and Autonomy, were added together to create Phase II White Racial Identity scores. In this sample, the Cronbach's alpha coefficients were .73 (White Phase I), and .70 (White Phase II).

Perceptions of Supervisor Racial Identity (PSRI) was developed for this investigation and used to evaluate supervisee's perceptions of their supervisor's racial identity. A pilot validation study was employed to further establish validity criteria for the measure (Ladany et al., 1997a).

Racial identity interaction was assessed by grouping racial Identity development as encompassing two phases: Phase I, incorporating less advanced racial identity statuses, and Phase II, incorporating more advanced racial identity statuses. T tests were used to exemplify the statistical differences between each of the groups: High Racial Identity Development Person of Color Supervisors versus Low Racial Identity Development Person of Color Supervisors, $t(23) = 2.81$, $p < .05$; High Racial Identity Development White Supervisors versus Low Racial Identity Development White Supervisors, $t(78) = 5.86$, $p < .05$; High Racial Identity Development Person of Color Supervisees versus Low Racial Identity Development Person of Color Supervisees, $t(28) = 2.12$, $p < .05$; and High Racial Identity Development White Supervisees versus Low Racial Identity Development White Supervisees, $t(73) = 5.42$, $p < .05$ and this indicated validity for the measure (Ladany et al., 1997a).

Ladany et al. (1997a) used the Working Alliance Inventory-Trainee (WAI-T). Developed by Bahrick (1990), the WAI-T is a self-report measure that determines the trainees' view of the three aspects of the supervisory working alliance which consists of Goals, Tasks, and Bond. This sample's Cronbach's alpha coefficients for all three subscales were .93. However, for this analysis, the goal and task subscales were added together. This was done because of high intercorrelation between the two subscales ($r = .93$), the low interjudge discriminations (Bahrick, 1990) and their conceptual relatedness (i.e., both components involve agreements between the trainee and the supervisor).

The Cross Cultural Counseling Inventory-Revised (CCCI-R) developed by LaFromboise, Coleman, & Hernandez (1991), an inventory that contains 20 items that measure a counselor's ability to work with clients from other cultures, was also used. Modifications to the scale were made for this study to allow supervisees to rate the extent of their supervisors' influence on their multicultural competence. All changes to the survey items were within the advised limits suggested by the developers of the scale. This sample used a sum score of all the items and a Cronbach's alpha coefficient of .97. Finally, a demographic questionnaire developed by the researchers of this study was created to obtain information about the participant's age, race, training, supervision, etcetera (Ladany et al., 1997a).

The above study involved the following statistical procedures. First, bivariate correlations and ANOVAs were done. Results showed that only one of the demographic indicators measured was significantly associated with the predictor or criterion variables, supervisee age significantly pre-dieted the emotional bond of the working alliance, r (104)= .33, p < .001. Second, the major hypotheses were evaluated through the use of a 4 x 4 (Racial Identity Interaction; regressive, parallel-low, parallel-high, progressive x Racial Matching; POC/POC, White/POC, POC/White, White/White) factorial multivariate analysis of variance with three criterion variables (Goals/Tasks, Bond, and Supervisee Multicultural Competence). Results confirmed that racial identity interaction was significantly related to the overall combination of the supervisory alliance factors and multicultural competence. Third, follow-up univariate procedures were done to verify if significance was reached for the main effects proposed. These analyses showed that racial identity interaction was significantly related to the goal/task and emotional bond components of the supervisory alliance and multicultural competence. Fourth, comparisons were then calculated to evaluate each of the sub-hypotheses. These analyses indicated that progressive and parallel-high interactions had significantly higher agreements than parallel-low and regressive interactions, t(101) = 3.51, p < .05. Likewise, parallel-high interactions had significantly higher agreements than parallel-low, t(101) = 3.37, $p < .05$, and regressive interactions, t(101) = 2.20, $p < .05$. To further add, progressive interactions had higher agreements than parallel-low interactions, t(101) = 2.77, $p < .05$ (Ladany et al., 1997a).

Progressive and parallel-high interactions had significantly higher emotional bonds than parallel-low and regressive interactions, t(101) = 4.01, $p < .05$. Additionally, parallel-high interactions had significantly higher emotional bonds than progressive, t(101) = 2.02, $p < .05$, parallel-low, t(101) = 3.71, $p < .05$, and regressive relationships, t(101) = 3.99, $p < .05$. Progressive and parallel-high interactions had significantly more of an impact on supervisee multicultural competence than parallel-low and regressive interactions, t(101) = 4.24, $p < .05$. In addition, parallel-high interactions demonstrated a strong effect on supervisee multicultural competence than parallel-low, t(101) = 3.26, $p < .05$, and regressive interactions, t(101) = 3.28, $p < .05$. As well, progressive interactions indicated a strong effect on supervisee multicultural competence than parallel-low, t(101) = 2.72, $p < .05$, and regressive interactions, t(101) = 2.73, $p < .05$ (Ladany et al., 1997a).

Finally, racial matching showed a significant finding when examining supervisory working alliance factors and multicultural competence. Specifically, followup univariate analyses showed that racial matching was significantly associated only with the supervisee multicultural competence but not with any of the supervisory working alliance factors. Furthermore, additional analyses depicted that supervisors of color were more persuasive in the perceived development of supervisees' multicultural competence than White supervisors, despite the race of the supervisee, t(101) =3.05, $p < .05$. To further highlight, supervisees in White supervisee-POC supervisor racial dyads established more development with respect to their multicultural competence than supervisees in White supervisee-White supervisor, $t(101) = 2.33$, $p < .05$, and POC supervisee-White supervisor dyads, $t(101) = 2.16$, $p < .05$. In addition, supervisees in POC supervisee-POC supervisor racial dyads demonstrated more development in terms of their multicultural competence than supervisees in White supervisee-White supervisor, $t(101) = 2.17$, $p < .05$, and POC supervisee-White supervisor dyads, $t(101) = 2.03$, $p < .05$ (Ladany et al., 1997a).

The results of this study demonstrated that racial identity interactions between the supervisor and the supervisee clearly forecast the quality of the supervisory alliance. Again, this study further underscores the need for instruction of multicultural competence of therapists who work with clients with diverse backgrounds. The issues surrounding diversity are paramount among the client, therapist, and the therapist's supervisor. Practicing psychologists cannot ignore the relevance of this topic to their effectiveness with clients and those they supervise. For practical and ethical reasons this topic needs to continue to be researched and discussed.

Another investigation that lends credible support to the author's interest in this study involving disability as a minority group is research conducted by Pope-Davis & Ottavi (1994). This investigation focused on the relationship between demographic variables and self-reported multicultural counseling competencies among practicing counselors.

The study began by mailing survey documents to counselors. Those who completed the forms were analyzed for this study. A national sample of 220 out of 345 {(64% response rate); (N=136 women and N=84 men); (subjects were classify into age groups of 26 to 35 years N = 80, 36 to 45 years N = 88, and 45 years and older N = 52)} counselors associated with various university counseling centers engaged in this project. The race and ethnic breakdown of study participants were: 15 were Asian American, 26 were African American, 10 were Hispanic, and 169 were White. Approximately 65% of the subjects had acquired doctoral degrees and 35% had earned master's degrees.

Counselors, when asked to describe the minority groups with which they were most experienced, responded as follows: 38% specified African Americans, 34% specified Asian Americans, 14% specified Hispanics, 4% specified Native Americans, and 5% specified gay and lesbian clients. Subjects were requested to complete the Multicultural Counseling Inventory (MCI) (Sodowsky et al., 1994) and a demographic questionnaire. Counselors provided feedback to 40 Likert-type statements about multicultural awareness, knowledge, skills, and relationships. Alpha coefficients and intercorrelations for the MCI subscales for the current study were .80 (awareness, .80 (knowledge), .80 (skills), and .67 (relationship). For this study, moderate to low correlations were found between the four subscales ranging from $r = .56$ to $r = .27$ (Pope-Davis & Ottavi, 1994).

Results from a series of multivariate and univariate analyses demonstrated a significant main effect was observed only for ethnicity, $F(12,564) = 6.18$, $p < .0001$. Followup statistical procedures consisting of ANOVAs for the individual subscales showed significant overall ethnicity effects for Knowledge {$F(3,216) = 5.21$, $p < .01$], Awareness [$F(3,216) = 20.23$, $p < .0001$], and Relationship [$F(3,216) = 10.71$, $p < .0001$]. Additionally, Tukey pairwise comparisons illustrated that Asian American and

Hispanic counselors exhibited more multicultural knowledge than White counselors, and African American, Asian American, and Hispanic counselors specified more competence in multicultural awareness and relationships than White counselors (Pope-Davis & Ottavi, 1994).

This research study demonstrated that there are multicultural differences among counselors with respect to multicultural awareness, knowledge, skills, and relationship. Pope-Davis and Ottavi (1994) further concluded that all psychology training programs should contain a multicultural component for their students. Students who plan on working with clients in the field of psychology need to understand the importance of cultural differences and how it could impact the therapeutic relationship with clients. Therapists who have the necessary skills, awareness, attitudes, and perceptions of cultural competence should be better-equipped to work effectively in addressing issues brought to treatment by minority clients. Unfortunately, this concern over multicultural awareness in training components has not kept pace with laws and regulations requiring inclusion for persons with disabilities. Most graduate doctoral programs in clinical and counseling psychology do not yet have a multicultural disability component in their graduate curriculum.

Ottavi et al. (1994) specified that the purpose of their research exploration was to study the Sabnani et al. hypothesis, which proposes that students' multicultural counseling competencies are controlled by White racial identity attitude development (Ottavi et al., 1994). The model implies that higher levels of racial identity development are related to higher levels of multicultural counseling competencies. Conversely, racial identity development is one of numerous conditions that could influence counseling students' multicultural competencies. To execute this study, the researchers planned to investigate the relationship between White racial identity attitudes and self-reported multicultural counseling competencies. Researchers indicated that, for White racial identity to be an important factor, developmental stages must clarify variance above and beyond demographic, multicultural, educational, and clinical variables (Ottavi et al., 1994).

Ottavi et al. (1994) reported that participants for this research study included 128 (n=88 women and n=40 men) white counseling graduate students who ranged in age from 22 to 51 (mean age =31.71 years; SD = 7.60). Demographic data on the subjects indicated that 86% were pursuing doctoral degrees, while 14% were working towards master's degrees. With respect to years in the program of study, subjects were: first year students (26%), second year students (23%), third year students (28%), and fourth year students or more (23%). Regarding clinical experience, 86% of the subjects had completed at least one practicum (Mean #of practicum= 2.79; SD = 2.14). Subjects had a mean of 36.01 client contact hours (SD = 55.52, Mdn = 15), with clients whose racial/ethnic backgrounds were other than White. Subjects spent an average of 7.30 practicum supervision hours (SD = 10.6, Mdn = 4) on discussing multicultural counseling issues. When reviewing the subject's previous multicultural counseling coursework, 8.5% of the subjects had completed two or more courses, 39% had completed one course, 43% had multicultural issues reviewed in other counseling classes, and 8.5% reported not having a class in which multicultural issues were discussed. Of the participants, 45% reported having participated in a multicultural workshop. The average number of workshop hours for participants was 4.51 (SD = 7.59).

The instruments used in this study were:

1. White Racial Identity Attitude Scale (WRIAS) developed by Helms and Carter (1990), which consisted of 50 self-report items used to evaluate five racial identity attitude stages that had been previously developed by Helms in 1984. Coefficient alpha reliabilities reported by Helms and Carter spanned from .55 for the Contact subscale to .74 for the Disintegration subscale. Coefficient alpha reliabilities obtained in this current study were Contact (.18), Disintegration (.65), Reintegration (.62), Pseudo-Independence (.75), and Autonomy subscales (.59). The Contact subscale was eliminated from further analysis in this study because of its poor statistics.
2. Multicultural Counseling Inventory (MCI) developed by Sodowsky et al. (1994) comprises 40 self-report items which evaluate behaviors and attitudes related to four multicultural competencies: skills, awareness, relationship, and knowledge. For this scale, higher subscale scores are indicative of greater multicultural competence in the individual subscale concentrations. During scale development, the subscale correlations ranged from .20 to .50.
3. Biographical Sheet which asked the subject to record gender, age, degree objective, year in program, number of clinical practicum, multicultural course work, number of workshops, client contact hours with persons of color, and number of supervision hours spent on multicultural issues (Ottavi et al., 1994).

Participants were obtained via a mailing to the directors of each of 20 randomly selected counseling psychology programs accredited through the American Psychological Associations in the Midwest. Each director was asked to distribute the packets to students, and no directives were given regarding which students should receive the packet. In total, 128 (53%) counseling students were integrated into this study. The program involvement rate was 19 out of 20 programs and 12 of the 19 programs had a return rate of 50% or greater (Ottavi et al., 1994).

The results of this study demonstrated that four hierarchical regressions analyses were done in which three sets of variables were block-entered in the following order: demographic variables (age and gender), educational and clinical variables (multicultural coursework, workshop hours, client contact, hours of supervision, and number of practicum), and WRIAS subscales (Ottavi et al., 1994). Demographic variables, including gender and age, did not account for a significant amount of variance for any of the four MCI subscales. However, educational and clinical experience variables accounted for a significant increase in the explained variance when inputted after the demographic variables. In each set, multicultural coursework—the variable displaying the highest zero-order correlation with the subscale—had a significant effect, with three additional variables having a significant effect for the subscale, awareness, client contact hours with racial–ethnic diverse clients, workshop hours, and number of practicum (Ottavi et al., 1994).

WRIAS subscales accounted for significant variance for each of the MCI subscales only after being inputted into the regression equation which consisted of the demographic, educational, and clinical variables (Ottavi et al., 1994). Pseudo-

Independence had the highest zero-order correlation with each MCI subscale. Also, Pseudo-Independence had a significant effect, with Autonomy and Autonomy had a significant effect with knowledge (Ottavi et al., 1994).

The study's results confirm the conviction that students' attitudes and beliefs about racial issues are an essential part of the process of multicultural competency development. The salient point here is that racial attitudes can impact the counseling process with clients, and as clinicians, we must be able to feel comfortable about discussing racial differences with clients, supervisors, and instructors. The first time that clinicians begin this process is in the classroom. Therefore, it is important to have a safe place for students to discuss these issues. To create such a place, the research design is key to evaluating what elements are needed to implement such a multicultural program that offers students a place to discuss their racial biases and differences.

Maxie et al. (2006) reported that cultural knowledge needed by psychologists should take account of the client's traditions, customs, norms, values, and beliefs. Psychologists should know about a myriad of sociopolitical influences such as White privilege, internal and external racism, institutionalized racism, and the legacy of oppression for racial minorities in the United States. Additionally, psychologists' perceptions and attitudes toward clients from diverse backgrounds and their understanding of the impact of their own racial, ethnic, and cultural identity, including their stereotypical opinions and prejudices regarding diversity concerns, can considerably affect their capacity to become more culturally competent (Maxie et al., 2006).

Psychologists should consider adding some of the following therapeutic techniques to expand their array of cultural skills: noting methods that may be effective when talking to clients of particular backgrounds, recognizing the cultural context when using verbal and nonverbal responses, utilizing alternative sources of treatment in therapy (e.g., traditional cultural and spiritual healers like shamans or witch doctors), and altering traditional forms of treatment to take into account the concerns of clients from diverse backgrounds. Such clients may have alternative approaches to communicating, thinking, and processing information (Maxie et al., 2006).

Additionally, if the psychologist is going to broach cultural concerns in therapy, it is recommended that it be done early on in the development of a working alliance (Maxie et al., 2006). In doing this, there are three viewpoints to consider when deciding whether or not to have cultural discussions between the client and therapist. These viewpoints are universalistic, particularist, and transcendists (Maxie et al., 2006).

Psychologists who have a universalist approach would recognize familiar experiences with clients, as well as think that naming these cultural differences could further hinder the level of cultural competence for the clinician resulting in over emphasizing cultural stereotypes. Particularists stress cultural differences in people, and declare that discussing these cultural differences is imperative. Transcendists assert that therapists should make use of both shared traits and differences. In addition, the therapist may or may not opt to attend solely to racial and ethnic differences in therapy (Maxie et al., 2006).

Racial identity affecting therapeutic work with clients, therapists, supervisors, and supervisees has been previously studied in the psychological literature and continues to be a topic of current diversity research explorations. The above-mentioned research investigations clearly illustrate that racial identity is a defining marker that can impact the working alliance among client, therapist, supervisor, and supervisees. Additionally, this research has shown that there is a disparity with regard to obtaining and using mental health services for racial and ethnic minority groups. Is it the same for individuals with disabilities?

A significant occurrence in multicultural research transpired when persons with disabilities were recognized as non-ethnic minorities (Hohenshil & Humes, 1988). After this occurred, Personal Identity models were used to restructure the concept of cultural difference. The models began to include, not only persons who had visible ethnic/racial group membership, but also persons with disabilities in acknowledgment of the shared aims of civil rights protection for this group (Arredondo et al., 1996).

If a visible marker further denotes membership in a certain group, then such a classification can include persons with disabilities. Individuals who have disabilities can have both visible and hidden disabilities. Smart and Smart (2006) stated that the implementation of better medical treatments, the use of technology, better access to health insurance, and an increased standard of living has allowed for the use of additional services and supports to individuals who may not have survived in the past. These individuals are now characterized as persons with disabilities. In addition, as the population becomes older and more complex, there will be a growing number of individuals who will ascribe themselves as a person with a disability (Smart & Smart).

In previous years, clients with disabilities were mainly treated by rehabilitation counselors (Smart & Smart, 2006). This was probably done because mental health professionals believed that the client's disability was the most salient concern when working with the client. Ongoing research and practice have demonstrated that the state of disability is both a common and a natural part of life. In addition, all persons, including people with disabilities, are comprised of multiple identities, traits, roles, and functions (Smart & Smart). The disability could be an important aspect to the client in question. However, the therapist working with the client with the disability should be careful to consider that the client may be coming to therapy to address issues other than those relating to their disability.

Clients with disabilities need treatment from clinicians in all specialty areas of mental health services. This includes school counseling; individual and group counseling; marriage and family counseling; child and adolescent counseling; aging and adult development; gay, lesbian, bisexual, and transsexual matters; multicultural issues; community mental health; career counseling; and pastoral counseling (Smart & Smart, 2006). Because of this, it becomes essential to study the attitudes of persons without disabilities toward people with disabilities (Sciarra, Chang, McLean & Wong, 2005).

Conceptualization of Disability in the United States

According to the Annual Disability Statistics Compendium (2010), it was reported that in 2009, the resident population in the United States was assessed at 307,006,550 persons. This was an increase from 298,593,212 persons reported in 2006. This is approximately a 2.8% increase in the population of the United States. Additionally, in 2009, this statistical report indicated that the state with the largest population was California with 36,961,664 persons. In 2009, the state with the smallest population was Wyoming with 544,270 persons.

In the United States, there are approximately 51 million people who have one or more identified disability (United States Census Bureau, 2006). This number comprises both people with disabilities who are institutionalized and those who are not institutionalized. According to Erickson and Lee (2008), the prevalence of disability among individuals aged five and above who were not institutionalized was 41,306,000. These individuals reported one or more disabilities out of the total nondisabled population of 276,758,000 aged five and above. Additionally, as the United States population grows older, advances in healthcare are helping individuals who sustain traumatic injuries to survive the injury. These factors, and a general population growth due to increased birth and immigration rates, could result in individuals with disabilities becoming the largest growing minority group in the country (Olkin, 2002; United States Census Bureau, 2006; Hollimon, 2007).

A disability is defined by the Americans with Disabilities Act Amendments Act of 2008 (PL 110-325), Americans with Disabilities Act (PL 101-336), and the Rehabilitation Act Amendments of 1992 (PL 102-569), as an impairment that substantially limits the person in performing a major life activity. Such life activities might include, but are not limited to, breathing, walking, standing, moving, speaking, hearing, seeing, working, intellectually processing information, or even if the person has an impairment that is substantially limiting because of societal attitudes regarding the specific condition. An example of two related conditions that created such societal stigma and discrimination for persons with this medical diagnosis was the epidemic of the Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) witnessed in the 1980's (Herek & Glunt, 1988).

According to the Americans with Disabilities Act Amendments Act (2008), a disability can be further designated as having a documented record of such impairment; or the human being with the disability being deemed as having such an impairment. The person only has to have trouble performing one or more life activities to be classified as having a disability under the Americans with Disabilities Act (Americans With Disabilities Act Amendments Act, 2008; Americans With Disabilities Act, 1990).

In addition, the Americans with Disabilities Act Amendments Act of 2008 (PL 110-325) was developed to further strengthen the protections of persons with disabilities, because the original ADA act of 1990 was not used legally in the manner in which it was originally intended. The original act was used by employers and/or public and private agencies to disqualify individual claims regarding receiving the accommodations needed due to their disability. Persons with disabilities had to go to great lengths to prove their disability and the need for accommodations for their disability. At times, after completing this disability testimony, requests for accommodations were still denied. This caused a call for revision of the legislation resulting in far-reaching amendments (Americans With Disabilities Act Amendments Act, 2008).

The new legislation as amended stated that persons with disabilities should be protected under the law to include a precise and comprehensive national mandate for the elimination of discrimination and prejudice against persons with disabilities. It provided for precise, strong, consistent, enforceable standards addressing discrimination and prejudice against persons with disabilities. The landmark legislation offered the reinstatement of a broad scope of protections for persons with disabilities (Americans With Disabilities Act Amendments Act, 2008).

The Americans With Disabilities Act amendments further stated that the limitations of the disability must be taken into consideration when determining if a person is disabled under the definition of the Act. The Act also indicated that the definition of handicapped articulated in the Rehabilitation Act of 1973 should be used. Additionally, the Act stated that there needs to be a clear definition of what is considered disabled and what represents a substantially limited life activity. A person with a disability must have an impairment that prevents or severely restricts the person from conducting activities that are of central importance to our daily lives. Finally, this Act wanted to insure that the Equal Employment Opportunity Commission would revise the portion of its regulations to redefine the term “substantially limits” to “significantly restricted” to be consistent with this Act, including the amendments made by the Act (Americans With Disabilities Act Amendments Act, 2008).

Initially, a person who is diagnosed with a disability can experience a psychological shift, which can involve a process of either adapting to the disability or accepting the disability (Bishop, 2005). The person is first struggling with realization that he or she has been diagnosed with a disability and is in the process of accepting and adapting to this realization. The diagnosis of a disability could cause an individual to question her or his life’s meaning and purpose. The diagnosis of a disability challenges one’s values and life commitments (Bishop).

Some feelings experienced when a person is initially diagnosed with a disability might be shock, disbelief, anger, depression, anxiety, fear of death, and grief. The person tries to find some significance to what just happened to them. The person begins to examine some type of global meaning and situational meaning to the diagnosis of the disability (Bishop, 2005). The person is now part of a minority group, and therefore is subjected to the stigma and discrimination associated with membership to such a group (Bishop).

People with disabilities have encountered discrimination and stigmatization over the course of American history. Some people without disabilities believe that the word "disability" means lack of independent functioning, loss of status, and a poor quality of life (Savage, Brashler, Mukherjee & Kirschner, 2004). Because of these beliefs held by persons without disabilities, persons with disabilities often experience both personal psychological stress and environmental stress attributed to their disability. History offers many examples of persons with disabilities having been treated inhumanely because of their disability, usually by persons without disabilities. Some examples of this inadequate treatment include the following situations.

Patients Physically Chained or Restrained

During the 1700's through the 1900's, when working with persons who had psychiatric disorders and/or mental illness, patients were physically chained and received little to no care to address their psychological problems (Brennan, 2003; Gould, 1996). Patients were viewed as objects of dread (Hanjorgiris & O'Neill, 2006). It was believed by most members of the medical profession that these patients could not be cured. It was not until two revolutionary medical treatment providers, Dr. Philippe

Pinel from France and Dr. Benjamin Rush from the United States, changed the treatment approach when working with individuals diagnosed with psychiatric disorders.

These doctors physically took off the chains when working with persons with mental illness. They both said that, to properly work with people facing these serious conditions, they needed to provide patients with a level of respect and dignity. Up to this point, no one believed that chaining patients was an act of inhumane and cruel punishment (Brennan, 2003).

Additionally, Dr. Rush believed that, to cure these patients of their mental illness, these patients needed to be afforded the opportunity to experience "pleasant surroundings, useful occupations, and the conversation of others when feasible" (Weisberger, 1975, p. 99). Persons with mental illness usually were segregated from the rest of the population by living in the home of their family, residing in an almshouse, confined to a local jail, or locked up in a mental sanatorium.

Dorothea Dix became one of America's famous champions of the rights of persons with mental illness during the 19th Century. She accomplished this by going to several hundred sites in the United States where persons with mental illness were incarcerated. As she visited the sites, she collected data and used that data to successfully launch appeals for reform to both state and federal legislators. In 1860, her efforts were successful in causing state legislatures to appropriate funds to create new mental facilities that would provide humane treatment to patients with mental illness.

Patients Isolated in Institutions

KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Throughout American history, persons with disabilities were separated from the population. During the industrialization movement, accepted members of society were viewed as strong, hard-working, and physical contributors to the population. In order for the country to progress financially, socially, and politically, people needed to work long hours, learn how to use machines, cultivate the farms and develop devices, adaptations, and processes that could propel and promote advancement for the overall population (Robitscher, 1973; Landman, 1932).

Persons with disabilities were not considered as being equipped or able to execute these needed functions. Families who had members with disabilities were often ashamed and, when they were faced with the burden of caring for a person with a disability, they had them transported to various asylums and institutions for care (Robitscher, 1973; Landman, 1932).

This would continue in American culture for many years until a new model of treatment was introduced that would have a dramatic and lasting impact on the lives of persons with disabilities. The deinstitutionalization movement revealed the horrific, deplorable, and inhumane conditions to which persons with disabilities were subjected while in institutions around the country. This progressive movement occurred during the late 1960's to the mid 1990's. It forced the closing of many of these institutions. People with disabilities who could live independently were trained how to live without assistance in the community. Additionally, individuals with more severe disabilities who required more comprehensive services were transitioned into the community and integrated into housing within their local community with supports (Hanjorgiris & O'Neill, 2006; Olkin & Howson, 1994; Wolfe & Blanchett, 2000).

Forced Female Sterilization Procedures

Tragically, American history offers another type of stigmatization endured by women with mental retardation and developmental disabilities (MR/DD). This troublesome time in American culture was known as the Eugenics Movement, and affected the normal sexual exploration and development of this population. According to Landman (1932), “eugenics” is defined as "a science of human betterment. Eugenics is concerned with the study of being well born with all the social agencies that may improve or impair physically, mentally the racial qualities of future generations" (Landman, 1932, p. 3). The Eugenics Movement's psychological imperative was to breed or create superior human beings. This movement believed in the strength of the influence of genetics and ignored the importance of the nurturing process. This movement examined the fecundity of all human beings and extensively looked to preserve a strong, genetic pool to eliminate all inherited defects. The elimination of such defects as blindness, deafness, physically impaired, mental illness, intellectual deficiencies, and criminality were controlled by utilizing methods such as mandatory birth control (involuntary sterilization and complete hysterectomies), regulated immigration procedures, and laws regarding marriage (Landman, 1932).

There were several states in the United States that passed marital laws indicating that persons with intellectual disabilities and mental illness could not marry and have children based on their cognitive disabilities. Connecticut was the first state to regulate marriage for the sole purpose of procreation. The law was evidenced in the following passage:

> No man and woman either of whom is epileptic, or imbecile, or feebleminded" shall marry or have extra-marital relations "when the woman is under forty-five years of age," and a minimum penalty of three years imprisonment for violation was set.

Connecticut was immediately extolled as an example for other states to follow and many legislatures discussed bills to forbid marriage to a variety of persons: the feebleminded, insane, syphilitic, alcoholic, epileptic, and certain types of criminals. Kansas in 1903, New Jersey and Ohio in 1904, and Michigan and Indiana in 1905, joined the ranks of states with eugenic marriage laws (Haller, 1963, p. 47).

Sterilization procedures were conducted on both women and men with cognitive, psychiatric, and physical disabilities, in addition to those who had criminal tendencies. Persons without disabilities found this procedure to be an acceptable method of regulating breeding for persons with disabilities. Sterilization involved the surgical removal of the male's testes and female's ovaries. This medical procedure was known as castration. Castration involved severe hormonal affects for the person who had the procedure.

In 1907, the first known sterilization law was enacted by the Indiana state legislature. Additionally, American legislation history indicates that, by 1926, sterilization laws were passed in 23 states of the union. Also, on May 2, 1928, sterilization laws were deemed constitutional by the Supreme Court of the United States. Between 1921 and 1964, approximately 63,000 persons were involuntarily sterilized based on their disability type (Robitscher, 1973)

Society believed that, in order for the population to progress as a superpower, the population needed only strong physical and emotional individuals to carry out the work needed for the population to thrive. Persons with MR/DD were deemed feeble-minded and would procreate more unnecessary and useless individuals. Therefore, women with these conditions were sterilized. In most cases, these women with intellectual or developmental disabilities were sterilized without their knowledge, and were never taught about their reproductive rights or sexuality (Hanjorgiris & O'Neill, 2006; Anderson, 2000; Nelson et al., 1999; Robitscher, 1973; Landman, 1932).

The sexual needs of persons with disabilities were addressed by persons without disabilities by means of segregation, sterilization, or just ignoring it because it was not considered an important life activity for members of this minority group (Löfgren-Martenson, 2004). Basson (1998) reported some common views held by persons without disabilities regarding the sexual needs of persons with disabilities. They are:

1. Disabled women are asexual.
2. Only independently functioning women can handle sexual relationships.
3. Disabled women who are single are celibate.
4. Disabled women cannot be mothers.
5. All disabled women are heterosexual.
6. Disabled women should be grateful for sexual relationships.
7. Disabled women are different.
8. Youth and beauty are essential to sexuality (Basson, 1998, p. 359).

Furthermore, Linton and Rousso (1988) conducted extensive research on sexuality for individuals with disabilities. They ascertained that individuals without disabilities think that individuals with disabilities have neither sexual desire, nor the capacity for achieving sexual pleasure (Linton and Rousso, 1988). This viewpoint is well demonstrated by the fact that women without disabilities undergo a great deal of pressure to maintain the perfect body and to further satisfy all gender role requirements, which consist of establishing a traditional, heterosexual marriage complete with children and occupational pursuits (Linton & Rousso, 1998; Anderson, 2000). Of course, people without disabilities think that women with all types of disabilities are unable to accomplish these goals.

Justifiably, we can say as psychological professionals that these inaccurate sexual misconceptions by individuals without disabilities could be psychologically damaging to individuals with disabilities. These harmful notions could result in a person with a disability's having a poor body image, low self-esteem, and inadequate social and sexual expectations for themselves (Linton & Rousso, 1988; Nelson et al., 1999; Anderson, 2000; Hollimon, 2007).

Being Objects of Ridicule and Mockery

When reviewing the history of the circus, it becomes clear that persons with disabilities were treated as objects of mockery and ridicule for the entertainment of the viewing public and for the financial benefit of the organizers. These individuals were displayed in the freak shows of the circus, often held nearby but separate from the main event. Attendees of the circus could also attend the freak show for an additional price. Yelling, spitting and throwing things at these individuals were commonplace. These individuals in the freak shows were often not paid and given only basic support to survive like food and water. These individuals, and their human subjects, degradingly referred to as freaks, usually consisted of persons with extreme physical disabilities. Persons selected by the organizers of these shows included persons who had missing limbs, persons with extreme facial deformities, persons who had limited height or size, and persons who had birth defects like those who were conjoined in unusual ways to another sibling or twin (Brogdan, 1992).

Because of this history of societal treatment of persons with disabilities, it can be concluded that a person diagnosed with a disability may be very apprehensive and resentful when receiving the initial diagnosis of a disability (Nelson et al., 1999; Anderson, 2000; Hollimon, 2007). In addition, research explorations conducted by Hergenrather, Rhodes and McDaniel (2005); Frank and Elliott (2000); Livneh and Antonak (1997); Gething, LaCour and Wheeler (1994); Yuker (1994); and Holmes and McWilliams (1981) depict the inhumane treatment which is comprised of negative social attitudes towards individuals with disabilities. Psychologists may have to work with clients who present with concerns surrounding their disability status in psychotherapy. Psychologists, with and without disabilities, may have preconceived notions about disability based on their social environment, social conditioning, personal awareness, personal perceptions and attitudes, exposure to disability, training, and skills. Therefore, it becomes critical to evaluate psychologists' multicultural disability competence when working with this minority group.

Disability Demographics and Statistics

Demographic statistics are imperative for practicing psychologists to fully appreciate the prevalence of disability among their client population. It has been documented that disability can differ according to age, gender, race, ethnicity, and location of primary residence (LaPlante & Carlson, 1996). Olkin's (2002) writings appropriately point out that the oppression felt by individuals with disabilities can be magnified when they share membership in other minority groups, including those of gender, racial and ethnic groups, sexual orientation, social class, age, and religious affiliation. Olkin further noted that the group composed of individuals with disabilities represent one of the most economically and educationally underprivileged groups due to cultural values and stigma.

The 2006 Disability Status Report showed that 25.3% of working-age adults with disabilities lived in poverty, compared to 9.2% of peers without disabilities (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2007). The Annual Disability Statistics Compendium (2010) reported that, in 2009, disability statistics showed that the poverty rate for persons with disabilities was 26.4%, whereas the poverty rate of individuals without disabilities was 11.7%. This underscores the fact that poverty is rising for persons with disabilities living in the United States.

According to the Rehabilitation Research and Training Center on Disability Demographics and Statistics (2007), when examining working-age adults with disabilities, approximately 37.7% were employed, compared to 79.7% of peers without disabilities. In addition, between the years of 2007 and 2010, the United States labor market lost numerous jobs attributed to the financial crisis in the domestic and global economies including the housing, automobile, construction, and banking industries. This affected persons of working age, both with and without disabilities.

According to the Annual Disability Statistics Compendium (2010), data compiled in 2009, indicated that out of the 19,054,587 persons with disabilities ages 18 to 64 years, 6,723,694 individuals were employed. This equals an employment rate of 35.3%. This number includes persons who worked part time or full time. Conversely, out of the 170,126,637 persons without disabilities aged 18 to 64 years, 126,478,646 of them were employed. This attributes to an employment rate of 74.3% (Annual Disability Statistics Compendium).

It is also revealing to examine full-time work statistics (a person working more than 35 hours per week for at least 52 weeks) for persons with and without disabilities. In 2009, out of the 20,452,155 persons with disabilities aged 16 to 64 years, there were 4,174,197 persons with disabilities employed full time. This employment rate was 20.4%. On the other hand, out of the 181,043,375 persons without disabilities ages 16 to 64 years, 91,887,733 persons without disabilities were employed. This employment rate was 50.8%. This accounts for an employment gap of 30.4 percentage points (Annual Disability Statistics Compendium, 2010).

Employment rates can differ based upon race and disability status. Whites (Non-Hispanics) aged 18 to 64 with disabilities have an employment rate of 40% (Houtenville, Erickson & Lee, 2007). Racial and ethnic minorities with disabilities aged 18 to 64 have even lower employment rates. They are: White Hispanic with disabilities 37%, African Americans with disabilities 30%, and Black Hispanic with disabilities 30% (Houtenville et al., 2007).

The National Council on Disability (NCD) reported by Houtenville et al., (2007) indicated the following employment-related barriers witnessed in this ever-growing minority group. They are:

(a) difficulty of maintaining ongoing recruitment and retention of employees with disabilities in both private and public sector positions,
(b) inappropriate development of employees with disabilities,
(c) lack of work-life programs and alternative work schedules,
(d) limited workplace accommodations,
(e) poor corporate climate regarding disability in general,
(f) lack of universal design,
(g) limited self-employment opportunities,
(h) limited accessible and affordable transportation,
(i) limited access to healthcare,
(j) inappropriate level of formal education,
(k) limited affordable and accessible housing in safe communities, and
(l) at times, the need for long-term services and supports (e.g., personal assistance if needed for disability-related issues, assistive technology, and assistance with financial management) (NCD, 2007).

Moreover, the following statistics were reported by Olkin (2002) to bring attention to the struggles that individuals with disabilities face in our culture:

(a) Individuals with disabilities who are unemployed in the United States and have the aspiration to work may be unable to do so as a result of societal stigma and discrimination. This occupational discrimination can cause a barrier to employment as mentioned above;

(b) In the United States, approximately 33% of individuals with disabilities have annual income of less than $15,000 per year;

(c) In the United States, despite legislative initiatives like the Americans with Disabilities Act (1990) and the Rehabilitation Amendments of 1992, individuals with disabilities continue to be, literally, physically segregated from the rest of the population without disabilities. This is seen with respect to construction and physical plant, the educational system, housing, retail sales, employment, transportation, and media.

(d) Individuals with disabilities comprise the only human group in our society that is relegated to utilizing separate doors, ramps or water fountains, which at times are located in unpleasant or undesirable locations away from those utilized by individuals without disabilities (Olkin, 2002).

When examining groups comprised of children and adolescents, it is noted that a larger number of boys than girls have disabilities (7% of boys and 4% of girls ages 5 to 15) (United States Census Bureau, 2005). This is attributed to the fact that boys are more often diagnosed with learning disabilities, mental retardation, autism, and attention deficit hyperactivity disorder (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2007). In comparison, for adult and elderly groups, more women have disabilities (43% of women and 40% of men) (United States Census Bureau, 2005). This is attributed to women's overall life longevity, compared to men (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2007).

When examining disability statistics within our school system, Sciarra et al. (2005) reported, that during the academic year of 1998-1999, the total number of students aged 6 through 21 were served under the Individuals with Disabilities Education Act (IDEA; PL 101-476) was 5,541,166 students. This statistic demonstrates a 2.7% increase, compared to the previous year. A closer examination further reveals that this number depicts a 30.3% increase from the academic year of 1989-1990.

Additionally, in the fall of 2008, there were 48,769,252 students, ages 6-17, receiving educational services in the United States. During this same time, there were 5,443,977 students (11.16%) participating in special education services under IDEA, Part B (Annual Disability Statistics Compendium, 2010). Further analysis associated with age demographics indicated that, in the fall of 2008, out of the 6,483,372 students ages 3-21 who participated in special education services under IDEA, Part B, 699,966 students (10.8%) were aged 3-5, 2,635,657 students (40.7%) were aged 6-11, 2,808,320 students (43.3%) were aged 12-17, and 339,429 students (5.2%) were aged 18-21. Disability types for these students receiving special education services under IDEA, Part B consisted of 2,462,946 students (42.6%) who had a specific learning disability, 1,102,552 students (19.1%) who had a speech or language impairment, 465,972 students (8.1%) who had mental retardation, 416,316 students (7.2%) who had an emotional disturbance, 122,689 students (2.1%) who had multiple disabilities, 69,944 students (1.2%) who had hearing impairments, 61,851 students (1.1%) who had an orthopedic impairment, 641,573 students (11.1%) who had other health impairments, 24,911 students (0.4%) who had a visual impairment, 291,218 students (5.0%) who had autism, 1,651 students (0.03%) who had both deafness and blindness, 23,990 students (0.4%) who had traumatic brain injury, and 96,510 students (1.7%) who had a developmental delay. It was further assessed that students ages 6-21 who participated in special education services under IDEA, Part B, about 4,606,980 students (79.7%) were in a regular classroom setting at least 40% or more of their time during the school day (Annual Disability Statistics Compendium).

The student population is becoming more diverse, and students without disabilities are more often being exposed to students with disabilities in the classroom (Sciarra et al. 2005). This is a result of legislation and educational policies for people with disabilities. Thus, it is necessary for clinicians who work in the school system to recognize this group as a minority group that may experience some marginalization in this society. The same is true for those clinicians who work with clients who are not currently part of the school system.

To summarize, the disability statistics indicate that persons with disabilities have experienced levels of societal discrimination and oppression when pursuing employment and educational objectives in the United States. Unfortunately, the oppression and discrimination imposed on individuals with disabilities is a historical piece of our cultural tradition (Leung, 2003; Olkin, 2002; Anderson, 2000; Landman, 1932). Smart and Smart (2006) articulated that attitudes and perceptions of individuals with disabilities have a propensity to vary with cultural belief changes. As a result, the foundation of such stigmatization is heavily linked to attitudes held by individuals without disabilities towards individuals with disabilities (Smart & Smart, 2006; Wright, 1983; Livneh, 1982). Consequently, there are attitudinal reasons for persons without disabilities to view persons with disabilities in such a negative way.

Over the course of history, different models of disability have been proposed. The most widely used models are those of the biomedical, environmental, and minority or sociopolitical models of disability (Olkin, 1999B; Smart & Smart, 2006). The following sections will present various models of disability identification illustrated in United States' culture, and will try to explain the viewpoint held by some members of the dominant group in the population.

The Biomedical Model of Disability

The Biomedical Model of disability is the oldest and most popular model of disability (Smart & Smart, 2006). This model is heavily linked to the medical profession. It has no association with social justice. It views the disability in terms of a problem and requires treatment in order to cure the problem. The disability is seen as pathology and the person has a problem that must be treated.

The person is placed into the sick role and must be cared for until he or she recovers from the disease or illness. Smart (2001) indicated that this view of disability promoted medical and mental health providers to view themselves as being in control of healing the individual with a disability (i.e., viewing members of this group as lesser beings). Thus, these individuals must be treated as sick victims (Hollimon, 2007; Smart, 2001; Smart & Smart, 2006; Ajzen, 2001).

This type of rationale encourages the development and implementation of advances to modern medicine observed in American culture. Disability was classified as more of a medical problem, encompassing features of physical, sensory, emotional or behavioral concerns. The biomedical model of disability proposes that the disability is a “defect, deficiency, dysfunction, abnormality, failing, or medical ‘problem’” (Smart & Smart, 2006, p. 30).

This allowed individuals without disabilities to focus on the limitations and/or deficits, rather than strengths of the person with a disability (Smart & Smart, 2006; Hollimon, 2007). The person with the disability is considered as an inferior being, compared to the medical professional. The person with the disability is viewed as not being knowledgeable of the medical information and unable to understand the cause of the disability; and therefore, should be treated by the professional. This leads to a power differential between the person with the disability and the medical professional (Smart & Smart, 2006).

Smart and Smart (2006) stated that the Biomedical Model of disability has allowed for persons with various disabilities to be categorized into various disability types (i.e., the blind, the quads, the deaf). Categorization can result in the person’s experiencing stigmatization. Stigmatization can lead to discrimination and prejudice to persons with disabilities. Hence, this categorization of disability precipitated the segregation of disability groups based on their individual disability type. In addition, this type of categorization resulted in persons without disabilities’ viewing persons with disabilities as members of specific disability categories, rather than individuals facing the global problems and challenges of disability (Smart & Smart, 2006).

This conceptualization of disability resulted in the design and implementation of treatments and interventions that would cure the disability. Hence, the disability was a problem found within the person, and the person with a disability required services and treatment to help eliminate the disability (Hollimon, 2007; Smart & Smart, 2006). The disability is seen as something innate in the person; and therefore, the person is blamed for having the disability (Smart & Smart, 2006).

Smart and Smart (2006) further stated that a disability can be viewed as bad luck for the person who has the disability. Possessing this conviction could result in the individual without a disability's unjustly legitimizing the role of prejudice and discrimination experienced by a person with a disability. The features of the Biomedical Model; that is, pathologizing, or the objectification, the categorization, and the individualization of a disability, are reliant on the individual diagnosis and classification systems given to a client with a disability. Thus, medical diagnoses given to clients with disabilities could lead to value-laden, one-sided, impressionistic opinions regarding the functioning, socialization, and quality of life for individuals with disabilities (Smart & Smart, 2006).

Smart and Smart (2006) suggested that the biomedical model of disability deems persons with disabilities as passive and compliant patients, because it holds that persons with disabilities do not have the comprehension, education, proficiency, and know-how that physicians possess. As a result, persons with disabilities may not be given the opportunity to act as decision makers in their overall treatment. It should be emphasized that, in this model, the categorization of persons with disabilities as inferior, dependent, and subordinate beings further strengthened the societal power differential that is intrinsic to the Biomedical Model of disability (Smart & Smart, 2006).

Asch (1998) put forth ideologies regarding disability proposed by the biomedical model which consist of the following statements:

1. Disability is biology, and disability is accepted uncritically as an independent variable."
2. "Problems faced by persons with disabilities result from 'impairment,' rather than the larger environmental social context."
3. "Persons with disabilities are victims, so treatment is aimed at changing the person."
4. "Disability is central to an individual's identity, self-concept, and self-definition."
5. "Disability is synonymous with needing help and social support (Asch, 1998, p. 78).

Based on these ideologies stated above, the Biomedical Model greatly stigmatizes and labels the individual with a disability. The person is not recognized for his or her personal traits, skills, strengths, and potential. Rather, this viewpoint segregates groups comprised of persons without disabilities from groups of persons with disabilities, forming an inferior versus superior hierarchical dynamic among members of these groups (Smart & Smart, 2006; Smart, 2001; Hollimon, 2007).

The Environmental Model of Disability

The Environmental Model of disability looks at both the person with the disability and the environment in which the person lives. In this model, disability is defined in terms of the person's acquisition of various achievements, functional skills, traits, and strengths, coupled with biological/organic aspects (Smart & Smart, 2006).

The model holds that one's environment is not the sole cause for the occurrence of the person's disability. A person having to endure such disadvantages as an inferior educational system and/or poverty is not deemed to have a disability (Smart et al., 2006).

Experiencing disadvantages; such as, poverty and a substandard educational system; are social injustices that some members of the population may encounter. Some people are able to navigate through arduous environments like a poor educational system and/or poverty while others are not successful. Those who are unable to are not necessarily considered to have a disability (Smart & Smart, 2006).

However, the model takes into consideration the combination of the biological factors that originate within the person, along with environmental factors that may cause or exacerbate the disability. Proponents of this model believe that limitations, experienced as the result of a disability, are environmentally or socially based (Smart & Smart, 2006).

In this model, the problem of disability is not entirely seen within the person who has the disability. Disability is not innate. Rather, the difficulties experienced by a person with a disability, those things that become attributed to the disability, can occur because of the functional requirements of the environment in which the person lives. In general, social barriers faced by people with disabilities consist of both physical inaccessibility and the perceptions and attitudes held by people without disabilities toward people with disabilities (Yuker et al., 1960; Smart, 2001; Smart & Smart, 2006).

Smart and Smart (2006) provided an excellent example of the interplay of this model. They wrote that a young, African American man with schizophrenia would most likely encounter more prejudice and discrimination, compared to a young, European American man who is blind. Both of these disability types may have similar physician ratings with regard to level of severity. However, the complexity and hardship imposed by the psychiatric disability is perhaps greater for the young, African American man with schizophrenia. This is attributed to societal perceptions and attitudes regarding a psychiatric disability. In addition, a person with a disability could have memberships in other multicultural groups such as age, racial/cultural/ethnic classifications, gender, sexual orientation, and/or social classes. These additional memberships, combined with the person's disability, could add to the level of prejudice and discrimination that a person with a disability faces within our society (Smart & Smart, 2006).

The Environmental Model of Disability is better positioned to serve as a foundation from which to study the difficulties encountered by persons with disabilities who are not young, European American, White, middle-class, male, or heterosexual (Smart & Smart, 2006). This model also seems more suitable for explaining social dynamics of chronic conditions. Smart and Smart (2006) reported that a good proportion of disabilities are classified as chronic conditions.

When evaluating and treating a chronic condition, the medical professional's goal is to stabilize the condition. Medical care for chronic conditions focus on maintaining quality of life, thwarting off any secondary disabilities, maintaining functional independence, obtaining proper assistive technology, and helping the person navigate the medical care system. In addressing the disability, the treatment regimen includes both a biological approach to dealing with the disease and an environmental focus on adapting it to better address the functional demands of the disability (Smart & Smart, 2006).

Smart and Smart (2006) reported that in the Environmental Model of Disability, it is harder to dehumanize persons with disabilities because of the following reasons:

> (a) Categorization by disability type is less likely;
>
> (b) the power differential is reduced when the individual is viewed as a total person and not as a stigmatized medical category; and
>
> (c) partial responsibility for the response to the disability devolves upon "society" to provide a physically accessible and non-prejudiced environment (Smart & Smart, 2006, p. 34).

Thus, this model has a dual approach which embraces both the person with the disability and the environment in which he or she lives. The person is not faulted for having the disability, but the person still must adjust to the limitations of the disability within his or her environment.

The Sociopolitical Model of Disability

The sociopolitical model of disability, also referred to as the minority model of disability, is one of the most preferred models in use when discussing the implication of disability in our society (Hahn, 1985; Fine & Asch, 1988; Fowler & Wadsworth, 1991; Hershenson, 1992; Shapiro, 1993; Olkin, 1999B). This model was developed by Hahn (1985), and later reconfigured into the model of disability identity development (Gill, 1997). Persons with disabilities consider themselves as participants of a minority group (Smart & Smart, 2006). Therefore, as members of this minority group, persons with disabilities can face the discrimination and prejudice that most individuals face when they are members of a minority group.

This model embraces such themes as self-determination, self-definition, reduction of stigma, elimination of medical diagnoses and categories, and the need to obtain equality and civil rights under United States law for persons with disabilities. This model of disability does not acknowledge the social roles of inferiority, dependency, and stigmatization usually associated with disability by persons without disabilities (Smart & Smart, 2006). The central themes in this model pertain to prejudice, discrimination, and stigmatization in United States' culture that an individual with a disability faces. This model also highlights the challenges facing an individual with a disability because of the attitudes and perceptions of individuals without disabilities. In this model, disability is viewed as a difference, rather than a deficit. As a result of this reasoning, having a disability becomes a neutral experience, rather than a positive or negative experience.

Continuing with the neutral view, disability is seen as a social construction. This means that the restrictions and disadvantages inflicted onto persons with disabilities by persons without disabilities are merely a social formation. They have absolutely nothing to do with the actual disability. Smart and Smart (2006) stressed that most societies create social construction of disability; and therefore, these same societies can begin to destroy or deconstruct the social conceptualization of disability. This is helpful to persons with disabilities because the individual with the disability is not being blamed for having the disability.

The social construction, or rules of being a good person with a disability in our society, as developed by persons without disabilities were:

> Always be cheerful; face the disability with courage, optimism, and motivations; manage the disability as well as possible (in the view of others); adhere to medical and rehabilitation regimens; request only those accommodations and assistance that others feel are necessary; make others comfortable with the disability; and keep all aspirations at a reasonable level, or stated differently, do not ask for much (Smart& Smart, 2006, p. 34).

Smart and Smart (2006) consider disability as a social construct. If society views disability in a more positive light, then the person can learn to adjust to his or her medical disability. This occurs because, despite his or her disability, the person can still maintain some functioning in a barrier-free society. The physical barriers to the disability, coupled with the discrimination, can make it even more arduous for an individual with a disability to execute his or her day-to-day activities (Smart & Smart, 2006).

Hahn (1985) stated that this model is addressing the fact that the attitudes and perceptions regarding disability held by a person without a disability places the individual with a disability in an inferior position, when compared to the rest of the population. In this model, problems attributed to one's disability are dealt with through legislation (Hahn, 1985; Olkin, 1999a). Legislation like the Americans With Disabilities Act Amendments Act (2008), Americans With Disabilities Act (1990), and the Rehabilitation Act Amendments (1992) have assisted people with disabilities to obtain better access to their environment including access to employment, technology, transportation, telecommunication, and education.

Kirkwood and Stamm (2006) conducted research that utilized the minority model of disability by incorporating social marketing principles. These principles state that placing disability in a positive light can result in reducing or eliminating negative attitudes towards individuals with disabilities. Hollimon (2007) found, in his study, that doctoral students in psychology who had positive contact with certain types of disabilities were more favorable to working with persons with disabilities in general.

When working as a licensed psychologist, it may be difficult to use only the minority model of disability when working with clients with disabilities. One reason for this is that psychologists are required to use and implement the descriptive labels of diagnosis and classification of disorders put forth in the Diagnostic Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR) (American Psychiatric Association, 2000). Hollimon (2007) found, in his research, that a clinician's attitude and perceptions of persons with disabilities can impact the quality of service delivery provided to persons with disabilities. The American Psychological Association (2002b) guidelines for ethical practice state that psychologists should take into consideration the diversity concerns of the clients with whom they are working in a clinical setting, and should take a cross-cultural approach when working with clients.

Additionally, the psychologist has an ethical and moral responsibility as a helping professional to gain self-awareness of his or her own values, attitudes, convictions, and behaviors regarding persons who comprise difference (APA, 2002b; Corey, Corey & Callanan, 2008; Sue & Sue, 2008). Further, the psychologist should comprehend how these aspects of one's thinking and behavior relate to the inner workings of a diverse society (Sue & Sue, 2008; Hollimon, 2007; Smart & Smart, 2006; Smart, 2001; Sciarra et al., 2005). Finally, the psychologist should keep in mind that the impact of the disability on the client may not be the initial reason for the referral for psychological treatment (Smart & Smart, 2006; Hollimon, 2007; Sciarra et al., 2005). During treatment, the disability should be conceptualized as being a contributing part of the client's identity, but not the defining characteristic of the client with a disability (Smart et al., 2006; Hollimon, 2007; Linton, 1998).

Defining Ethics and Ethical Principles of Professional Practice

The above sections described some of the sociocultural issues faced by persons with disabilities. It provided a picture of this referent group, and how their peers without disabilities have treated them throughout American history. Based on this information, it is apparent that psychologists will have persons with disabilities as clients. Therefore, as practicing psychologists, it is imperative for psychologists to apply sound ethics when working with clients with disabilities.

According to Berkeley and Ludlow (2007/2008), professional ethics are defined as values and norms that a person brings to a given situation, coupled with a legal implication. Ethics are working guidelines and principles used to navigate through professional conduct in one's work. Berkeley (2006) stressed the conviction that helping professionals need a set of ideals to motivate the individual to deliver good, comprehensive, and quality product to their clients.

Practicing psychologists are faced with trying to uphold the ethical principles and codes of their profession when working with clients with disabilities. This includes maintaining the principles of autonomy, beneficence, nonmalfeasance, and justice (Levack, 2009; Corey, Corey & Callanan, 2008; Becker, 2005; APA, 2002b).

The ethical principle of autonomy is having the conviction that people with disabilities have a right to self-determination regarding the quality and quantity of medical care that he or she receives (Levack, 2009; Corey et al., 2008; APA, 2002b). This is heavily linked to informed consent, treatment choice, and the patient's right to being treated with respect and dignity. This principle entails an agreement between the clinician and client that holds that the clinician will provide the client, despite his or her level of disability, an opportunity to elect the type and quality of psychological treatment desired.

Some ethical dilemmas associated with the principle of autonomy can cause therapeutic discords between client and therapist. Discords between client and service provider may arise especially when the client wants to pursue goals that the service provider views to be harmful or not to be in the best interest of that client (Levack, 2009). Such discord may occur, for example, when a client wants to stop taking his or her psychiatric medication and he or she is not fully informed of the consequences of such a stoppage. Discord might also be evidenced in situations when a client is newly diagnosed with a medical condition like HIV/AIDS and refuses to use sexual protection when engaging in sexual intercourse, or in the situation where a client who has a terminal illness refuses medical care and checks out of the hospital. These examples of therapeutic discord affect the client's level of autonomy by interfering with the client's level of treatment choice and treatment outcome.

The ethical principle of beneficence is characterized by a psychologist's having the intention to do good on behalf of his or her clients, including those clients with disabilities (Corey et al., 2008; APA, 2002b). The clinician must evaluate whether or not his or her efforts will really make a difference in the life of a person who has a severe disability (Levack, 2009). The ethical dilemma here is created when the psychologist in question begins to measure the importance of one's life (and treatment) based on the level and significance of the person's disability.

The ethical principle of nonmalfeasance is described as "avoiding harm to clients at all costs" (Corey et al, 2008; APA, 2002b). This principle comes into play when considering conducting medication trials and/or treatment on those who might be medically fragile or minors. Also, this can be further complicated by those who conduct genetic research and use stem cells to prevent disabilities from occurring in our society.

The principle of justice is the practice of treating all patients fairly in all circumstances (Corey et al., 2008; APA, 2002b). This could become compromised when issues pertaining to advocacy and legislation are considered (Levack, 2009). Samples of some ethical dilemmas for psychologist might be the following:

(a) The psychologist may be put in an arduous position, in that he or she might have to decide whether or not to allocate a limited number of patient treatment hours;

(b) The psychologist might have to decide whether or not the length of the inpatient treatment stay should be shortened because the client has no medical coverage left to pay for the needed treatment;

(c) The psychologist might have to determine whether or not a client should receive applications for funding of assistive technology and other resources; and

(d) The psychologist might have to evaluate if the need for referrals for additional services should be made, even if the psychologist might think that the client is not improving with the current treatments (Levack, 2009).

Levack (2009) stated that disability research indicates that persons without disabilities minimize the quality of life for persons with disabilities. Persons without disabilities routinely think that the life of a person with a disability is less worthy, compared to a person without a disability (Levack). However, the disability research shows that persons with severe disabilities value their quality of life, and that persons with severe disabilities state that their quality of life is no worse than their peers without disabilities (Levack; Olkin, 2002).

To summarize, psychologists are faced with ethical dilemmas when working with persons with disabilities. Such dilemmas may involve a person's involuntary confinement, involuntary euthanasia, involuntary sterilization, the right to treatment, the right to refuse treatment, the right to be treated as a whole person rather than just a person with a disability, and other concerns that affect individuals with disabilities on a daily basis. Practicing psychologists should recognize that Code 2.01 of the Ethical Principles of Psychologists and Code of Conduct demonstrates that multicultural disability competence is determined by the psychologist's educational background, clinical training, supervised predoctoral and postdoctoral experiences, consultation, and professional familiarity (APA, 2002b). This means that the psychologist should become comfortable with working with all aspects of human difference including disability status.

Psychologists who consider themselves to be ethical and competent professionals will obtain the necessary awareness, attitudes, and skills needed to work with all clients, especially clients from diverse backgrounds. Also, these ethical guidelines are based on the Multicultural Counseling Competencies and Standards put forth by Sue et al., (1992). Graduate training programs who wish to be accredited by the American Psychological Association must employ an attentive and logical plan to offer students in training relevant knowledge and experiences about the position of cultural differences when treating psychological issues (Committee on Accreditation, 2008). The aspect of disability is a very important characteristic of diversity and should be considered when working with all clients.

Psychologists' Multicultural Competence Pertaining to Disability

I have presented some research evidence related to the need for multicultural competence in psychologists who provide direct services to clients. Minority group membership, including those clients with disabilities, may have important implications in treatment. Historical studies conducted by Allison, Crawford, Echemendia, Robinson and Knepp (1994); Allison, Echemendia, Crawford and Robinson (1996); Kemp and Mallinckrodt (1996) demonstrated that, despite the need for multicultural disability competence and mandated ethical requirements for all psychologists, most psychologists do not have the necessary skills that are ethically required for them to work with this population. In particular, Allison et al.'s (1994) study rationale was to take action to try to obtain solutions to the many unanswered questions pertaining to multicultural training of psychologists, with special regard to the ability of psychologists to give germane and competent services to diverse clients. The study centered on training experiences when providing treatment to African Americans, Native Americans, Asian Americans, Hispanics, Blacks of Hispanic origin, individuals with diverse sexual orientation, economic disadvantage individuals, and persons with physical or sensory disabilities.

Participants for Allison et al.'s (1994) study were gathered through a mailing list of 600 American Psychological Association members who had recently completed doctoral programs in clinical, counseling, and school psychology. This list was generated from the American Psychological Association's Office of Demography, Education, and Employment Research (ODEER) in 1990. Out of the 600 protocols mailed, 288 were returned, resulting in a response rate of 48.7%. The researchers devised an instrument that asked the participants to record demographic information (e.g., gender, age, ethnic group membership, sexual orientation, physical challenge), and psychological training (i.e., classroom, practicum, and internship experiences). Researchers sent out the initial protocol to participants and gave them four weeks to complete the document. Two weeks later, a reminder card was sent to those participants who did not send back the completed document.

The sample demographics showed that 125 subjects were male, 162 were female and 1 subject did not report their gender; race and ethnic breakdown White (N=260, African American (N=10, Native American (N=1, Asian American (N=7), Hispanic (N=5), and other (N=5); 13 (4.5%) were gay, lesbian, or bisexual; 9 (3.1%) reported being affiliated with a particular religion; 6 (2.1%) said that they had a sensory or motor impairment; 234 (81.0%) participants were PhDs; 45 (15.6%) participants were PsyDs; and 10 (3.5%) had EdDs.

When reviewing the content area of training with respect to exposure to members of minority groups, 78% of subjects reported exposure and access to majority culture faculty. Exposure to African American faculty was *n* = 125 (48.3%). Participants reported having access to other minority groups about an average of 2.75%. Only *n* = 87 (34%) of the participants indicated the availability of a course focusing on the provision of services to diverse populations in their training program. Additionally, out of this group, only 65 participants took the course. The response to the question asking about whether the general graduate school course work of the subjects addressed issues relevant to diverse groups, *n* = 120 (46.3%) of the participants indicated that such materials were infrequently (41.3%) or never (5%) covered, whereas only *n* = 51 (19.7%) indicated that these topics were usually (17%) or always (2.7%) covered .

When examining the relevant training participants had received through practicum and internship experiences, just about one half (*n* = 119; 46%) of the subjects stated that their supervision for therapy cases “never” (9.3%) or “infrequently” (36.3%) tackled cultural issues, while less than one quarter (*n* = 61; 23.5%) reported that such information was “usually” (19.3%) or “always” (4.2%) present. About one third of the participants (*n* = 79; 30.5%) mentioned that the quality of the supervision that emphasized the need of services for diverse groups was “excellent” (5.8%) or “good” (24.7%); to add, 89 participants (34.4%) highlighted that such supervision was “poor” (31.3%) or “inadequate” (3.1%).

Finally, the highest level of competence regarding working with specific ethnic groups was witnessed for European American clients, with 96.5% of subjects indicating that they were extremely, or very, competent in their work with this group. However, 92.7% of respondents stated that they had some training experience working with African-American clients, but only 37.5% indicated a reasonably high level of competence working with this group. The groups that subjects reported the lowest levels of competence with were Native Americans and persons with disabilities. Only 7.7% of respondents stated that they were extremely, or very, competent working with Native Americans and 18.9% indicated that they felt competent working with persons with disabilities.

Essentially, this study shows that some psychologists can be more comfortable working with clients who share racial and ethnic backgrounds that are similar to their own. Some psychologists profess having the ability to work with all clients, but, when pressed, indicated that they have limitations working with certain groups. This study indicates that clients with disabilities are more likely to have a therapist who may not know or understand the issues that a person with a disability might face in this society. It becomes necessary for all psychologists to become more aware of the skills, knowledge, attitudes, and perceptions needed to work with this diverse group.

Allison et al. (1996) implemented this empirical exploration to decipher solutions to three central concerns:

> (a) "an examination of psychologists' self-perceived competence in providing mental health services to diverse client groups;

(b) the exploration of training variables related to this perceived competence; and

(c) the identification of characteristics of individuals who provide therapeutic services to diverse client groups (Allison et al., 1996, p. 386).

Participants for the study were gathered from the American Psychological Association's Office of Demography, Education, and Employment Research (ODEER). A randomized mailing list which included 600 members who obtained their doctorates during 1985 and 1987 in clinical, counseling, or school psychology was provided to the researchers. Approximately, 292 protocols were returned, resulting in a response rate of 49%.

Some demographics on the sample included: 56% of subjects were women, and mean age was 37.8 years *(SD* = 7.3). Psychology disciplines included clinical psychology (45% adult-clinical; 21 % child-clinical), and counseling psychology (24%). Racially and ethnically, the sample was European American *(n* = 260, 90%), African American *(n* = 10, 3.5%), Asian American *(n* = 7, 2.4%), Hispanic *(n* = 5, 1.7%), and Native American (*n* = 1, 0.4%). Types of degrees earned were PsyDs (N-45, 15%), PhDs (N=234, 80%), and EdDs (N=10, 3%).

The instrument used here was a self-designed, 48-item survey which received consultation and evaluation from the ODEER staff. The instrument contained questions which asked the participants to record data regarding their demographic background; training, consisting of all classroom, practicum, and internship experiences; current employment status; client populations served; and treatment options.

Additionally, participants were requested to report their level of competence to give clinical or counseling services to clients with diverse backgrounds. Aspects of diversity included ethnic minorities, sexual orientation, gender, physical or sensory impairment, and economic disadvantage. Participants also had to report the number of faculty and clinical supervisors from each of these diverse groups with whom they had worked with during their doctoral training.

Finally, participants were requested to discuss their supervision activities with respect to working with diverse clients and the number of diverse clients in their caseloads, and to state whether or not their program had offered a multicultural course that taught students about the provision of services for clients with diverse backgrounds. Additionally, if such a course was available, he or she had to state whether or not the participant took the course.

Independent variables used in this study consisted of the participant's ethnicity (recoded as a dichotomous variable for majority versus minority group membership), gender, the participant's self-identification as a member of a minority group defined on the foundation of a feature other than ethnicity, exposure to culturally diverse staff and faculty, the number of training therapy cases with each diverse client group, taking a multicultural counseling course, the inclusion of information on specific diverse groups in a multicultural counseling course, the extent to which diversity issues were reviewed in general, supervision, the quality of supervision that focused on human diversity issues, and the number of clients currently being seen within each diverse group. The dependent variable was the level of the therapist's cultural competence.

A series of 14 regression analyses were done and demonstrated several findings. First, the number of therapy cases during training was used to hypothesize self-perceived competence and it was a significant indicator of competence for work with 10 out of the 13 diverse client groups. Also, the number of current cases with clients in the specific cultural group was a significant predictor in regression models predicting competence with African Americans, Hispanics, gays, lesbians, and individuals with a motor impairment. Supervision activities that address specific cultural groups were a significant predictor in the regression equations for competence with clients with a sensory or motor impairment and economically disadvantaged clients. Female therapists perceived themselves to be more competent in dispensing treatment to women, and psychologists who were ethnically diverse perceived themselves to be more competent in providing treatment to European Americans and economically disadvantaged clients.

Second, the number of therapy cases that the participant of the study had during clinical training with a specific cultural group turned out to be the most recurrent significant predictor of that group's representation in the psychologist's current client caseload, and it also added significantly to the proportions of unique variance in 8 of the 14 statistical models. Self-rated competence with a cultural group was a significant indicator in the regression models for number of African American, Hispanic, gay, and lesbian clients, and for the number of clients with motor or orthopedic disabilities on the practitioner's caseload. When looking at self-ratings of competence when providing treatment to culturally diverse clients, clinicians reported the lowest levels of competence when working with Native American clients.

Third, the researchers did frequency analyses to observe the rate of psychologists who rated themselves “not competent” to work with a specific diverse population, and if they continued to provide services to that group despite the psychologist’s ability. Findings indicated that in 12% of ratings, psychologists indicated that they were not competent to provide services to diverse clients. Additionally, in 8% of these cases where psychologists did not view themselves as competent to provide clinical services to a specific client group, they reported that they continued to provide the service despite the lack of competence.

To conclude, this study showed that there continues to be a need for multicultural training when working with diverse groups. The culturally competent psychologist needs a cultural rubric to follow in order to provide comprehensive and sound services to all clients. Specifically, for the purposes of this dissertation, this study illustrated the need for disability competence among practicing psychologist. The study results indicated high levels of competence working with European American, female, and economically disadvantaged clients. Psychologists reported moderate levels of competence when working with African American, lesbian, gay, and bisexual clients. Psychologists reported having lower levels of competence when working with clients with motor or sensory disabilities, Hispanic, Asian American, Black Hispanic, and Native American clients. Psychologists who continue to treat clients from diverse groups with limited competence and do not acquire the knowledge, skills, and awareness needed may be breaching the code of conduct. An ethical psychologist would not attempt to provide treatment under these circumstances prior to gaining competence in the area of diversity of the client to be served.

Another study that dramatically underscored the relationship of competence in disability to effectiveness is summarized below. It provides significant insights concerning this area of exploration and helps to support the need for further study of competence in disability as it relates to practicing psychologists. Using a sample of mental health providers, Strike (2001) assessed the self-reported level of competence pertaining to individuals with disabilities. Strike had four research questions that she was seeking answers for and they were the following:

1. Do counselors with different levels of prior exposure to disability report different levels of competence when working with clients with disabilities?
2. Does counselors' self-reported level of competence differ among self-awareness, perceived knowledge, and perceived skills?
3. Do counselors report the highest level of competence in the competency area of self-awareness?
4. Are the results accounted for by counselors responding in an overly socially desirable manner? (Strike, 2001, pp. 95-97).

The independent variable used in this research investigation was counselors' previous experience with individuals with disabilities. The dependent variables for this project were the three cultural disability competency components of "self-awareness/beliefs/attitudes toward disability, perceived knowledge of disability and disability-related issues, and perceived skills/behaviors working with clients with disabilities" (Strike, 2001, p. 95). Additionally, Strike used the covariate of socially desirable responding which was impression management and self-deceptive enhancement.

The mental health providers used in this research investigation were psychiatrists, psychologists, social workers, career counselors, disability specialists, and other mental health providers. Demographics for this study incorporated 75 women (69%) and 33 men (31%). Racial and ethnic makeup of this sample included 96 Caucasian/White participants (89%) and 13 participants of color (12 %). This consisted of five African American/Black participants, five Asian/Pacific Islander participants, two Hispanic/Latino/Chicano participants, and one American Indian/Native American participant. The participants' years of work experience counseling clients or completing related work in the field was between one and 36 years, with an average of 12 years (M = 11.6, SD = 9.0). The highest degrees obtained by the participants were 19% doctoral level degrees, 75% master's level degrees, and 6% bachelor's level degrees. Current training levels for the participants included two participants who were counselors training in master's level programs and 64 participants who were in doctoral level programs (for a total of 61%). The rest of the sample (39%) was not presently in training (Strike, 2001).

The sample was asked to indicate their experience with working with persons with disabilities. In this sample, 99% of the sample indicated that they had experience working with persons with disabilities. The disability types reported by participants were: mental health or psychiatric conditions (96%), chemical/alcohol dependency (89%), learning disability, Attention Deficit Disorder, or Attention Deficit Hyperactivity Disorder (89%), deaf or hard of hearing (54%), mobility or orthopedic impairments (53%), blind or visual impairments (49%), and other disabilities (19%). The other types of disability categories indicated by some participants included systemic conditions or chronic illnesses, traumatic brain injury, and developmental disabilities or mental retardation (Strike, 2001).

The study examined personal experience with disability in general. Participants reported that 12% indicated that they had a disability, 22% reported having a medical condition (not a disability), and 55% stated that they do not have a disability or a medical condition. Other information gathered in the study was interpersonal experience with disability. Results showed that 48% specified that a family member or personal friend has a disability, and 53% responded that an extended family member, coworker, or general acquaintance had a disability. Regarding disability training, 6% of the sample reported that disability training was the focus of all, or most, of their coursework, and 56% reported that information on disability concerns was discussed in classes, seminars, or workshops that the respondent attended. When reviewing the participants' work experience, 66% reported recent work experience with clients with disabilities (0 to 5 years), and 44% reported past work experience working with clients with disabilities (more than 5 years) (Strike, 2001)}.

Strike (2001) provided a significant breakthrough in the study of this area by proposing core areas of competencies in the area of disability. I utilized the assessment tool as developed by Strike to measure these core areas in practicing psychologists. Strike reviewed Perceived Competence by evaluating three core areas, which originated from the Multicultural Counseling Competencies and Standards (Arredondo et al., 1996; Sue et al., 1992) and the minority model (Hahn, 1985). These core areas were

Self-Awareness, Perceived Knowledge, and Perceived Skills. In this research study, Self-Awareness was described as the research sample introspective comprehension of the impact of having a disability compared to not having a disability. Four examples out of the 20 items contained in the survey were: “I have respect for people with all types of disabilities”; “If I had a different disability status (disabled or nondisabled) than my clients, it would impair our working relationship”; “I believe people with disabilities are stigmatized in society”; and “I have thought about how worldviews are influenced by disability status (disabled or nondisabled)” (Strike, 2001, p. 75).

Perceived Knowledge incorporated a universal comprehension of factual knowledge about topics related to disability. Four examples out of the 20 survey items from this section consisted of, “I understand terms used in the ADA, Americans with Disabilities Act, of 1990 (e.g., "reasonable accommodation ")”; “I understand terms used in the disability community (e.g., ableism, disability culture)”; “I can state the educational significance of Section 504 of the Rehabilitation Act of 1973”; and “It is unfair to accommodate college students with disabilities by treating them differently than their peers (e.g., extra time)” (Strike, 2001, p. 78).

The Perceived Skills section of the scale was designed to tap into the abilities and behaviors sought after in counselors who may work with clients with disabilities. Strike (2001) proposed that these items on the survey were intended to express attempt on the part of the counselor to be accessible to clients with disabilities. Four examples out of the 20 survey items from this section are: “I know how to determine if a DSM-IV diagnosis is a disability”; “I could take a client's disability into account when interpreting the results of assessment instruments”; “I know how to write letters documenting how disabilities affect clients in their work/academic environments"; and "If I had a new client with a disability, I would hypothesize that adjusting to the disability is a problem" (Strike, 2001, p. 82).

Statistical procedures for this study indicated that a multivariate test using Hotelling's t statistic was used to determine whether the independent variable, *group membership*, matters when measuring the overall disability competence of counselors (Strike, 2001). In answering Research Question 1, Strike witnessed a significant relationship between group membership (Experienced Group 1 counselors and Not Experienced Group 2 counselors) and overall competence was designated by (F(3, 104) = 16.346, p < .0001). This means that the more disability-experienced group reported greater disability competence compared to the less disability-experienced group (Strike).

To answer Research Question 2, Strike (2001) executed three univariate t-tests to compare the group means in each competency area. The Bonferroni procedure was administered to control the overall alpha level at .05; and therefore, Strike positioned the alpha level for each t-test at .0167. In addition, The Welch-Satterthwaite solution was implemented to allow for unequal variances. Results showed significant differences between the groups for Self-Awareness (t(106) = 4.026, p < .0001) with a mean difference of 6.57, Perceived Knowledge (t(106) = 6.776, p < .0001) with a mean difference of 15.90, and Perceived Skills (t(38) = 4.846, p < .0001) with a mean difference of 18.44 (Strike). These results substantiate the relationship between group membership and overall disability competence witnessed in Research Question 1. Additionally, these results took into account the unequal variances using the Welch-

Satterthwaite solution (Strike). Overall, these findings indicate that each of the three disability competency areas (Self-Awareness, Perceived Knowledge, and Perceived Skills) were established to add to the observed difference in groups' overall competence in working with clients with disabilities. The difference among the more-experienced group's scores and the less-experienced group's scores was greatest for Self-Awareness, followed by Perceived Knowledge, and lastly by Perceived Skills (Strike).

To answer Research Question 3, Strike (2001) did three Bonferroni paired t-tests to find out the significance of differences between each combination of the Self-Awareness, Perceived Knowledge, and Perceived Skills disability competencies. Additionally, Strike reported the means for each of the disability competency subscales of the CCDS for the entire research sample. Findings procured by Strike demonstrated significant differences between Self-Awareness and Perceived Knowledge ($t(107) = 9.152$, $p < .0001$), between Self-Awareness and Perceived Skills ($t(107) = 12.776$, $p < .0001$), and between Perceived Knowledge and Perceived Skills ($t(107) = 7.638$, $p < .0001$).

Strike (2001) reported the means for the subscales as Self-Awareness ($M = 88.63$), Perceived Knowledge ($M = 80.56$), and Perceived Skills ($M = 73.41$). All subscales scores ranged from 20 to 120 with a higher score indicative of more disability competence. Overall, these findings suggest considerable differences between each pair of disability competencies (Self-Awareness and Perceived Knowledge, Self-Awareness and Perceived Skills, and Perceived Knowledge and Perceived Skills). The more disability-experienced group and the less disability-experienced group both accounted for higher competence in Self- Awareness, followed by Perceived Knowledge, and then by Perceived Skills.

To answer Research Question 4, Strike (2001) evaluated the sample by using T-scores of socially desirable responding using measures for the Impression Management (IM) and Self-Deceptive Enhancement (SDE). She further reexamined Research Question 1 with social desirability as a covariate. Strike implemented a MANCOVA statistical procedure, and determined that the relationship between group membership and competence was establish to be significant ($F(3, 102) = 15.963$, $p < .0001$) as demonstrated in previous statistical analyses. When looking at social desirability factors, no relationship was seen between either IM and overall competence ($F(3, 102) = .575$, $p = .632$) or SDE and overall competence ($F(3, 102)$ .952, $p = 419$). Results demonstrated that 95% of the sample did not answer the survey questions in a socially desirable way consistent with either Impression Management or Self-Deceptive Enhancement (Strike).

This research investigation indicated that counselors with more experience in working with persons with disabilities report more disability competence in the areas of self-awareness, knowledge, and skills. These elements of disability competency are needed to work more effectively with clients with disabilities. Therapists and/or counselors must be able to accurately report their abilities and traits when working with clients from diverse backgrounds and those diverse backgrounds include persons with disabilities. When working with clients, therapists may not always be apprised of the presence of disability (hidden disability) or the client may have a disability, but may not consider himself or herself to have membership in this minority group (Strike, 2001). Thus, it becomes important for therapists to become more familiar with the social and cultural implications of disability and garner the tools and resources needed to work effectively with this minority group.

Another related study that illustrates the powerful influence of competence or the lack of perceived competence in psychologists was conducted by Leigh, Powers, Vash and Nettles (2004). They conducted an anonymous research investigation via the Committee on Disability Issues in Psychology (CDIP), an American Psychological Association committee. This committee developed and implemented a task force to determine the self-perceived competence and barriers to providing psychological services to individuals with disabilities. The model used a sample that included psychologists with and without disabilities. The second aim of the CDIP was to attain illustrations of bias faced by clients with disabilities and examples of sensitivities shown by therapists (Leigh et al., 2004).

The sample of participants (*N* = 1,179) included members of the American Psychological Association who designated themselves as clinical psychologists (55% of the returned protocols), neuropsychologists (10% of the returned protocols), and rehabilitation psychologists (7% of the returned protocols). Approximately 481 completed research protocols were received for analysis resulting in a response rate of 41%. The sample was made up of 40% of women and 60% of men. Other demographics assessed were that 93% had doctoral degrees; 7% indicated that they were members of an ethnic minority; 5% ascribed themselves to be gay, lesbian, or bisexual; 72% of the participants were between the ages of 41 to 60; and 80% stated that they had been practicing psychologists for at least 10 to more than 20 years.

Participants' theoretical orientations were listed as cognitive (32%), eclectic (22%), behavioral (17%), and psychodynamic (8%).

With respect to the aspect of disability, 301 subjects indicated that they did not have a disability; four subjects did not indicate disability status at all; and 176 (37%) had a disability. Out of the 176 subjects with disabilities, 7% indicated that they were blind/visually impaired, 18% specified that they were deaf/hard of hearing, 37% stated that they had a physical/orthopedic disabilities, 9% indicated that they had a learning disability/cognitive, 1% said that they had a mental disability, 9% denoted having multiple disabilities, and 18% marked "other" with respect to disability type (Leigh et al., 2004).

For this study, Leigh et al. developed an instrument to identify a number of data sets, including demographic information, experience with knowledge of disability-related barriers, including funding and legislative policies for persons with disabilities, personal and professional experience with disability training, and what service-related improvements are needed for this minority group (Leigh et al., 2004). To calculate the data for this study, the number and percentage of participants with and without disabilities who indicated a marking for at least one response option in the barriers, success factors, and support needs sections were calculated. The statistical analysis used here was the difference of proportions tests to further assess the null hypothesis. This stated that the proportion of nondisabled respondents endorsing each item within each category was not different from the proportion of those with a disability endorsing that particular item. Additionally, a two-tailed level of significance for Z was utilized (Leigh et al., 2004).

Results indicated that there are some barriers present in service delivery to people with disabilities. They are: lack of funding for services (i.e., providing translation services for hearing impaired clients and unavailability of text telephones; TTYs), lack of accessibility for persons with disabilities (conducting psychological testing with instruments that do not consider a person's visual impairment), and lack of disability-related expertise (i.e., not knowing the sociopolitical climate for persons with disabilities in the United States). Hearing loss was stated by 45% of the participants with and without disabilities as the most arduous disability type to serve. Participants with disabilities were considerably more likely to indicate that speech impairment, learning or memory problems, and movement disorders as types of disabilities that would present barriers to treatment. In contrast, psychologists without disabilities were significantly more likely to report that clients with visual impairment were more difficult to serve. A total of 31% of participants who did not have a disability reported that the most frequent funding barriers in their practice is the lack of a sliding fee scale, participants' not accepting Medicare or Medicaid, and a limited, or no, pro bono program when working with clients with disabilities. These participants are probably accustomed to working with clients from a higher socioeconomic background. Clients with disabilities usually have lower socioeconomic status and require programs with governmental or nonprofit support in order to receive psychological services (Leigh et al., 2004).

Researchers established that psychologists without disabilities (35%) believed their level of competence and training for working with individuals with disabilities was ample, when contrasted to the psychologists with disabilities. The researchers hypothesized that this inconsistency is likely the consequence of the psychologists' without disabilities ignorance of their need for additional training and support regarding this diverse population. However, psychologists with disabilities point out that they did require additional training and support when providing services to individuals with disabilities, especially disabilities with which they are not readily familiar. Participants with disabilities were more likely to seek resources to advance accessibility (34% persons with disabilities compared to 66% without disabilities), attain information with reference to disability services (35%), develop approaches to improve services (26.1%), and seek training related to serving persons with disabilities (24%).

Additionally, Leigh et al. (2004) highlighted that, in this study, there are sensitivity biases that occur when working with persons with disabilities. Only 160 participants out of 481 reported incidents of bias and inappropriate treatment to clients with disabilities. In addition, 15 participants reported no bias observed during their practice. The bias incident reported most frequently by survey participants (39 participants) was misdiagnosis. This means that survey participants provided the researchers with examples of clinician error in understanding the disabilities of their clients or error in the psychological interpretation of a physical difficulty attributed to a disability. Also, participants reported biases associated with the mishandling of psychological assessments or misinterpretation of test results (19 participants), providing incompetent psychological treatment (25 participants), displaying discriminatory or unethical conduct (21 participants), and communicating an unwholesome mind-set (13 participants). The remaining sample (43 participants) reported vague, unspecific, or multiple-bias cases (Leigh et al., 2004).

Some specific examples of bias during the treatment process included:

"A deaf woman was diagnosed as having schizophrenia by a mental health agency because she flailed her arms around; she was signing." Another respondent indicated that a child with hearing impairment had been misdiagnosed with mental retardation. With regard to test interpretation, a respondent reported that a provider administered a short version of the Minnesota Multiphasic Personality Inventory and did not take into consideration how disability might affect some responses such as "I have difficulty standing or walking." Other examples of bias described by respondents included providers' not using an interpreter and provider refusal to treat persons with disabilities" (Leigh et al. 2004, pp.51-52).

Disability training for psychologists who work with clients with disabilities could be helpful to avoid providing inadequate services. When asked about disability training offered by their professional psychological association, survey participants reported that 49% of them said that they did not know if the association offered this type of training, 33% of participants said their local psychological association did not offer disability training at all, and 18% said their association did offer disability training (Leigh et al., 2004). The resistance of psychologists without disabilities to acquiring knowledge or improving deficiencies regarding local, state, and federal disability resources and training opportunities continues to be one major way to further provide clinical harm to persons with disabilities.

In this study, researchers commented that the psychologists with disabilities have better insight into the lack of training for providing services to individuals with disabilities in the field of psychology. This study shows that disability issues can be enormous during the therapeutic process; and therefore, should be studied before entering into the therapeutic room. Again, this study supports the need for additional research in the area of disability competence for all practicing psychologists in the United States.

Further study in support of my area of interest was conducted by Hunt, Matthews, Milsom, and Lammel (2006). Their investigation was designed as a phenomenological qualitative study to evaluate perceived therapist's competence regarding working with individuals with disabilities. The sample (N=25) comprised clients who were lesbian women with physical disabilities. These women were recruited from announcements on local and national electronic mailing lists dealing with topics related to lesbians with physical disabilities, from flyers given at two national professional counseling conferences, and from personal contacts with persons and organizations who serve the concerns of this group (Hunt et al., 2006).

If a woman was interested in participating in the study, she contacted the researchers, and an interview was scheduled with one of the researchers. Demographics on the participants indicated that all the women in the study were White, participants represented all regions of the country, and mean age was 40 years, ranging from 24 to 57. Physical disabilities of the participants ranged from rheumatoid arthritis, lupus, and ulcerative colitis. At the time of this study, most of the participants were not working, and it was attributed to their disability and not lack of vocational desire (Hunt et al., 2006).

Data was collected over a time span of 16 months. Researchers conducted individual interviews with each participant. Participants were asked about their experiences with their therapist concerning the therapist's handling of issues associated with the client's physical disability and sexual orientation (Hunt et al, 2006).

Results from this research investigation depicted nine central themes. Five major themes involved the participants' perception of their therapists: (1) general satisfaction or dissatisfaction, (2) therapists' general effectiveness, (3) therapists' awareness and education regarding sexual orientation and/or disability, (4) discrimination and bias, (5) and therapist identity. Three themes were associated with the participants' attempts to negotiate the therapeutic process: (1) coming out or self-disclosure, (2) self-advocacy, and (3) accessibility/accommodations. The last theme concerned depression.

One of the most important themes was a rating for the therapists' knowledge regarding disabilities in general. The clients in this study rated their therapists' knowledge of disability concerns as inadequate. In general, the participants of this study rated their therapists as inept.

Hunt et al., (2006) also showed that participants wanted therapists who use a multidimensional viewpoint when conducting psychotherapy and are not focused on sexual orientation or disability status as the defining attribute of the client. Clients wanted to be viewed as individuals. Clients with disabilities wanted to have counselors who are able to use their clinical skills to recognize whether or not their presenting issue in therapy relates to their disability or another characteristic attributed to identity.

Finally, it is imperative to mention that the psychologist's attitude towards the referent group adds to the therapist's competence in working with the referent group. Nathanson's (1979) study further supports the above-mentioned conceptualization of disability held by both therapist and client. This study discussed seven syndromes that can transpire during therapy between the therapist and client due to negative attitudes and perceptions held by the therapist. Nathanson's study examined designations encompassing psychologists, career counselors, rehabilitation counselors, and social workers. The syndromes are as follows:

1. The All That Matters Is Your Label Syndrome:

This occurs when the therapist believes that the client should be defined by his or her disability label, instead of the client's defining his or her specific need for therapy. The disability may or may not be related to the client's presenting issue in therapy. Furthermore, the client with a disability may not consider his or her disability as the most salient and defining characteristic of their personality.

2. The Feel Sorry For You Syndrome:

This takes place when the therapist is working from a perspective of pity with the client, rather than using clinical skills to work through the client's presenting issue. Nathanson (1979) suggested that the therapist thinks that the life of a client with a disability is onerous, painful, and frustrating. These beliefs by the therapist could be unintentionally transmitted to the client via voice tone or facial expressions.

3. The Don't Worry, I'll Save You Syndrome:

This happens when the therapist begins to assume a paternal role, because the therapist thinks that the client needs help or assistance. Nathanson (1979) stated that the therapist develops a need to protect the client because the therapist is uncomfortable with watching the client struggle during psychotherapy. As a result, the therapist liberates the client from the therapeutic difficulty in order to satisfy the therapist's personal tribulation when conducting therapy with this client (Nathanson).

4. The I Know What's Best for You Syndrome:

In this situation, the therapist has more power in the therapeutic relationship. The therapist utilizes his or her power in therapy to discourage goals of the client. This happens because the therapist believes that the client is unable to accomplish goals because of the therapist bias to the client's abilities. The therapist can see only the disability, and not the client's abilities (Nathanson, 1979).

5. The If I'm Lucky, You'll Miss Today's Appointment Syndrome:

In this case, the therapist is quite uncomfortable with the client with the disability. He or she might feel antipathy about the disability in question and want to avoid the process all together. Therefore, during therapy, the therapist might demonstrate reduced levels of empathy and patience (Nathanson, 1979).

6. The I'm Amazed by Your Courage Syndrome:

This happens when the therapist overdoes the significance of the client's accomplishments. In actuality, the therapist truly believes that the client could not really accomplish the task at hand. When the client does so, the therapist utters very disparaging comments. For instance, the therapist may say that "it is quite remarkable that you did this, or how did you overcome your disability despite numerous obstacles" (Nathanson, 1979).

7. The Who's More Anxious, You or I? Syndrome:

This ensues when the therapist believes that the client causes stress and anxiety to the therapist (Nathanson, 1979). These emotions of anxiety may develop from the therapist feeling unable to handle the complexities of the client's disability. This could be further exhibited by the therapist's talking rapidly and loudly or speaking too much during the session (Nathanson).

In the field of psychology, multiculturalism is a significant element (Pederson, 1999), and disability competence is an essential issue (Olkin, 1999b). More recently, studies done by Peterson (2008), Hollimon (2007), Stanhope et al. (2005), Pledger (2003), Olkin (2002), Olkin (1999b), and Strike (2001) depict the same result with respect to disability competence among psychologists. Olkin (2002) stated that contemporary research concerning individuals with disabilities shows that the field of psychology has been unable to effectively tackle disability issues. Olkin's writings denote the importance of graduate psychology training programs to strengthen the amount of curricular content and experiences dedicated to disability related topics. Also, these graduate training programs need to address how these disability-related topics could impinge on the counseling relationship. Finally, Olkin urged that graduate training programs in psychology make their programs more accessible to graduate students with disabilities.

When I reviewed these studies, it became clear to me that some therapists may need to obtain multicultural disability competence to work effectively with this minority group. The psychologist's multicultural competence can foster the establishment of rapport in therapy, the development of the working alliance in therapy, the involvement of both the therapist and client in therapy, the client trust in the therapeutic process, client's affective experiencing and insight, and client satisfaction with therapy (Fuertes et al., 2001).

Pedersen (1988) and Peterson (1997) stated that, if the therapist lacks multicultural disability competence, some significant issues could arise. These include: limited establishment of rapport between client and therapist, client or therapist hostility, and client's noncompliance with treatment goals may arise in therapy. Therefore, it becomes crucial to assess the psychologist's level of multicultural disability competence when working with persons with disabilities. In addition, assessing the level of the psychologist's disability competence can further aid one's ability to provide complete treatment to clients, educate early-year practitioners, and assist supervisors with providing comprehensive supervision to supervisees.

Attitudes Toward Individuals with Disabilities

Multicultural counseling literature specifies that the clinician's attitude towards individuals with disabilities can manipulate the therapeutic process (Fouad & Arredondo, 2007; Pope-Davis, Coleman, Ming & Toporek, 2003; Sue, 2001; Pope-Davis & Coleman, 1997; Sue et al., 1992). It is not enough to just acquire training and skills regarding this group (Hollimon, 2007). There is a level of education, training, and introspection required to extend the clinician's attitudes, knowledge, and skills related to individuals with disabilities (Hollimon, 2007; Leung, 2003). Understanding the convictions held by members of the majority group about various cultural minority groups is denoted as one of the major facets of having cultural competence (Hollimon, 2007; Sue, 2001; Sue and Sue 1999; Sue et al., 1998; Sue et al., 1992; Sue et al., 1982).

A review of the literature resulted in Livneh's (1988) classifying 12 prospective origins of negative attitudes towards individuals with disabilities. These perspectives can be easily understood in five dimensional categories which are listed below:

Category 1: Sociocultural Psychological Sources of Negative Attitudes

This dimension begins with early childhood. During this phase, the development of social mores, cultural norms, psychodynamic, and personal experiences occur. The media, parents, and peers are the essential foundations for the development of prejudicial attitudes, as specified by social learning theories (Weiten, Lloyd, Dunn & Yost- Hammer, 2009; Gardner, 2002; Anderson, 2000). Children are not born to dislike members from a particular minority group, they are conditioned by forces in their environment to learn which groups are desirable and which groups are not desirable. Social learning theory states that children are taught about the world through making observation of others in their environment (Weiten et al., 2009; Gardner, 2002; Anderson, 2000).

Additionally, Rohan and Zanna (1996) established that, when they looked at the value profile of the parent with respect to status of minority groups, they found that it closely aligned with the value profile of the child. This child value profile matched that of the parent, even when the child became an adult. Livneh (1988) stated that some additional cases in point regarding societal control on attitudes consist of stressing the importance of health, physical beauty, and personal attainment.

In addition to these ideas, in the United States' culture, a person's sexual interests and sexual behavior are further shaped and controlled by an individual's health, personality, family, media, friends, peers, and teachers. When observing different forms of the media depicting sexuality, people with disabilities are never shown as engaging in a healthy sexual lifestyle. For the most part, the media will demonstrate beauty and sexuality in those individuals with healthy, in-shape bodies and no apparent signs of physical or mental abnormalities. So, in the eyes of society, a person with a disability is not considered to be a true sexual being (Anderson, 2000).

Category 2: Affective-Cognitive Sources

This dimension involves the emotional reactions people without disabilities may encounter when coming face-to-face with a person with a disability that may consist of physical deformities or psychological disorders (Savage et al., 2004; Olkin, 2002; Anderson, 2000; Linton, 1998; Siller, Chipman, Ferguson & Vann, 1967). This dimension may induce feelings in the person without a disability that what they see could happen to them (Livneh, 1988). So, the cognitive reaction to such a realization by the person without a disability is to blame all persons with disabilities for their condition in hopes that such a disability never happens to the person presently without a disability (Livneh).

Category 3: The Conscious-Unconscious Dimension

This dimension is indicative of the fact that the person without a disability may have conscious and unconscious reactions to persons with disabilities. First, the person without the disability may undergo a conscious process of attitude development, in which he or she may designate responsibility of the cause of the disability to the person with the disability. Secondly, the person without a disability may experience an unconscious process that may cause the person without the disability to have fear or anxiety about their own physical loss or death as a result of being around a person with a disability (Livneh, 1988).

Category 4: The Differentiation of Attitudinal Origins Stemming from Past Experience from Present Situations

This dimension involves early teachings of moral, cultural, and social convictions associated with disease and illness. Disease is viewed as a castigatory action for earlier sins if the person is religious or as an ancestral transgression. Because these early experiences are then compared with present-day encounters, the person without a disability may have fear of associating with persons with disabilities. This fear could be further augmented by a fear of censure from peers without disabilities for giving sympathy towards a person with a disability. Therefore, the person without a disability is taught to fear disease and to disassociate from others that may have disease. This can result in mocking and ridiculing the person who is afflicted with the disease (Livneh, 1988; Brogdan, 1992).

Category 5: The Attitude Development from Internal Versus External Sources

This dimension indicates that the internal factors consist of demographic features such as gender, age, race, and ethnicity (Livneh, 1988). To further clarify this point, female observers without disabilities are more likely to have more positive attitudes towards individuals with disabilities, compared to male observers without disabilities (Livneh 1998; Hollimon, 2007). External factors are comprised of such aspects as disability type, views on employment, and social involvement (Livneh).

These behaviors could result in persons without disabilities having prejudice towards persons with disabilities, because they think that this group may not want to work or participate in social activities (Livneh). In this dimension, the person with the disability is at fault, and not the barriers in the environment that would prevent the person with a disability from participating in these social activities (Livneh, 1988; Smart & Smart, 2006).

Consequently, it is possible for individuals with disabilities to be part of society if the person assigned to help them in a therapeutic process feels comfortable and positive about this referent group (Levack, 2009; Wong, Chan, Cardoso, Lam, & Miller, 2004; Hollimon, 2007). A culturally competent therapist will evaluate for the client's cultural differences and determine how these differences may or may not impact the therapeutic process. It is imperative for the therapist to understand the client in a broad cultural context when working on therapeutic goals and interventions.

Attributions are inferences made by individuals to describe their perceptions of things, objects and behaviors (Hollimon, 2007). In trying to understand the causes for what happened, we begin to plan our response. Affect and anticipation have vital positions in deciding consequent behavior.

Attributional analysis has been used to evaluate decisions to help a person in need. The decision to help could depend on the perceived cause of the need for help. For instance, if help is needed but the person who requires the help is not viewed positively, then anger may increase, and assistance may not be given. In contrast, if help is needed because the person is viewed to possess low ability or has external barriers, then pity and positive social responses are created, resulting in help being given to the person in need (Weiner, Perry & Magnusson, 1988).

Responses to social stigmas are also open to the attributional analysis (Weiner, Perry & Magnusson, 1988). Historically, the word "stigma" developed from the Greek practice of branding slaves who were captured while trying to escape from their masters. The brand was denoted as the letter F, which represented the person's being a fugitive. The word for such a brand was "stigma" (Funk, 1950; Weiner et al., 1988). Therefore, the word "stigma" was extended to include any sign of observed conditions that deviated from the normal group (Levack, 2009; Jones et al., 1984).

In addition, Goffman (1963) reported that stigmas include "abominations of the body…blemishes of individual character inferred from a known record of, for example, mental disorder, imprisonment, addiction…and tribal stigma of race, nation, and religion…" (Goffman, 1963, p.4). Stigmas are viewed as undesirable, and symbolize pessimistic outcomes or unnecessary effects (Weiner et al., 1988; Levack, 2009).

Wright (1983) discussed the fact that people with physical disabilities frequently inquire about existential attribution in questioning why the disability happened to them. This type of questioning occurs because the person with the disability feels stigmatized as a result of the disability and the treatment received (Wright, 1983; Levack, 2009; Olkin, 2002; Hollimon, 2007). This type of questioning takes place in all disability groups, and must occur in order to maintain true psychological health (Weiner et al., 1988).

The word stigma is heavily linked to one's attitude regarding a referent group. For this dissertation, I will define the word "attitude" by using statements proposed by

Antonak and Livneh (1988). They proposed that the word "attitude" has a multidimensional conceptualization. This conceptualization states that an attitude is a formal thought with great emotional context that causes an individual action(s) to a specific cluster of social dilemmas (Antonak & Livneh).

Fundamentally, an attitude is an assessment of an object with respect to attribution dimensions which Ajzen (2001) stated consist of "good-bad, harmful-beneficial, pleasant-unpleasant, and likable-dislikable" (Ajzen, 2001, p. 28). The person's individual attitudes and perceptions about the specific object are comprised of the actions, convictions, and outcomes of the attributions in question (Ajzen, 2001; Kelley & Michela, 1980). The person's level of conviction about an object can affect his or her behavior towards the object. Similarly, these attitudes can further manipulate the perception of the object which then controls the beliefs about the object (Ajzen, 2001; Marsh & Wallace, 2005; Hollimon, 2007).

When looking at the classification of disability, attribution theory demonstrates that causes of disability have historically been associated with attitude construction regarding individuals with disabilities (Arokiasamy, Rubin & Roessler, 1995). The type of convictions held by individuals without disabilities towards individuals with disabilities is one of the most significant factors that persuade attitudes in the general population regarding this minority group (Levack, 2009; Hollimon, 2007; Smart & Smart, 2006; Olkin, 2002; Strike, 2001; Basnett, 2001; Hunt & Hunt, 2000; Maras & Brown, 1996; Yuker, 1994; Yuker & Block, 1986; Yuker et al., 1970; Yuker, Block & Younng, 1966; Yuker et al., 1960). Negative attitudes held by persons without disabilities towards persons with disabilities are developed from cognitions that the individual with the disability is either totally or partially to be blamed for having the disability (Levack, 2009; Hollimon, 2007; Smart et al., 2006; Olkin, 2002; Strike, 2001; Basnett, 2001; Hunt & Hunt, 2000; Maras & Brown, 1996; Yuker, 1994); Livneh, 1988; Livneh & Sherwood, 1991; Yuker & Block, 1986; Yuker et al., 1970; Yuker et al., 1966; Yuker et al., 1960).

Additionally, Weiner (1995) further suggested that people without disabilities try to localize responsibility for the occurrence of the disability. In general, humans create attributions regarding the etiology and the controllability of the situation in question (Hollimon, 2007; Weiner, 1995). The explanation is such that if the individual has, or had, power over the cause of the situation, then the individual is deemed to be responsible (Hollimon, 2007; Weiner, 1995). In contrast, when the cause of the situation is associated to forces outside the individual's power, then the individual will not be deemed responsible (Hollimon, 2007; Weiner, 1995). These causal attributions could influence the convictions about the individual's responsibility for causing his or her disability (Hollimon, 2007; Weiner, 1995).

If the person who has a disability is considered responsible for the disability by the society, members of the majority group may exhibit a negative view of that person. As a result, the person with the disability may be held responsible for the consequences of the disability. This trend toward placing responsibility for disability on the person was witnessed in American society with persons with alcohol and substance abuse problems. In the mid-1990's, the Social Security Administration stopped issuing Social Security Disability benefits to individuals who submitted benefit claims for alcohol and substance abuse. These disability categories were seen as self-inflicted disabilities, and subsequently blamed on the person(Weiner, 1995). In addition, Corrigan, Markowitz, Watson, Rowan and Kubiak (2003) indicated that having these convictions could result in the person without a disability's engaging in very discriminatory and unethical acts. These acts might include withholding needed assistance to persons with disabilities, totally avoiding contact with persons with disabilities, acts of coercion toward persons with disabilities, and segregation of persons with disabilities in the community.

Finally, research conducted by Weiner et al, (1988) revealed that the degree of willingness to help, and of anger and pity held by the person without a disability toward the person with the disability, was mediated by the attribution of controllability of the resulting disability. This research study showed that physical disabilities were viewed as not controllable, and resulted in an increased willingness to help, a feeling of minor anger, and an increased level of pity from persons without disabilities towards individuals with disabilities. On the other hand, mental illness or behaviorally related disorders like alcoholism or substance abuse were viewed as controllable and resulted in less willingness to help, increased levels of anger, and a decreased level of pity from people without disabilities towards persons with disabilities (Weiner et al., 1988). To conclude, it is vital to highlight that based on attribution theory, attitude creation toward individuals with disabilities is directly associated with the attributions nexus to the cause of the disability (Hollimon, 2007; Smart & Smart, 2006; Weiner, 1995; Weiner et al., 1988; Batson, 1975).

Level of Comfort With Disability

The previous review discussed the fact that negative attitudes about individuals with disabilities are created in a society that is predominantly able-bodied. Anderson

(2000) also discussed the fact that the media portrays individuals with disabilities in a less than desirable position and, therefore, adds to negative attitudes and perceptions of individuals with disabilities. At times, these media images may result in persons without disabilities viewing persons with disabilities as sick, pitiful, or even a social hindrance (Warren, 1985; Anderson, 2000; Olkin, 2002; Savage et al., 2004; Hollimon, 2007).

Research findings procured by Gething (1991) illustrated that persons without disabilities reported numerous individual feelings of distress, apprehension, and uneasiness when in the presence of an individual with a disability. It could be further said that the emotional anxiety felt by a person without a disability may happen as a result of the desire to stare, being curious, or not knowing how to act appropriately when coming face-to-face with a person with a disability (Gordon, Lam & Winter, 1997; Hollimon, 2007; Olkin, 2002). The person with the disability is viewed as an object and is assigned a label of shame, pity, charity, ridicule or mockery. Berry and Jones (1991) showed that the individual's feelings of anxiety when in contact with an individual who has a disability can cause the person without a disability to engage in avoidant behavior.

Hirschberger, Florian and Mikulincer (2005) studied death anxiety, and tried to decipher whether or not it was connected to emotional reactions such as avoidance by persons without disabilities towards persons with disabilities. The study indicated that, when thoughts associated with death were introduced in female research subjects, they were more inclined to convey increased compassionate responses towards individuals with disabilities (Hirschberger et al., 2005). On the other hand, when cognitions associated with death were induced in male research subjects, they became emotionally disconnected and reported less compassion for individuals with disabilities (Hirschberger et al.).

The research demonstrated that people without disabilities are apt to avoid individuals with disabilities because, in general, a person's disability is a constant reminder to the person without a disability of the possibility of acquiring a disability. This study further showed that the reminder of death or one's mortality is a considerable dynamic when reviewing emotional reactions to individuals with disabilities (Hirschberger et al., 2005).

Persons without disabilities respond in such a manner because they fear acquiring a disability. Disability is considered something negative to possess and; therefore, it is avoided or seen as a negative occurrence (Savage et al., 2004; Hollimon, 2007). According to Park, Faulkner & Schaller, 2003, there is a natural tendency for people without disabilities to employ a disease-avoidance pattern in order to not become infected or contaminated with the condition.

Park et al., noted that disease has traditionally been coupled with disability, and so they developed the disease-avoidance model. People viewed physical disabilities and/or visible deformities as the consequence of a genetic or contagious disorder. This type of thinking of people without these conditions caused them to isolate themselves from individuals with these disorders (Park et al., 2003). Some examples of such disabling conditions that were treated in this manner in American history are leprosy, tuberculosis, deafness, blindness, mental illness, and developmental disabilities (Arokiasamy et al. 1995; Anderson, 2000).

Yuker (1965) categorized two dimensions of attitudes toward individuals with disabilities, which include: (1) acceptance or rejection, and (2) prejudice or lack of prejudice. The first dimension, acceptance of individuals with disabilities, consists of the readiness to relate to the individual with the disability. The second dimension, prejudice, incorporates the propensity to recognize people based only on a specific category. An example in this category is having membership in a specific minority group like individuals with disabilities (Yuker). Yuker further noted that, while people can be accepting of persons with disabilities, the same people can display prejudice by placing an individual into the classification of a minority group.

Therefore, it becomes important to study persons with disabilities as a marginalized minority group that experiences stigma and prejudice. This minority group requires trained mental health professionals to provide the skills, awareness, and attitudes necessary to serve them adequately. From this review, we can see how the origin of discrimination and separation occurs between persons with and without disabilities. As mental health providers, it is our social calling to try to heal the wounds of this minority group!

Continuing Education for Licensure in Psychology

Studies performed by Hollimon (2007), Berry (2005), and Strike (2001) stated that multicultural disability competence is a clinical issue that must be addressed among psychologists. The debate over whether or not continuing education credits need to be mandatory has occurred many times (Sharkin & Plageman, 2003; DeGroot, 1994; VandeCreek & Brace, 1991; VandeCreek, Knapp, & Brace, 1990; Hellkamp, Imm & Moll, 1989). This debate is about whether or not all practicing licensed psychologists in the United States should be instructed to have continuing education credits as a way to monitor the implementation of up-to-date clinical practice to clients with psychological problems. Clients should be assured that their psychologist is current and knowledgeable in the present techniques that could assist in addressing their psychological issue.

Mandatory continuing education credits for relicensure is a requirement in 41 states and the District of Columbia (Sharkin & Plageman, 2003). In 2003, the only states that did not require mandatory continuing education credits for renewal of a psychological license are Colorado, Connecticut, Hawaii, Illinois, Michigan, New Jersey, New York, North Carolina and South Dakota (Sharkin & Plageman, 2003). However, none of the states that have a mandate for continuing education credits for a renewal of a psychological license include the additional requirement for some credits to address disability related concerns. The need for continued education in this area is something that should be considered for future research.

As of 2003, each state that had a mandate for continuing education credits for renewal of a psychological license differed on the amount of credits needed. Information regarding these requirements in all 50 states and the District of Columbia can be obtained from the Handbook of Licensing and Certification Requirements for Psychologists in the United States and Canada (Association of State and Provincial Psychology Boards, 2002; Sharkin & Plageman, 2003). At that time, each state had a different prerequisite regarding the number of continuing education credits needed for renewal of the psychological license (Sharkin & Plageman, 2003). The prevalence among most states was 20 to 40 credits every two years (Sharkin & Plageman).

However, Sharkin and Plageman stated that there were some states that called for more than 40 credits every two years (Utah requires 48, Oregon requires 50, Arizona and Vermont require 60, and Kansas requires 100). This information will be updated in the discussion of the current study.

In order to update this information and conduct the current research plan, I contacted all the licensing boards in the United States to obtain current information regarding the actual number of licensed psychologists and the current continuing education requirements for each state. The following table shows such requirements as of September of 2011:

Table 2

States Involved in Continuation Education Credits For Licensure

State	Continuing Education Requirement	Specialization in CE Hours
Alabama	20 credit hours; annually	N/A
Alaska	40 credit hours; biannually	3 credit hours must be in ethics
Arizona	60 credit hours; biannually	4 credit hours must be in domestic violence and child abuse
Arkansas	20 credit hours; annually	N/A
California	36 credit hours; biannually	Some information must be in law and ethics (undetermined credit amount); one time requirement (1 credit) of spousal and domestic violence assessment; one time requirement (3 credits) of adult aging and long-term care
Colorado	N/A	N/A
Connecticut	N/A	N/A

State	Continuing Education Requirement	Specialization in CE Hours
Delaware	40 credit hours; biannually	3 credit hours must be in ethics
District of Columbia	30 credit hours; biannually	3 credit hours must be in ethics and 3 credit hours in cultural competence
Florida	25 credit hours; biannually	N/A
Hawaii	N/A	N/A
Idaho	20 credit hours; annually	4 credit hours must be in ethics; standard of care; or laws of practicing in the field of psychology
Illinois	N/A	N/A
Indiana	Only pertain to psychologist that are credential as a health service provider; 40 credit hours; biannually	N/A
Kansas	50 credit hours; biannually	3 credit hours must be in ethics; 6 credit hours must be in diagnosis and treatment
Kentucky	30 credit hours; triannually	3 credit hours must be in ethics or risk management
Louisiana	30 credit hours; biannually	2 credit hours must be in ethics
Maine	40 credit hours; biannually	3 credit hours must be in ethics; 3 hours in supervision, if supervising
Maryland	40 credit hours; biannually	3 credit hours must be in ethics
Massachusetts	20 credit hours; biannually	N/A
Michigan	N/A	N/A
Minnesota	40 credit hours; biannually	N/A
Mississippi	40 credit hours; biannually	N/A
Missouri	40 credit hours; biannually	N/A
Montana	40 credit hours; biannually	N/A

State	Continuing Education Requirement	Specialization in CE Hours
Nebraska	24 credit hours; biannually	N/A
Nevada	30 credit hours; biannually	6 credit hours must be in ethics
New Hampshire	40 credit hours; biannually	6 credit hours must be in ethics
New Jersey	N/A	N/A
New Mexico	40 credit hours; biannually	4 credit hours must be in ethics
New York	N/A	N/A
North Carolina	18 credit hours; biannually	3 credit hours must be in ethics
North Dakota	40 credit hours biannually	3 credit hours must be in ethics
Ohio	23 credit hours; biannually	3 credit hours must be in ethics
Oklahoma	20 credit hours; annually	3 credit hours must be in ethics
Oregon	50 credit hours; biannually	4 credit hours must be in ethics
Pennsylvania	30 credit hours; biannually	3 credit hours must be in ethics
Rhode Island	24 credit hours; biannually	N/A
South Carolina	24 credit hours; biannually	N/A
South Dakota	6 credit hours; annually	N/A
Tennessee	40 credit hours; biannually	3 credit hours must be in ethics
Texas	12 credit hours; annually	3 credit hours must be in ethics
Utah	48 credit hours; biannually	N/A
Vermont	60 credit hours; biannually	6 credit hours must be in ethics; 30 must be direct contact hours at a conference
Virginia	14 credit hours; annually	1.5 hours in ethics, standards of practice or laws governing the professional

		practice in VA
State	Continuing Education Requirement	Specialization in CE Hours
Washington	60 credit hours; triannually	4 credit hours must be in ethics
West Virginia	20 credit hours; biannually	3 credit hours must be in ethics
Wisconsin	40 credit hours; biannually	6 credit hours must be in either ethics, legal studies, or risk management
Wyoming	30 credit hours; biannually	N/A
Total States That Have CE Requirement	43 States have CE requirements at this time.	

Most states accept continuing education credits from programs sponsored and approved by the American Psychological Association (Sharkin & Plageman, 2003). The only specialty concentration in which credits are mandated for psychologists, in those states that have continuing education requirements for renewing one's license is the area of ethics and/or legal issues in psychological practice (Sharkin & Plageman, 2003). The reason for the mandate of continuing education credits for the maintenance of a psychological license is to assure the public that practicing psychologists: (a) uphold competence at all times, (b) stay apprised of new advances in the profession of psychology, and (c) offer premium services to the public with respect to psychological care (Sharkin & Plageman, 2003.; VandeCreek & Brace, 1991; VandeCreek et al., 1990; Hellamp et al., 1989).

Sharkin and Plageman's (2003) research study indicated that licensed psychologists in the State of Pennsylvania greatly supported continuing education credits in their state as a mandate for relicensure. To further highlight the research findings, they ascertained that psychologists in their state did not attend these programs only for the means of obtaining needed credits. They found that many participants specified that they attended continuing education programs even when they do not require the credits for relicensure. This could be interpreted as an indication that psychologists in this sample had the desire to learn, and that psychologists could benefit from training that is interesting to them, as well as relevant to their current everyday practice (Sharkin & Plageman.

Based on Sharkin and Plageman's review, many states have incorporated a program that requires psychologists to acquire credits in order to maintain their license to practice psychological services. Therefore, with this study I investigated the level of multicultural disability competence among practicing licensed psychologists. In addition, with this study I determined what kind of continuing education credits psychologists are receiving and if any of those courses are specifically addressing disability concerns.

Summary

This examination of the germane literature has provided an outline for comprehending attitudes, perceptions, and competencies held by individuals without disabilities towards individuals with disabilities. Researchers in psychology who studied the impact of clients' identities in psychotherapy agree that the aspects of race, ethnicity, culture, socioeconomic status, social class, religion, age, gender, sexual orientation, and disability can influence the course of psychological treatment. For this literature review, the aspect of race was heavily discussed. Several research investigations were presented to highlight that the aspect of race is a very visual marker of difference between client, therapist, supervisor, and supervisee. Racial identity differences were explored, because, in the psychological research, this aspect of difference has been heavily reviewed. The role that race plays in disability is simply that a person could have a visual disability and/or a hidden disability that may elicit some level of discrimination and prejudice directed at that person. In addition, a person with a disability could have several multicultural traits that could cause the person to have membership in numerous minority groups. Therefore, such an individual could experience multiple opportunities for discrimination and prejudice that goes along with such membership(s).

Individuals with disabilities were classified as a minority group through legislation {Americans with Disabilities Act Amendments Act of 2008 (PL 110-325), Americans with Disabilities Act (ADA, PL 101-336) and the Rehabilitation Act Amendments of 1992 (PL 102-569)}. This legislation was needed to fight against discrimination and prejudice that this group faced in American society. Persons with disabilities were discriminated against in all facets of life, including transportation, public works, employment, technology, retail sales, education, socialization, media, healthcare, family concerns, sexual matters, and housing. This minority group continues to be underserved in American society.

Disability statistics indicated that, during the early years, more boys are diagnosed with disabilities than girls. In later life, more women are designated with disabilities when compared to men. Additional disability statistics showed that individuals with disabilities are living in poverty, have low employment rates and poor educational outcomes, and experience an overall poor quality of life due to the environmental barriers placed on them.

Individuals with disabilities have been viewed by individuals without disabilities through the lens of several models of disability. These models include the Medical Model of Disability, the Environmental model of Disability, and the Sociopolitical Model of Disability. These models have helped to shape the perceptions and attitudes of individuals without disabilities towards individuals with disabilities. Psychologists have an ethical obligation to uphold when working with all clients, including clients with disabilities. The ethical standards of autonomy, beneficence, nonmalificence, and justice are ethical principles that practicing psychologists must follow in order to be a licensed, practicing, and ethical clinician.

The review documented factors that might impede on attitudes and perceptions held by therapists when working with clients with disabilities. These factors have a significant impact on the therapeutic relationship. Sue et al. (1998), Sue et al. (1992), Sue et al. (1982), and Sue (2001) designed and advocated for multicultural mandates for all psychologists to follow. They wanted psychologists to be sufficiently educated and equipped to tackle the distinctive counseling requirements of diverse minority groups including clients with disabilities.

Additionally, this literature review discussed some seminal disability competence research studies that were conducted. These studies indicated that therapists who work with clients with disabilities need to have the necessary knowledge, awareness, attitudes, and skills to effectively work with clients with disabilities. Both therapist and clients have preconceived notions associated with disability; and therefore, these attitudes and perceptions could color one's thinking and processing of the aspect of disability in general. Attribution theory was discussed to further highlight this viewpoint. The need for continuing education credits was presented, in hopes of further illustrating the need for psychologists to obtain the knowledge, skills, and resources needed to work successfully with this minority group.

Therefore, the purpose of this dissertation study is to evaluate the aspect of multicultural competence associated with disability among practicing psychologists. Multicultural issues addressed by psychologists also include issues of disability. It is important to identify whether or not present practicing psychologists are multiculturally competent enough to work with clients with disabilities. In order to accomplish this task, it is necessary to fully examine psychologists' attitudes and perceptions held towards individuals with disabilities. Also, it is necessary to properly discern any relationship between the attitudes and perceptions held by psychologists towards these clients and psychologists' perceived levels of multicultural disability competence to work effectively with clients with disabilities.

CHAPTER III

NATURE OF THE DESIGN, METHOD, AND PROCEDURES

Introduction

This research aimed to explore the general success of the intentional training of psychologists in multicultural competences. Moreover, this study explored the degree and impact of training psychologists to be competent in working with individuals with disabilities. As stated earlier, the likelihood of encountering individuals with disabilities is rapidly increasing due to a number of demographic factors. For instance, statistics amassed by the United States Census Bureau (2006) further highlight that there is an estimated 51 million people in the United States who are classified as having some type of disability. Therefore, it is very conceivable that psychologists will work with individuals with disabilities as clients.

Furthermore, this section addressed the research participants, data collection and administration procedures, a description of the psychometric properties of the instruments used in the study, research design and analysis procedures, and power analysis for the statistical procedure used for the research question and each hypothesis.

Target Population

The intention of this dissertation was to assess whether or not practicing psychologists are multiculturally competent to work with clients with disabilities. The target group in this research study was all practicing licensed psychologists who are either in an early career, midcareer, or late career phase of professional work in the United States. This study evaluated psychologists' exposure to persons with disabilities, training related to persons with disabilities, and individual awareness of attitudes and perceptions of persons with disabilities to perceived multicultural disability competence, and engagement in specialized work with clients with disabilities. It is important to determine the level of competence for clinicians in the field of psychology as clients present in psychotherapy with varying identities which include one's disability status.

Data Collection Methods

Data was collected from practicing licensed psychologists anonymously, from June of 2011 through November of 2011, by using an online survey tool called Asset Programming (2011). A research letter of solicitation requesting participation in the study was sent via email to all specialized listserves of divisions of the American Psychological Association, individual state psychological associations, and to published e-mail lists of licensed psychologists obtained from the individual state psychology licensing boards.

Procedures to insure that participants responded to the electronic research request are as follows:

1. This research plan was developed cautiously to select instruments that can precisely answer the proposed research question;
2. The questionnaire was formatted in Asset Programming (2011) to look professional and eye-catching;
3. Participants of the study were informed via the letter of solicitation that this was an anonymous survey, and that personal identifiers such as full name and address were not being collected;

4. The precise time needed to complete the survey (30 minutes) was given to the participants; and
5. Reminder e-mails were sent to all participants precisely four weeks after the initial e-mailing. This action tried to insure that those who did not participate in the study initially might reconsider.

Method of Sampling

This dissertation used a criterion purposeful sampling method. A criterion sampling method involves the researcher's establishing a specific criterion for cases in the study to follow, and then selecting all cases that satisfy that particular criterion (Meyers et al., 2006). According to the 2008 Annual Report of the American Psychological Association, there were approximately 150,000 domestic and international members of the organization. Additionally, the 2007 Report of United States Bureau of Labor Statistics indicated that there were about 95,120 psychologists classified as clinical, counseling, and school psychologists practicing in the United States. This was quite a large population to work with in order to carry out this proposed research project. Therefore, a criterion sampling method used in an Internet-based survey project was incorporated here.

The criterion sampling requirements for this study included the following:

1. Participants had to be licensed in the state in which they are currently working with clients as a psychologist, and this was denoted by passing their home state licensure exam for all psychologists;
2. Participants had to be practicing in the field of psychology as licensed psychologists for either zero to 20 years or more post-doctoral training;

3. Participants had to be working directly or indirectly (teaching) with clients;
4. Participants had to work as psychologists in the United States;
5. Participants were selected from all geographical regions of the United States representing the north, south, east, and west;
6. Participants were either male or female;
7. Participants were from any racial or ethnic background; and
8. Participants were aged 27 and older. This insured that a person who obtained his or her undergraduate and graduate doctoral degrees continuously could be included in this sample of practicing psychologists.

A purposeful sampling method for this study integrated several procedures. This type of sampling was first implemented by a comprehensive Internet search, which was done across all the states to determine the total number of (psychological members classified as clinical, counseling, and school) psychologists working in the United States (95,120). Then, the American Psychological Association was contacted, because this is the professional organization for all psychologist and graduate students in psychology doctoral and master's level programs in the United States. As of 2008, this organization had over 150,000 members which include both members from the United States and International members (APA, 2008).

Next, the American Psychological Association's board member who handles research solicitation requests for all the specialized divisions of the organization were contacted to inquire about the precise instructions needed for posting this solicitation request to their membership listserves. The following divisions granted my request: Clinical (Division 12), Counseling (Division 17), Psychologists in Public Service (Division 18), Adult Development and Aging (Division 20), Rehabilitation (Division 22), Health (Division 38), Gay, Lesbian, and Transgender Issues (Division 44), and Ethnic Minorities (Division 45). Request documents were also sent to each state psychological association and to the state licensing boards in hopes to reach a great number of licensed psychologists in the United States. The solicitation packet included both the letter to request research participation, containing all the details about the study, and the Seton Hall University's Institutional Review Board (IRB) approval letter insuring that permission was given to me to conduct this type of doctoral-level research.

Instruments and Identification of Variables

For this dissertation, there were two standardized measures used along, with a biographical sheet which I developed. I obtained written permission from the authors of the published scales (ATDP Form A and CCDS) to use these instruments as an electronic protocol on the ASSET web site. The first scale that was used is the Attitudes Toward Disabled Persons Form A Scale (ATDP Form A). This paper-and-pencil instrument assesses attitudes toward individuals with disabilities (Yuker & Block, 1986; Yuker et al., 1966, 1970; Yuker et al., 1960). This assessment tool asks participants to rate their level of perceived attitudes regarding individuals with disabilities, on a 30-point scale (e.g., "Disabled people are often unfriendly," "Disabled people should not have to compete for jobs with physically normal people", and

“Disabled people are more emotional than other people” Yuker & Block, 1986, p. 84-85).

Respondents to the scale convey their agreement or disagreement to each statement by using a six-point Likert-type scale (+1 = I agree very much, +2 = 1 agree pretty much, +3 = 1 agree a little, -1=1 disagree a little, -2 = 1 disagree pretty much, and -3 = 1 disagree very much). The scoring procedures for this instrument are discussed in Chapter IV. The total score of the scale ranges from 0 to 180. It is important to highlight that higher scores on the scale are indicative of more positive attitudes pertaining to individuals with disabilities (Yuker & Block, 1986).

Yuker and Block (1986) documented that the test-retest reliabilities for this scale range from .74 - .91 and the split half reliabilities range from .73 - .89. Additionally, the validity of the ATDP Form A as a gauge of attitudes towards individuals with disabilities has been instituted through median correlations with over 50 other measures of attitudes towards individuals with disabilities. These correlations of the ATDP Form A with other measures of attitudes towards individuals with disabilities ranged from .19 - .98 (Yuker & Block, 1986).

The second standardized assessment used in this study was the Counseling Clients with Disabilities Survey (CCDS) (Strike, 2001). This paper-and-pencil instrument is used to measure mental health professionals' multicultural disability competence. The CCDS asks respondents to rate their opinions regarding their competence working with individuals with disabilities on a 60-point scale, with an additional seven demographic questions, plus a space for additional comments. Scoring procedures for this instrument will be discussed in Chapter IV. Total scale score ranges from 0 to 360. The demographic section on this instrument was not used in this current research investigation.

The CCDS has three subscales that consisted of the Self-Awareness subscale, the Perceived Knowledge subscale, and the Perceived Skills subscale. Each scale is comprised of 20 statements. The respondents to the scale indicate their agreement or disagreement to the statement on a six-point scale (1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree). Each subscale has a possible score between 20 and 120. Please note that higher scores on each subscale denote greater perceived multicultural disability competence by the respondent. Also, 35% of the 60 items are reverse worded.

The Self-Awareness subscale is aimed to evaluate respondents' perceptions of the effect of being disabled. This subscale incorporates statements that ascertain the person's self-awareness, convictions, and attitudes toward disability in general (Strike et al., 2004). Examples of such statements include "I consider people with disabilities to be a minority group", and "It is difficult for me to understand how disability could be a source of pride for people with disabilities" (Strike, 2001, p. 75). These subscale items are numbers 1 through 20.

The subscale, Perceived Knowledge, determines the individual's factual knowledge associated with disability concerns (Strike et al., 2004). This subscale provides an assessment of previous exposure and training related to disability. Examples of items from this section of the instrument are "I believe that unemployment/underemployment is common among people with disabilities in the

United States", and "I think English is the native language of Americans who are deaf from birth" (Strike, 2001, p. 78). These subscale items are from number 21 through 40.

The Perceived Skills subscale evaluates the individuals' skills and behaviors that are necessary for clinicians who work with individuals with disabilities (Strike et al., 2004). Some examples of items from this section consist of "I could take a client's disability into account when interpreting the results of assessment instruments", and "I am not aware of how disability may interact with human sexuality (e.g., family planning)" (Strike, 2001, p. 83). These subscale items consist of numbers 41 through 60.

Finally, this assessment tool has several demographic items. These variables include type of contact with individuals with disabilities, sex, ethnicity, highest degree completed, years of counseling experience, experience working with different types of disabilities, and the degree the participant is currently working towards. This section of the instrument was not utilized in this research investigation because I had developed a biographical sheet to further tap into additional competence areas in disability.

This assessment tool is a newly developed instrument, and therefore, modest data regarding reliability and validity of this protocol is available. Hollimon (2007) used this scale for his dissertation research, and found an internal consistency for the total scale to be Cronbach's alpha of .87. Additionally, Strike (2001) conducted statistical analysis which revealed the internal consistency for the total scale to be Cronbach's alpha of .94. The Self-Awareness scale was found to have a Cronbach's alpha of .67, the Perceived Knowledge scale had a Cronbach's alpha of .87, and the Perceived Skills scale had a Cronbach's alpha of .90 (Strike). Strike performed statistical correlations between the Self-Awareness and Perceived Knowledge scales (.72), Self-Awareness and Perceived Skills scales (.69), and Perceived Knowledge and Perceived Skills scales (.81). Results indicated a positive relationship among awareness, knowledge, and skills.

Strike (2001) reported that the establishment of validity of the CCDS was attended to by utilizing expert reviewers' consideration to construct, content, and face validity of the items. Strike indicated that, when examining the individual items of the scale, factor analysis on this scale was not done because the CCDS subscales (Self-Awareness, Perceived Knowledge, and Perceived Skills) are "conceptualized as dimensions of the underlying construct competence, and they are not conceptualized as independent, uncorrelated underlying variables" (Strike, 2001, p. 102).

Additionally, validity of the CCDS was established by obtaining results of successful differentiation between two groups of mental health providers (experienced and nonexperienced with regard to disability). To establish the readability of the CCDS and accurate estimates of time needed to complete the CCDS, college-educated persons with English as a first language and/or second language were utilized. Also, survey layout and methodology of the instrument were reviewed by the Minnesota Center for Survey Research and faculty at the University of Minnesota. In doing this, construct validity of the CCDS was done and the examination of this instrument demonstrated that the CCDS is a valid measure of multicultural disability competence (Strike, 2001).

The third tool used in this current research investigation was the biographical sheet. This biographical sheet developed for this study contains questions that provided answers for the 15 observed variables, which became a summed composite for each domain area of the research question (containing the variables, exposure to persons with disabilities, training related to persons with disabilities, and engagement in specialized work with clients with disabilities). In addition, it provided demographic information for the sample used in this study. Demographic information obtained included the following:

1. Gender,
2. Age of the Participant,
3. Marital Status,
4. Race and/or Ethnicity,
5. Primary Language,
6. Fluency in English,
7. Type of Doctoral Degree,
8. Degree Concentration in Psychology,
9. Doctoral Program Accredited through the American Psychological Association,
10. Number of years taken to Complete the Doctoral Degree,
11. Age Started the Doctoral Program,
12. Psychologist Own Personal disability status,
13. Current Work Status,
14. Number of Hours Worked Per Week,
15. Number of Years Worked in the Current Job Position,
16. Involvement in Professional Associations,
17. Involvement in Professional Associations Related to Disability Issues,

18. Number of Licensed Psychologist, and
19. Number of Years Working as a Licensed Psychologist.

Variables Used in the Overall Analysis

Composite Independent Variable #1: Exposure

The variable, *exposure to persons with disabilities*, had indicators which are listed as follows:

1. Personal (individual having a disability);
2. Immediate family (someone in the family having a disability);
3. Friends having disabilities;
4. Coworkers having disabilities;
5. Occupational history that includes working with persons with disabilities; and
6. Learning about the concept of disability through legislation, the media, or other social exchange.

Note that this variable, *exposure to persons with disabilities*, has seven questions taken from the demographic questionnaire that were summed together to obtain a continuous score.

Composite Independent Variable #2: Training in Disability

The variable, *training related to persons with disabilities*, examined training opportunities specifically taken in disability education. This composite variable consisted of indicators that included:

1. Doctoral preparation (internships, externships, or coursework obtained during the predoctoral years that focused on teaching in the area of disability concerns);
2. Inservice Employed-Based (training received while in a work setting offered by an employer);
3. Continuing education (certification based or training required to maintain a psychological license if required); and
4. Postdoctoral coursework offered by a college or university.

Note that this variable, *training related to persons with disabilities*, has 12 questions taken from the demographic questionnaire that was summed together to obtain a continuous score.

Independent Variable #3: Awareness

The variable, *awareness*, is the individual personal attitudes and perceptions about persons with disabilities held by persons without disabilities in general. This was measured by utilizing the total scale score achieved on the Attitudes Toward Disabled Persons Form A Likert measurement scale (ATDP Form A; Yuker & Block, 1986).

Dependent Variable #4: Perceived Multicultural Disability Competence

The variable, *perceived multicultural disability competence*, was measured by using the total scale score of the Counseling Clients With Disabilities Survey (CCDS; Strike, 2001). This includes the scores received across the three subscales (e. g., Self-Awareness, Perceived Knowledge, and Perceived Skills) assessed by the CCDS.

Dependent Composite Variable #5: Engagement in Disability Specialization and Practice

The variable, *engagement in disability specialization and practice*, incorporated additional indicators such as the following:

1. Postdoctoral employment specifically working with clients with disabilities;
2. Involvement in professional associations or organizations regarding professional practice with clients with disabilities;
3. Extra certifications or licenses specifically addressing the concerns of persons with disabilities;
4. Percentage of the psychologist's caseload directly dealing with clients with disabilities; and
5. Supervision of cases with clients with disabilities.

Note that this variable, *engagement in disability specialization and practice*, had six questions taken from the demographic questionnaire that were summed together to obtain a continuous score.

Study Design and Statistical Analysis

The design of the study was a nonexperimental, web-based design which incorporated survey research methods. A nonexperimental design evaluates the dependent variable and tries to explain why this factor varies. Statistical analyses for this research investigation was performed using LISREL Version 8.8 (Jöreskog & Sörbom, 2006), SAS VERSION 9.3 (2012), and the Statistical Program for Social Scientists (SPSS) Version 17.0 (2008). Participation in the study entailed completion of a brief packet of measures only once through an online survey tool called Asset Programming (2011). It should have taken the participant approximately 30 minutes to complete the packet. There were no experimental procedures involved in this study. The participant completed a research protocol that consisted of the biographical sheet, the ATDP Form A, and the CCDS. This was an anonymous study. The participant's consent to participate in the study was denoted as the participant's completing the electronic copy of the protocol located on the Asset Programming (2011) web site.

Research Question

This study investigated the following research question: What are the unique contributions of the variables, *exposure to persons with disabilities*, *training related to persons with disabilities*, and *individual awareness of attitudes and perceptions of persons with disabilities*, to perceived multicultural disability competence, and engagement in specialized work with clients with disabilities among practicing licensed psychologists in the United States?

Research Hypotheses

The following research hypotheses were predicted for the proposed research question:

Hypothesis #1

Strike (2001) and Strike et al., (2004) indicated that, when deciphering disability competence among mental health providers, there are three essential ingredients needed to determine one's level of multicultural disability competence. These three components are awareness, knowledge, and skills. Therefore, in this research investigation, it was predicted that psychologists who have had previous exposure, training, and awareness of persons with disabilities will demonstrate higher levels of multicultural disability competence when working with clients with disabilities.

Hypothesis #2

Based on findings ascertained by Hollimon (2007) on the perceptions and attitudes of graduate students in psychology programs regarding persons with disabilities, psychologists who have previous exposure, training (recently obtained their doctoral degree, and/or postdoctoral training via on-the-job training, or continuing education certification), and awareness of persons with disabilities will demonstrate a higher level of positive regard for persons with disabilities.

Hypothesis #3

It is proposed that psychologists who have exposure to persons with disabilities, training about persons with disabilities, awareness regarding individual perceptions and attitudes about persons with disabilities will have higher levels of disability competence, and would be more likely to seek specialized training to work specifically with persons with disabilities.

To answer this research question, a path analysis, a type of Structural Equation Model (SEM), was implemented. This causal model began with the construction of a path diagram comprising all the observed variables. These variables can also be classified as endogenous or exogenous variables. Variables being explained in the model are called *endogenous variables*. In the model, these variables have arrows pointing toward them. Exogenous variables are variables that are not explained in the model. They can be identified easily because there is no arrow pointing toward them (Meyers et al., 2006). Overall, the variables in the model are connected to other variables using arrows to denote hypothesized causal linkages.

A path analysis, or a model fitting procedure, characteristically uses an iterative maximum likelihood procedure. This procedure allows for a simultaneous execution of the data concerning the relationships between the variables (Meyers et al., 2006). This procedure does not terminate with its first best guess about the value for all the path coefficients in the model (Myers et al., 2006). This iteration process calls for the refining of its previous approximations over and over again. Its aim is to match the data with the structure of the model; and therefore, the hope is that it will get closer and closer to that desired match (Myers et al.).

In addition, multiple regression analyses were performed separately on the study's three hypotheses to further support the overall path model. To fully execute this statistical procedure, it was indicated by Meyers et al., (2006) that the following five assumptions underlying the application of path analysis when multiple regression is used to perform the analysis must be considered:

1. The relationships between variables in the model are linear and causal.
2. The errors linked to the endogenous variables are not correlated with the variables that are predicting that variable.
3. For multiple regression, there is just a one-way causal flow in the model. This type of model is called a recursive model.
4. The variables in the model are gauged on at least an interval or near-interval (e.g., summative response).
5. The variables are assessed without error (Meyers et al., 2006).

In this type of multiple regression, the beta weights are used, and they are considered the path coefficients. This was done by using the standard equation-building method, and this calls for one to presume that each variable is the last one to enter the model. As a result, variables are entered only after controlling for the weight of all the other predictors in the model. To do this, I used the standard regression method because it is necessary to produce the beta weights of all predictor variables in the model. Also, it can be interpreted that "low values of some beta weights (e.g., < .2) are potentially as informative as high values (e.g., > .3) of others if we are evaluating hypotheses of weaker as well as stronger causal influences in the model" (Meyers et al., 2006, p. 596).

Multiple regression uses the ordinary least squares method to compute the path coefficients. In multiple regression, the researcher compares the observed correlation to the hypothesized correlations. "If the two correlation matrixes are within .05 of the observed correlation matrix, then the researcher has some evidence of a proper fit [for one model]" Meyers et al., 2006, p. 597).

In addition, if multiple models are employed, "then the model that most closely resembles the observed model is considered to have the best fit" (Meyers et al., 2006, p. 597). The partial information technique (multiple regression) and the full information technique (path analysis), coupled together, derived a strong case for the proposed research question and hypotheses.

In this study, the hypothesized model stated that *exposure to persons with disabilities*, *training related to persons with disabilities*, *awareness regarding individual perceptions and attitudes about persons with disabilities* (assessed by the ATDP Form A) will demonstrate a strong relationship with the variable, *multicultural disability competence* (assessed by the CCDS), and further a strong relationship with the variable, *psychologists seeking specialized training to work specifically with persons with disabilities.* This is depicted in the following figure:

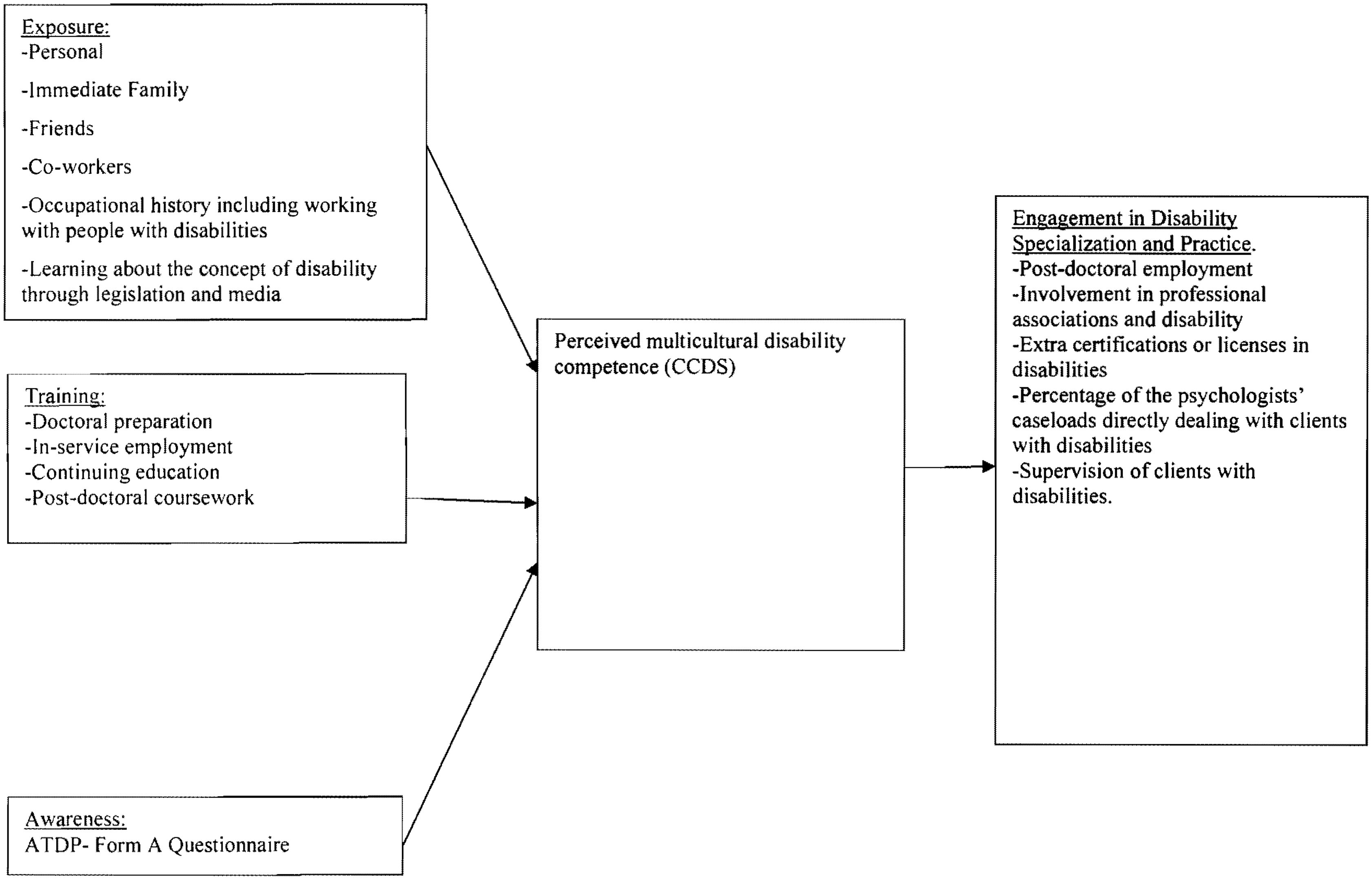

Figure 1. Diagram of Hypothesized Path Model

After the data was collected, model-fitting analyses were done to determine the path coefficients. After that process, an extensive inspection was conducted to evaluate the magnitudes of these coefficients to further decipher if the hypothesized causal model had any statistical viability. This was done at the level of 0.3 or greater (Meyers et al., 2006).

Power Analysis

Hair and Black (2006) and Vonder Heidt and Scott (2007) articulated that deriving an accurate sample size in one's research investigation offers the foundation for the estimation of sample error, and further affects the capacity for the model to be properly estimated. In most cases, this is done by assessing the level of power needed for a particular research project. The definition of power of a statistical test is the probability that the test will generate statistically significant findings (Cohen, 1988). This occurs only if the phenomenon being evaluated is actually at hand (Cohen). Power is denoted as 1- beta, where beta is the probability of Type II error occurring (Cohen). Type II error is when the null hypothesis is inconsistently rejected (Cohen).

In addition, Cohen (1988) articulated that power analyses assume normal sample distributions, homogeneity of variance, and homoscedasticity. Power analyses are usually conducted prior to data collection. This is done to decipher the number of participants needed for the research investigation to obtain a significant finding along with the proposed research question and hypotheses.

Since, this research investigation calls for the use of a path analysis created via a SEM, conducting power analysis using the computer program G*Power 3 (Faul, Erdfelder, Lang & Buchner, 2007) and incorporating Cohen's (1988) criteria for effect size is more difficult to use here. Therefore, theoretical approximation must be used when creating a SEM. According to Bentler and Chou (1987) and Vonder Heidt and Scott (2007), a ratio of five case responses per free parameter is required to obtain trustworthy estimates for executing a SEM. This means that 153 indicators, or a maximum of 306 free parameters, would mean that an effective sample size would be 1530. However, given that we only have 17 observed variables for this current research investigation, it is sufficient to have seven case responses per variable. Therefore, an adequate sample size of 210 participants was needed to execute the proposed statistical analysis consistent with the research question. Data collection efforts resulted in a final sample size of 840 participants, which was deemed to be an adequate number of participants to conduct this type of analysis.

Summary

This research proposal was approved by my dissertation committee, at the Counseling Psychology Program through the College of Education and Human Services, Department of Professional Psychology and Family Therapy at Seton Hall University, and Seton Hall University's Institutional Review Board (IRB) for research with human subjects. This was done to satisfy the requirement for the Doctor of Philosophy. This proposal provided the relevant literature that supports the importance of multicultural disability competence among practicing psychologists in the United States. The next two chapters will discuss the results of the study, provide some discussion for the findings, and make suggestions for future research endeavors associated with this research topic.

CHAPTER IV
RESULTS
Introduction

This chapter will describe the data analysis process. This entailed how data was screened, how the instruments were scored, and results of the analysis, including the demographic variables and items used for the path analysis.

Data Screening

The data screening process consisted of data being first downloaded from the Asset Programming (2011) web site into an Excel spreadsheet. Data was checked for complete answers. Data included categorical responses, continuous responses, and responses that provided more thorough qualifying explanations. These qualifying verbal responses were read through, and I developed central theme codes for these responses. Once the theme codes were created, an external reviewer checked for the consistency of the theme codes. This process involved the external reviewer's checking for the face validity of the items. This means that the external reader made sure that the codes reported matched with the codes that I had created. The theme codes were then transcribed into a numeric value.

Once this spreadsheet was converted to only categorical and continuous data, the data was then analyzed by using SPSS Version 17.0 (2008). This software package was used to convert the categorical responses (yes and no responses) to a numeric value (yes = 1 and no = 0); score the standardize assessment tools (the ATDP Form A and the CCDS); screen the assessment tools scores for normal distribution; obtain descriptive statistics and reliability data on the assessment tools; gather frequency data on some of the demographic information; obtain descriptive statistics on the remaining demographic variables from the biographical sheet; compute the sum value for each composite variable; and finally, conduct the Kuder Richardson statistic (KR20) for the variables (exposure to persons with disabilities, training related to persons with disabilities, and engagement in disability specialization and practice) used in the model.

Final data screening for this data set indicated no missing values. An additional check for multivariate outliers utilizing robust Mahalanobis distance through the SAS Version 9.3 (2012) software was done prior to conducting the overall model path analysis and multiple regression analyses. To evaluate for a multivariate outlier, I checked for the extreme values output (those cases with the most extreme Mahalanobis distance values). This is performed by evaluating these distance measures with a chi-square criterion (e.g., the square root of the 0 point .975 quantile of the chi-square distribution with five degrees of freedom). To remove a residual outlier from the data set, it must satisfy this criterion. The method employed here in the SAS VERSION 9.3 (2012) program was the minimum value tolerance ellipsoid using robust Rousseuw Mahalanobis distances to screen for outliers with respect to the data centroid.

This procedure was executed in SAS VERSION 9.3 (2012), by first converting all the variables in the model to Z scores. This needed to occur because of the wide range of scores for each variable in the model (e.g., exposure to persons with disabilities, training related to persons with disabilities, awareness of personal attitudes and perceptions related to persons with disabilities, perceived multicultural disability competence, and engagement in specialized work or practice with persons with disabilities). To accomplish this task, each variable in the model (5) mean divided by its standard deviation for the entire data set (N=825) was computed. After this procedure, the minimum value tolerance ellipsoid using robust Rousseuw Mahalnobis distances to screen for outliers with respect to the data centroid was performed. The chi-square criterion was then utilized to eliminate any outliers.

When checking the overall data distribution for the standardized instruments used in the analysis (ATDP Form A; CCDS), I found a negative skew to the left and kurtosis observed. Therefore, this had to be addressed, resulting in the need for the instruments to be transformed. This process is further explained in the next section.

Instruments Scoring Procedures and Results

Two psychometric assessment tools were scored for this research investigation. First, the ATDP Form A had 30 items. The ATDP Form A had reverse-coded items, which were scored in SPSS Version 17.0 (2008). These items included questions # 5, 9, 12, 14, 17, 19, 21, 22, 23, 24, 25, and 29. These recoded items signs had to be changed (a negative sign became a positive sign; a positive sign became a negative sign). Additional scoring procedures consisted of summing the scores and subtracting those with negative signs. Next, it was required to change the sign of the summed score (a positive sign would be changed to a negative sign; a negative sign would be changed to a positive sign). Finally, it was necessary to add 90 points to the summed score.

Results demonstrated that the internal consistency for the total scale score of the ATDP Form A was Cronbach's alpha of 0.85. Additionally, the mean was 135.76 (Sd 18.88). The range of scores was from 21 to 180.

Second, the CCDS had 60 items with three subscales. The individual scores on the three subscales (self-awareness, perceived knowledge, and perceived skills) were not used for the final analysis, because the total scale score of the CCDS was the perceived multicultural disability competence value needed for this project. The CCDS had reverse-coded items, which were scored in SPSS Version 17.0 (2008). These items included questions #3, 6, 7, 13, 14, 15, 16, 18, 24, 25, 27, 31, 35, 36, 39, 41, 50, 52, 53, 54, and 58. The Likert scale recoded scores were as follows: 6 became 1, 5 became 2, 4 became 3, 3 became 4, 2 became 5, and 1 became 6. After this procedure, all 60 items were summed together to obtain the final total scale score.

Results revealed the internal consistency for the total scale score of the CCDS to be Cronbach's alpha of 0.78. Please note that the scores on the three subscales were not used in the final data analysis, but are reported here, and the internal consistency was recorded as follows: self-awareness was Cronbach's alpha of 0.46, perceived knowledge was 0.58, and perceived skills were 0.62.

The mean for the CCDS was 223.02(Sd 21.31). Scores ranged from 149 to 281. Additional descriptive statistics for the ATDP Form A and the CCDs are demonstrated in the following table:

Table 3a

Descriptive Statistics ATDP Form A

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
135.7576 (.65742)	134.4672	137.0480	136.6131	138.0000	356.567	18.88299	21.00	180.00	159.00	23.00	-1.049 (.085)	3.347 (.170)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

Table 3b

Descriptive Statistics CCDS

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
223.0170 (.74190)	221.5607	224.4732	223.2916	224.0000	454.087	21.30932	149.00	281.00	132.00	29.00	-.198 (.085)	-.050 (.170)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis

An univariate outlier evaluation was performed on the data of the ATDP Form A and the CCDS. An univariate outlier is an extreme score on either the criterion or the predictor variable (Meyers et al., 2006). According to Myers et al. (2006), outliers are considered anomalous values, typically three or more standard deviation units below or above their respective means. These outliers might imply possible problems with the assessment instrument, problems with the manner in which the responses were recorded, or even problems with the participants' membership in the population that was presumably studied (Myers et al.).

The Likert scale measures in this study, the CCDS and the ATDP Form A, were transformed. This occurred because, prior to the transformation process, there was an indication of a negative skewness to the left and Kurtosis which had to be addressed. Therefore, the data was transformed in SPSS Version 17.0 (2008) by squaring the individual scores of the CCDS and the ATDP Form A for all cases. This squaring method was used because the range of scores for the CCDS were from 0 to 360, and the ATDP Form A ranged from 0 to 180. Final results of the transformation process for the CCDs indicated a skewness of 0.07 and Kurtosis of -0.18. Additionally, the transformed ATDP Form A demonstrated a skewness of -0.26 and Kurtosis of 0.40. This statistical procedure significantly helped the overall distribution of the data, and the transformed total scale scores of the CCDS and the ATDP Form A were used in the final path analysis. These transformed variables are displayed in the figures below:

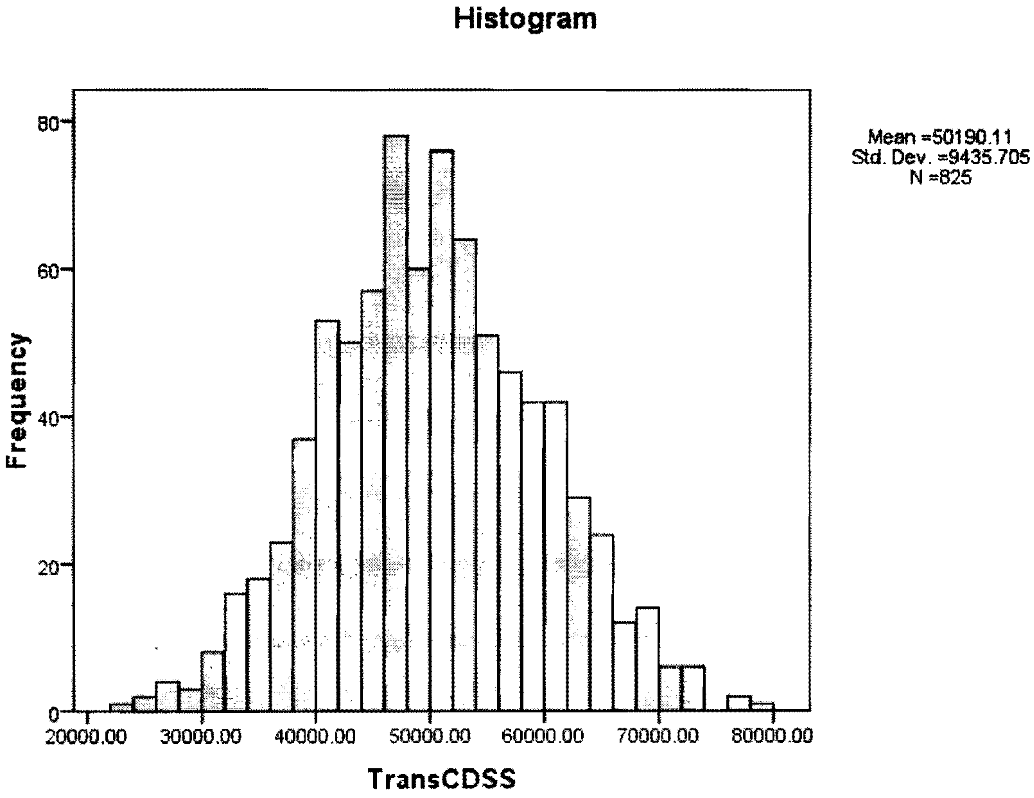

Figure 2a. Transformed CCDS

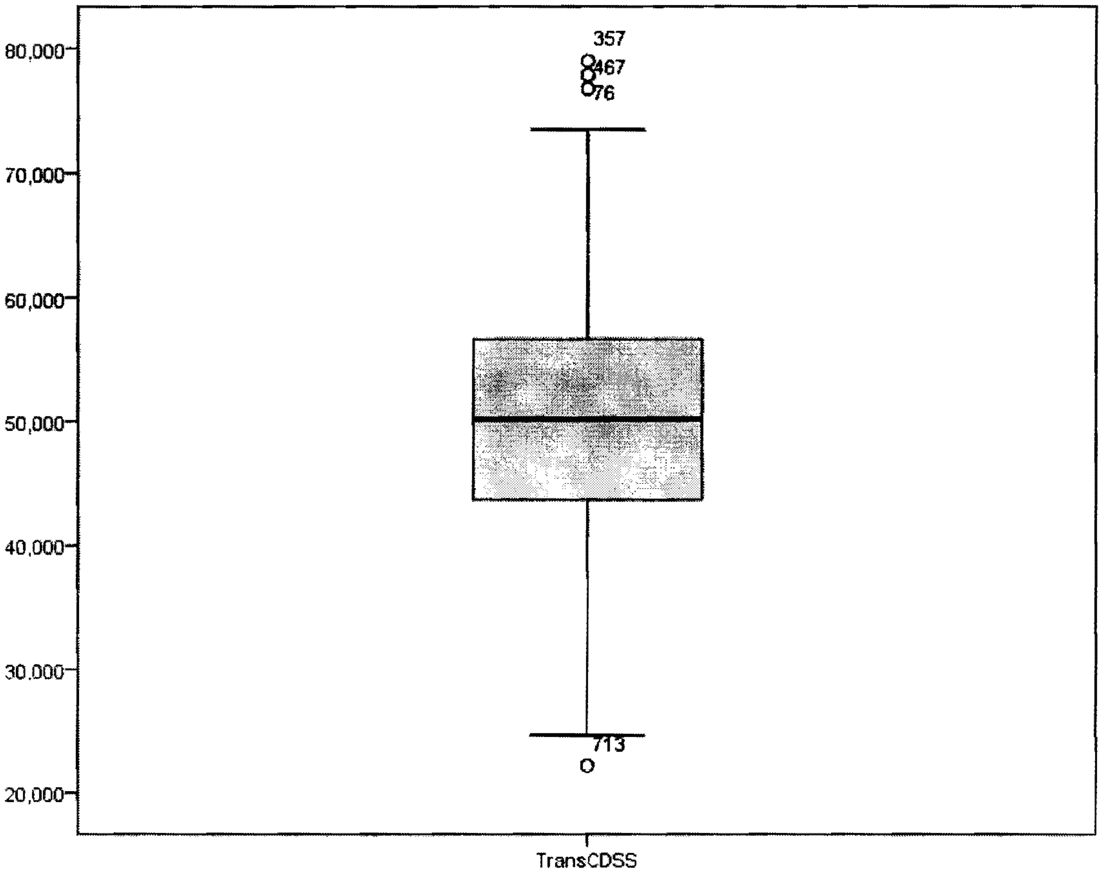

Figure 2b. Box Plot of Transformed CCDS

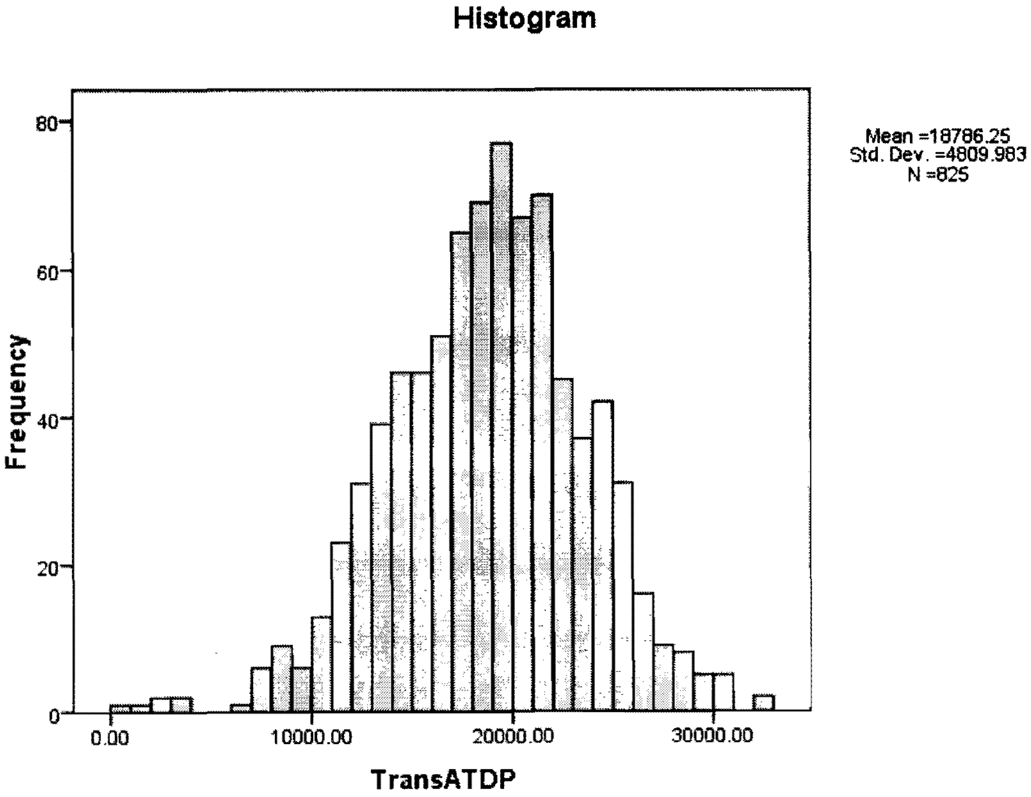

Figure 3a. Transformed ATDP Form A

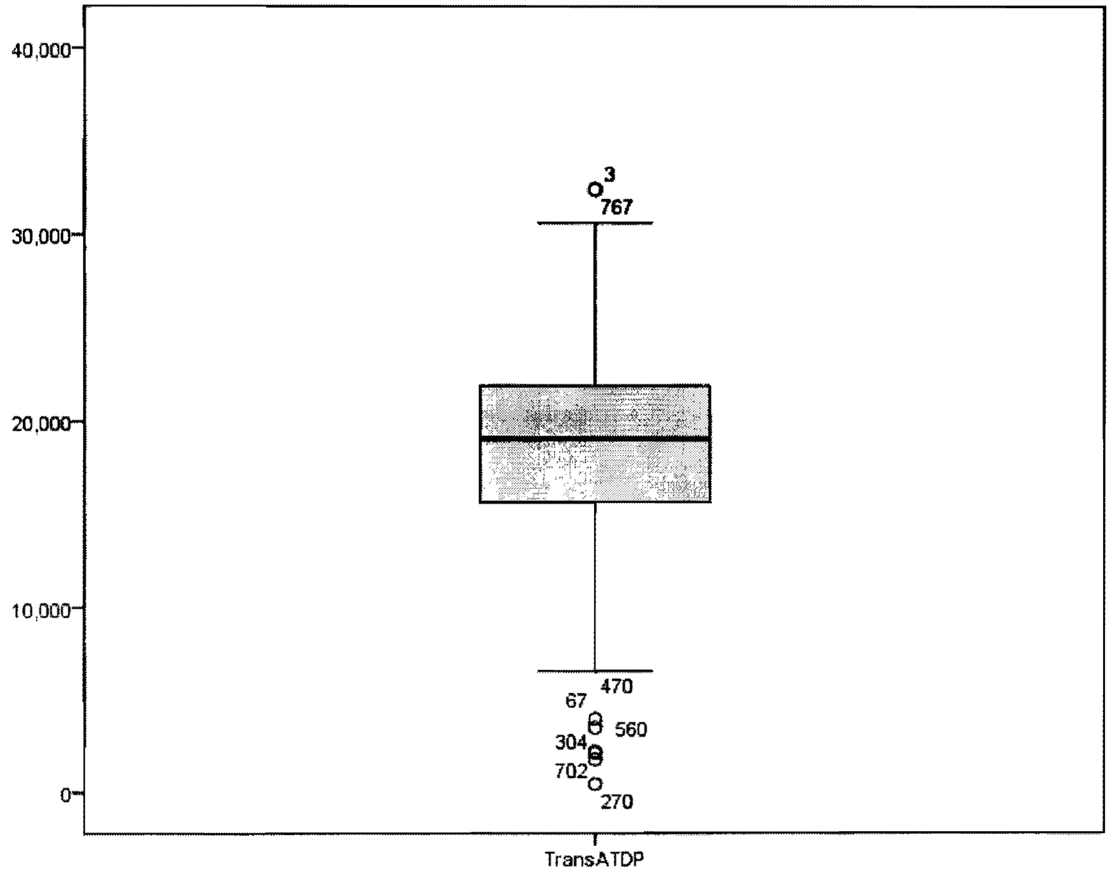

Figure 3b. Box Plot of Transformed ATDP Form A

Demographic Results

This research investigation yielded a sample size of 840 participants. This number comprised 825 practicing licensed psychologists and 15 nonlicensed psychologists. Therefore, the 15 nonlicensed psychologists were eliminated from the final data analysis. Demographic indicators for this sample demonstrated that there were 315 males (38.2%), and 510 females (61.8%). Mean age for the sample was 50.99 (N = 825; SD = 12.09). Participants' marital status included 109 single participants (13.2%), 601 married participants (72.8%), 22 widowed participants (2.7%), and 93 divorced participants (11.3%). A category for same sex unions were not offered at this time and should be added to future replications of this study. Race and/or ethnicity for the sample consisted of 741 White participants (89.8%), 31 African American participants (3.8%), 5 Arab American/Middle Eastern participants (0.6%), 41 Hispanic participants (5.0%), 5 Asian/Pacific Islander participants (0.6%), 12 Native American participants (1.5%), and an "Other" category reported 13 participants (1.6%). Please note that the percentages sum over 100, because some participants chose to specify their race and ethnicity more precisely in the "Other" category provided.

The primary language for this sample was reported to be English, and 812 participants (98.4%) stated this fact. Additionally, 13 participants (1.6%) stated that another language other than English was their primary language. When asked about their fluency in English, 822 participants (99.6%) reported having fluency in English, and 3 participants (0.4%) said that they did not possess fluency in English. The types of doctoral degrees reported by participants were: Ph.D., 633 participants (76.7%); Psy.D., 172 participants (20.8%); and Ed.D., 20 participants (2.5%). The participants were also asked to report the branch of psychology that their doctoral degree was affiliated with, and this consisted of Clinical (N = 507; 61.5%); Counseling (N = 182; 22.1%); School (N = 57; 6.9%); and Other (N = 79; 9.6%). In addition, participants were asked to indicate if their doctoral program was an American Psychological Association Accredited Program. They indicated: 719 participants (87.2%) said yes; 87 participants (10.5%) said no; and 19 participants (2.3%) said that they did not know if their program was accredited through the American Psychological Association.

Other demographics for this sample included the Number of Years Taken to Complete the Doctoral Degree, which resulted in a mean of 5.71 (N = 805; Sd = 1.76); and Age Started the Doctoral Program had a mean of 27.52 (N = 825; Sd = 6.64). For the category indicating the Psychologist Own Personal Disability Status, 685 (83.0%) participants said that they did not have a disability, and 140 (17.0%) participants indicated that they personally had a disability. The current Work Status of the sample was that 799 (96.8%) participants were currently working, and 26 (3.2%) participants were not working at this time. Number of Hours Worked Per Week resulted in a mean of 37.93 (N = 821; Sd = 14.18). Number of Years Worked in the Current Job Position was a mean of 12.83 (N =816; Sd = 10.88). Involvement in Professional Associations yielded 650 (78.8%) participants involved in professional associations, and 175 (21.2%) participants were not involved in any professional association. For Involvement in Professional Associations Related to Disability Issues, 615(74.5%) participants had involvement in this area, and 210 (25.5%) had no involvement. Finally, Number of Years Working as a Licensed Psychologist, had a mean average of

15.85 (N = 825; Sd = 11.00). This information is further depicted in the following table:

Table 4a

Study Demographics (Demographic Variables)

Variable		Participants (N)	Frequency Percentage
Gender			
	Male	315	38.20%
	Female	510	61.80%
	Other	0	0
Marital Status			
	Married	601	72.80%
	Divorced	93	11.30%
	Widowed	22	2.70%
	Single	109	13.20%
Race and/or Ethnicity			
	White	741	89.80%
	African American	31	3.80%
	Arab American (Middle Eastern)	5	0.60%
	Asian/Pacific Islander	5	0.60%
	Hispanic American	41	5.00%
	Native American	12	1.50%
	Other	13	1.60%
Primary Language			
	English	812	98.40%
	Another Language	13	1.60%
Fluency in English			
	Yes	822	99.6
	No	3	0.40%
Type of Doctoral Degree			
	Ph.D.	633	76.70%
	Psy.D.	172	20.80%
	Ed.D.	20	2.50%
Degree Concentration Area			
	Clinical Psychology	507	61.50%
	Counseling Psychology	182	22.10%
	School Psychology	57	6.90%
	Other Specialization	79	9.60%
Program accredited by the APA			

Variable	Participants (N)	Frequency Percentage
Yes	719	87.20%
No	87	10.50%
Do Not Know	19	2.30%
Psychologist Own Disability Status		
Yes	140	17.00%
No	685	83.00%
Current Work Status		
Yes	799	96.80%
No	26	3.20%
Involvement in Professional Assoc.		
Yes	650	78.80%
No	175	21.20%
Involvement Professional Assoc.(Disability)		
Yes	615	74.50%
No	210	25.50%

Table 4b

Study Demographics (Descriptive Statistics)

Variable	N	Min	Max	Mean	SD
Number of Years Taken to Complete Degree	805	0	16	5.71	1.76
Age of Participants	825	0	86	50.99	12.09
Age Started Doctoral Degree	825	0	57	27.52	6.64
Number of Hours Worked Weekly	821	0	80	37.93	14.18
Number of Years Worked in the Current Job	816	0	60	12.83	10.88
Number of Years Licensed as a Psychologist	825	0	55	15.85	11.00

Table 4c

Study Demographics (Disability Competence)

Variable	Number of Participants Responding	Frequency
Doctoral Program Offered Coursework in Disability		
Yes	409	49.6%
No	416	50.4%
Any Doctoral Externship or Internship in Disability		
Yes	663	80.3%
No	162	19.7%
Knowledge of Legislation for Persons with Disabilities		
Yes	702	85.1%
No	123	14.9%
Learning About Disability Through the Media		
Yes	329	39.9%
No	496	60.1%
Current Work with People with Disabilities		
Yes	644	78.1%
No	181	21.9%
Employer Training in Disability		
Yes	366	44.4%
No	459	55.6%

KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Variable	Number of Participants Responding	Frequency
Additional Certification in Disability		
Yes	142	17.2%
No	683	82.8%
PostdoctoralTraining in Disability		
Yes	367	44.5%
No	458	55.5%
Current State Requires CE for License Renewal		
Yes	763	92.5%
No	62	7.5%
Aware of State CE Requirement		
Yes	706	85.6%
No	119	14.4%
Any CE in Disability Required		
Yes	22	2.7%
No	803	97.3%
CE Required in Ethics and Legal Issues		
Yes	698	84.6%
No	127	15.4%
CE Improving Quality of Care to Patients		
Yes	707	85.7%
No	118	14.3%

Variable	Number of Participants Responding	Frequency
Competence Level Increasing When Attending CE		
Yes	725	87.9%
No	100	12.1%

This was an electronic survey that required psychologists from many states to complete the survey. Texas (N= 128), North Carolina (N = 121), Florida (N = 82), Ohio (N = 51), New York (N = 33), New Mexico (N = 29), and Louisiana (N= 24) had the largest amount of participants. There were nine states that had no representation. The following table depicts which states were involved in this current study and which states had e-mail addresses readily available to the public. Also, the table will demonstrate the number of psychologists who have multiple state licenses and those who are only licensed in one state.

Table 5
State Participation

State	State Licensing Board Providing E-Mail Addresses	Number of Actual Study Participants
Alabama	none available	2
Alaska	none available	1
Arizona	none available	1
Arkansas	Available	17
California	none available	17
Colorado	none available	4
Connecticut	Available	6
Delaware	none available	0

State	State Licensing Board Providing E-Mail Addresses	Number of Actual Study Participants
District of Columbia	Available	15
Florida	Available	82
Georgia	none available	2
Hawaii	none available	0
Idaho	none available	0
Illinois	none available	10
Indiana	none available	0
Iowa	none available	0
Kansas	Available	22
Kentucky	none available	3
Louisiana	Available	24
Maine	Available	8
Maryland	none available	6
Massachusetts	none available	2
Michigan	none available	7
Minnesota	none available	5
Mississippi	none available	4
Missouri	none available	1
Montana	none available	0
Nebraska	none available	1
Nevada	Available	12
New Hampshire	none available	1

State	State Licensing Board Providing E-Mail Addresses	Number of Actual Study Participants
New Jersey	none available	2
New Mexico	Available	29
New York	none available	33
North Carolina	Available	121
North Dakota	none available	1
Ohio	Available	51
Oklahoma	Available	16
Oregon	Available	8
Pennsylvania	none available	4
Rhode Island	Available	13
South Carolina	none available	1
South Dakota	none available	0
Tennessee	none available	0
Texas	Available	128
Utah	Available	20
Vermont	none available	0
Virginia	none available	3
Washington	none available	4
West Virginia	none available	1
Wisconsin	none available	1
Wyoming	Available	4
Subtotal	single state licensure only	693

State	State Licensing Board Providing E-Mail Addresses	Number of Actual Study Participants
Multiple State Licensure	not counted above	132
Total		825

Analysis

The variables, the summed composite of exposure to persons with disabilities, the summed composite of training related to persons with disabilities, and the summed composite of engagement in disability specialization and practice, were statistically analyzed for reliability by computing a Kuder Richardson value (KR20). This value was performed by first conducting a factor analysis procedure on the individual summed composite items in SPSS Version 17.0 (2008) to obtain an Eigen value. This Eigen value was then computed in the Kuder Richardson formula to obtain the final KR20 value for each composite score. This formula is as follows:

$KR20=k/(k-1)(1-(1/eigenvalue))$

K=the number of items in each summed composite variable.

The results were as follows: Exposure to persons with disabilities (containing seven categorical items from the demographic questionnaire) was 0.53, training related to persons with disabilities (containing 12 categorical and continuous items from the demographic questionnaire) was 0.66, and engagement in disability specialization and practice (containing six categorical and continuous items from the demographic questionnaire) was 0.67.

Multivariate outlier tests indicated that there were 42 cases that were deemed as multivariate outliers. Based on the chi-square criterion, these cases had to be eliminated before running the final path analysis and the three separate multiple regression analyses. Analysis of multivariate outliers was performed in SAS VERSION 9.3 (2012).

When screening for multivariate outliers, the following cases were classified as a multivariate outlier: case #3, 37, 52, 67, 76, 78, 80, 104, 113, 172, 179, 189, 222, 224, 242, 270, 304, 308, 328, 340, 347, 351, 368, 397, 414, 426, 467, 470, 481, 560, 569, 584, 591, 615, 656, 661, 666, 702, 746, 767, 783, and 792. Some interesting descriptive information to note about this sample is that most of these participants were White, female, married, clinical psychologists with Ph.D. degrees, and were licensed in the southeastern part of the United States. About one-third of these participants had relative work experience related to persons with disabilities. This subset of the overall sample matched the demographics of the sample used to execute the overall path and multiple regression analyses.

The output generated, including descriptive statistics for this unique data set, indicated the following:

Table 6a

Descriptive Statistics Multivariate Outliers zTransCCDS

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
.43	.01	.85	.46	.43	1.78	1.33	-2.54	2.93	5.47	1.89	-.28	-.26
(.21)											(.37)	(.72)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

Table 6b

Descriptive Statistics Multivariate Outliers zTransATDP-A

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
-.23	-.83	.37	-.21	.14	3.70	1.92	-3.81	2.83	6.64	3.01	-.273	-.925
(.30)											(.37)	(.72)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

Table 6c

Descriptive Statistics Multivariate Outliers zEngagement

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
.70 (.29)	.12	1.28	.52	.45	3.48	1.86	-1.28	9.96	11.24	2.33	3.00 (.37)	14.27 (.72)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

Table 6d

Descriptive Statistics Multivariate Outliers zExposure

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
-.16 (.19)	-.54	.22	-.17	-.50	1.48	1.22	-2.46	2.11	4.57	1.96	.01 (.37)	-1.0 (.72)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

Table 6e

Descriptive Statistics Multivariate Outliers zTraining

M (SEM)	95% CI UB	95% CI LB	5% TM	Median	V	SD	Min	Max	Range	IR	S (SEM)	K (SEM)
.86 (.24)	.37	1.35	.88	.73	2.47	1.57	-2.27	3.45	5.72	2.73	-.09 (.36)	-.99 (.72)

Note. M= Mean. S= Standard Error of Measurement. CI UB= Confidence Interval for Mean Upper Bound. CI LB=Confidence Interval for Mean Lower Bound. 5% TM = Trimmed Mean. V = Variance. SD = Standard Deviation. IR = Interquartile Range. S = Skewness. K = Kurtosis.

The following table depicts the tests of normality of the data set using the minimum value tolerance ellipsoid comprising robust Rousseuw Mahalanobis distances to screen for outliers with respect to the data centroid.

Table 7

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
zTransCCDS	.071	42	.200*	.979	42	.614
zTransATDP	.118	42	.153	.955	42	.096
zEngagement	.174	42	.003	.730	42	.000
zExposure	.167	42	.005	.943	42	.036
zTraining	.109	42	.200*	.966	42	.236

a. Lilliefors Significance Correction

* This is a lower bound of the true significance.

The following pages will show the stem & leaf plots for each variable—Z-score of exposure to persons with disabilities, Z-score of training related to persons with disabilities, awareness of perceptions and attitudes of people with disabilities (assessed by the Z-transformed ATDP Form A), multicultural disability competence (assessed by the Z-transformed CCDS), and Z-score of engagement in specialized work with persons with disabilities. This illustrates the distribution of the cases that were deemed outliers.

```
Frequency    Stem & Leaf

    1.00      -2 .        5
    2.00      -2 .        03
     .00      -1 .
    4.00      -1 .        0123
    2.00      -0 .        59
    5.00      -0 .        01334
    9.00       0 .        012333444
    5.00       0 .        56667
    4.00       1 .        1344
    6.00       1 .        677999
    2.00       2 .        14
    2.00       2 .        89

Stem width:  1.000000
Each leaf:       1 case(s)
```

Figure 4a. zTransCCDS Stem-and-Leaf Plot

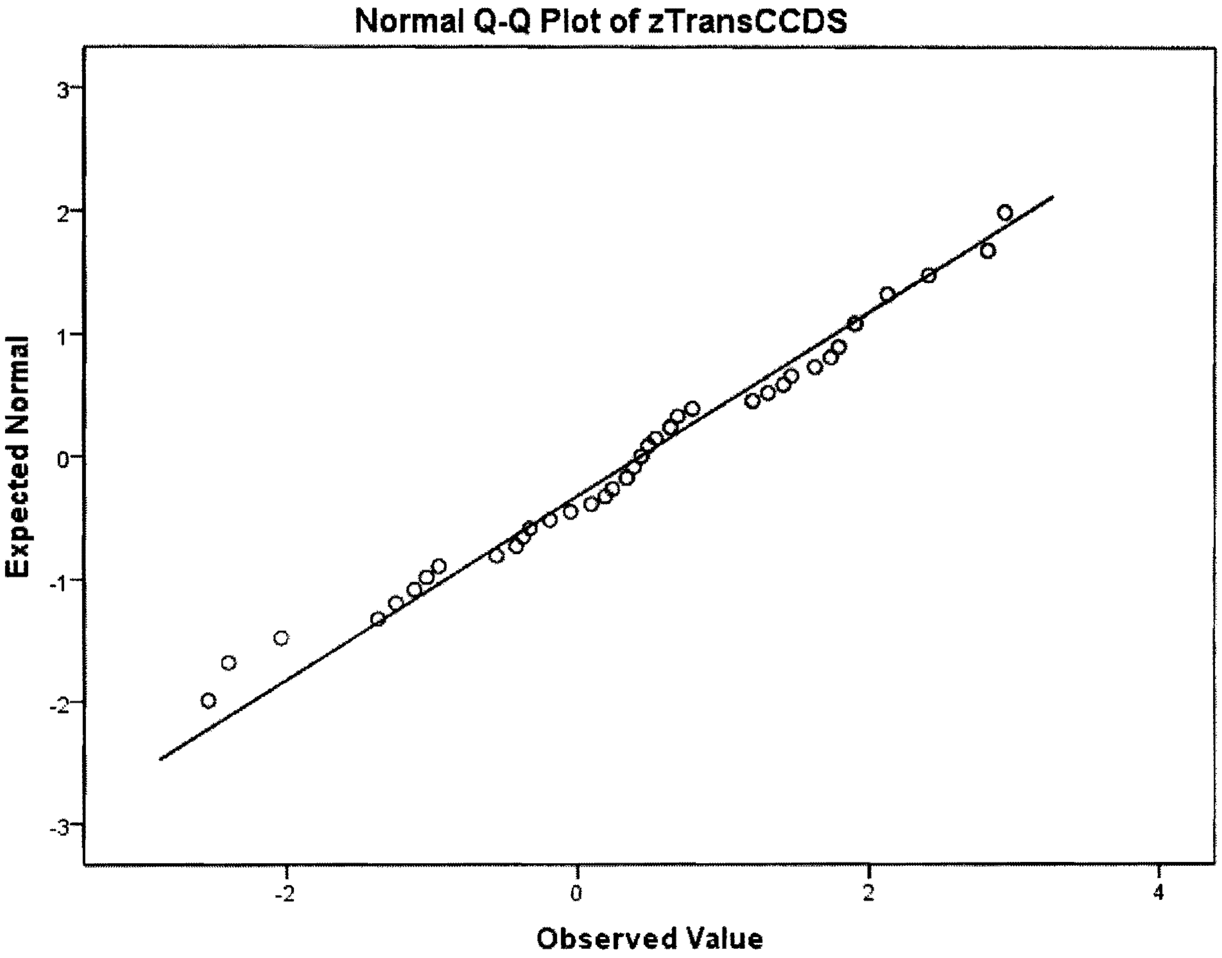

Figure 4b. Normal Q-Q Plot of zTransCCDS.

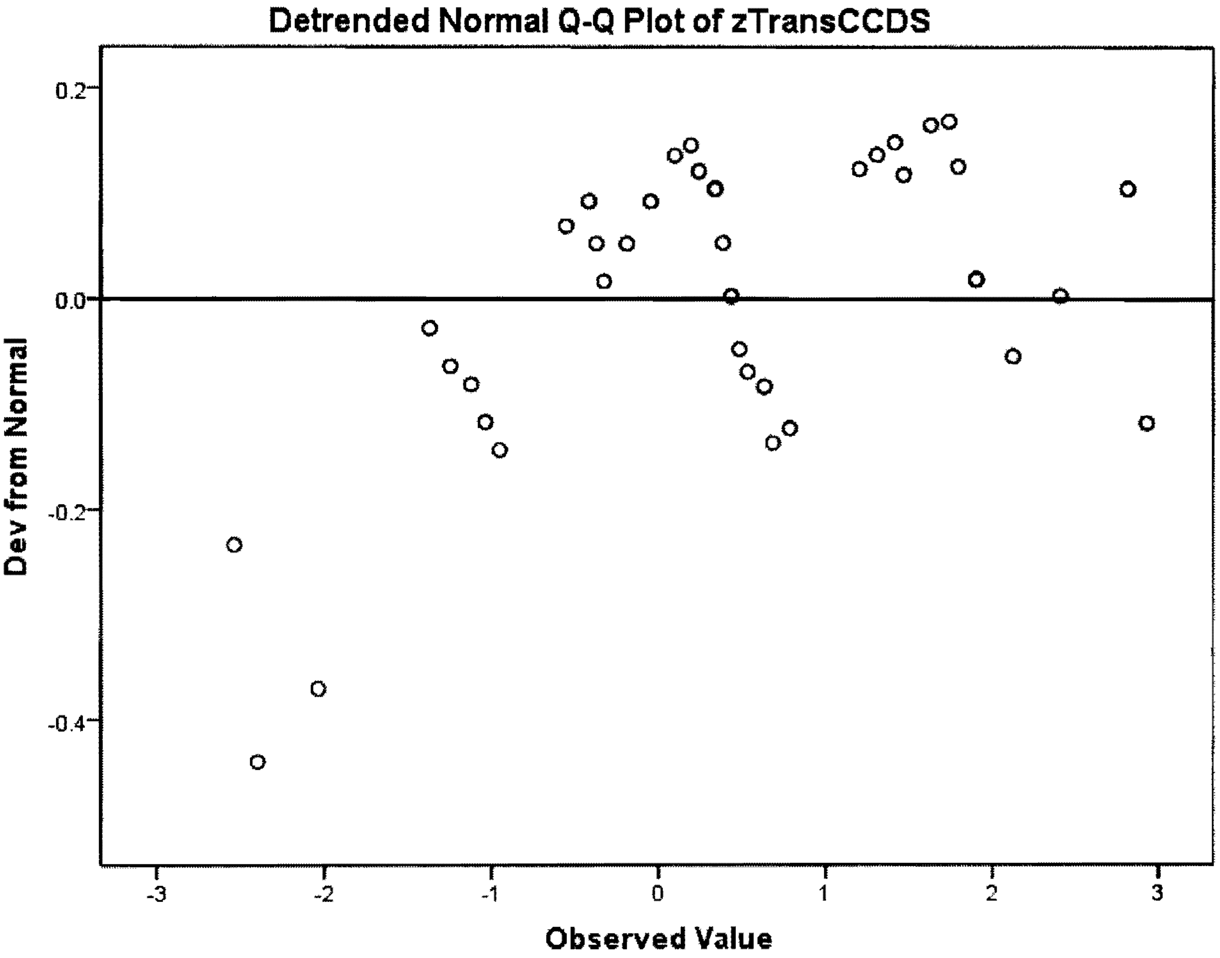

Figure 4c. Detrended Normal Q-Q Plot of zTransCCDS.

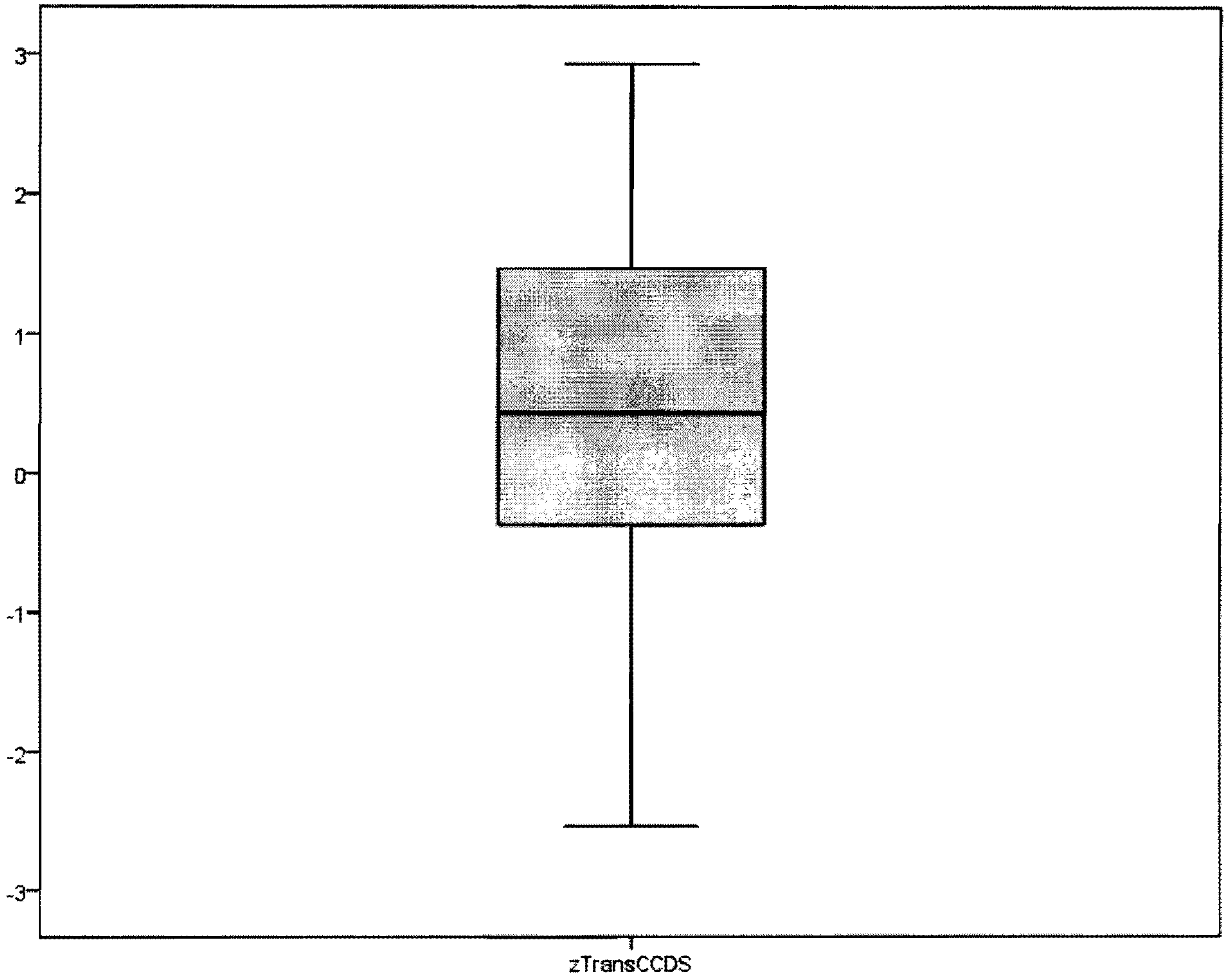

Figure 4d. Box Plot of zTransCCDS.

```
Frequency    Stem &  Leaf

    6.00       -3 .       014458
    3.00       -2 .       115
    6.00       -1 .       024458
    4.00       -0 .       1159
   10.00        0 .       1111134445
    8.00        1 .       02346889
    5.00        2 .       13488

Stem width:  1.000000
Each leaf:      1 case(s)
```

Figure 5a. zTransATDP Form A Stem-and-Leaf Plot

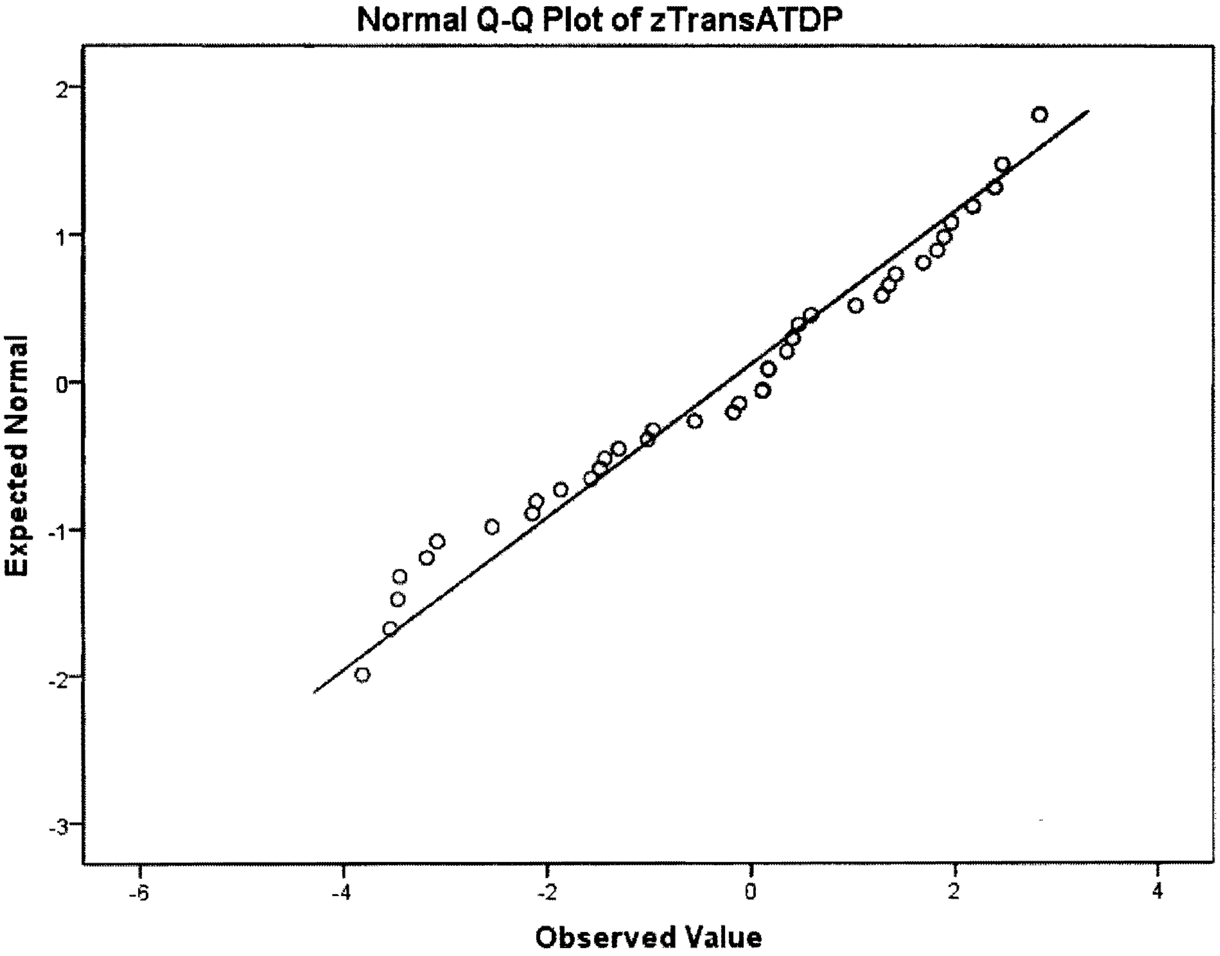

Figure 5b. Normal Q-Q Plot of zTransATDP Form A.

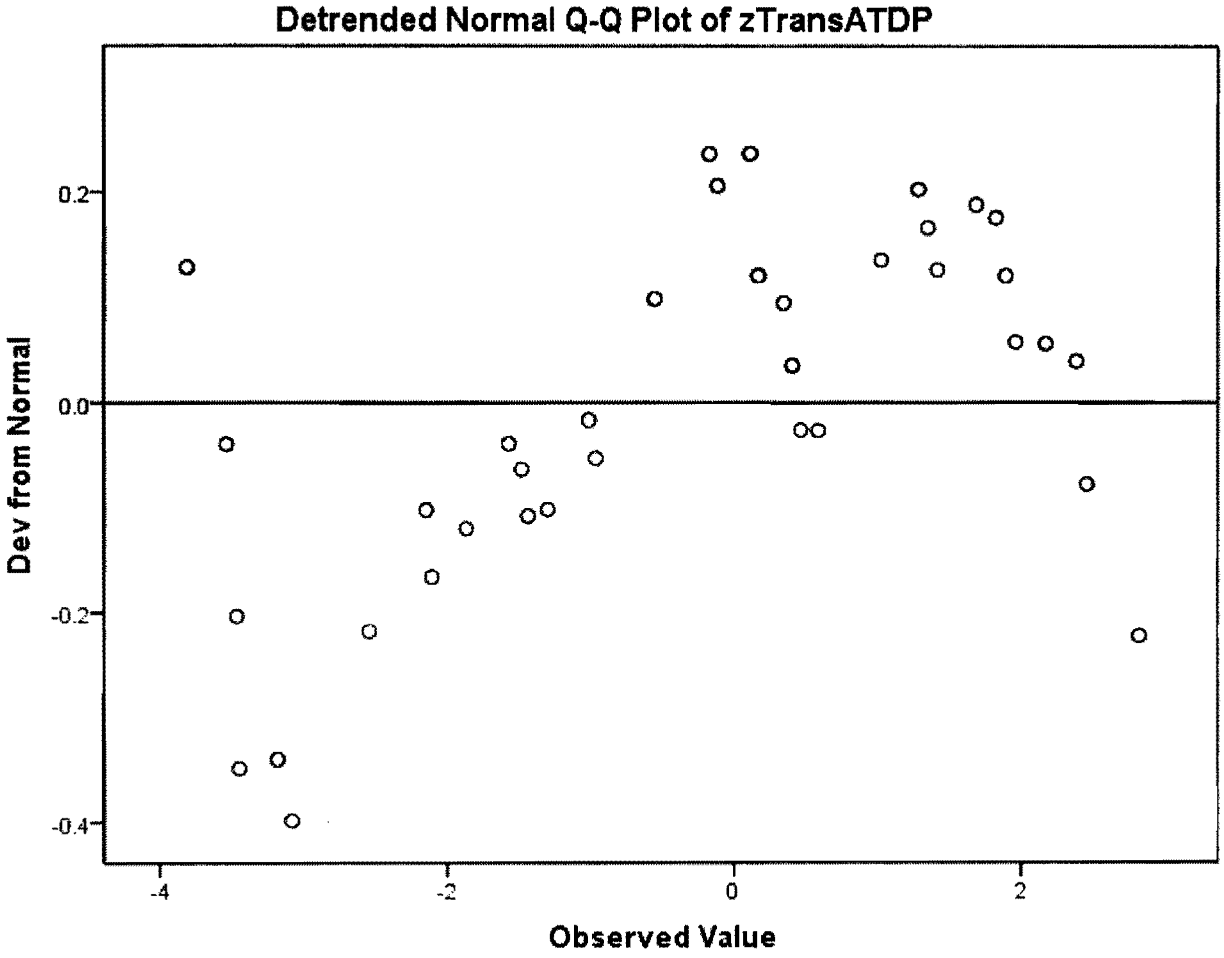

Figure 5c. Detrended Normal Q-Q Plot of zTransATDP.

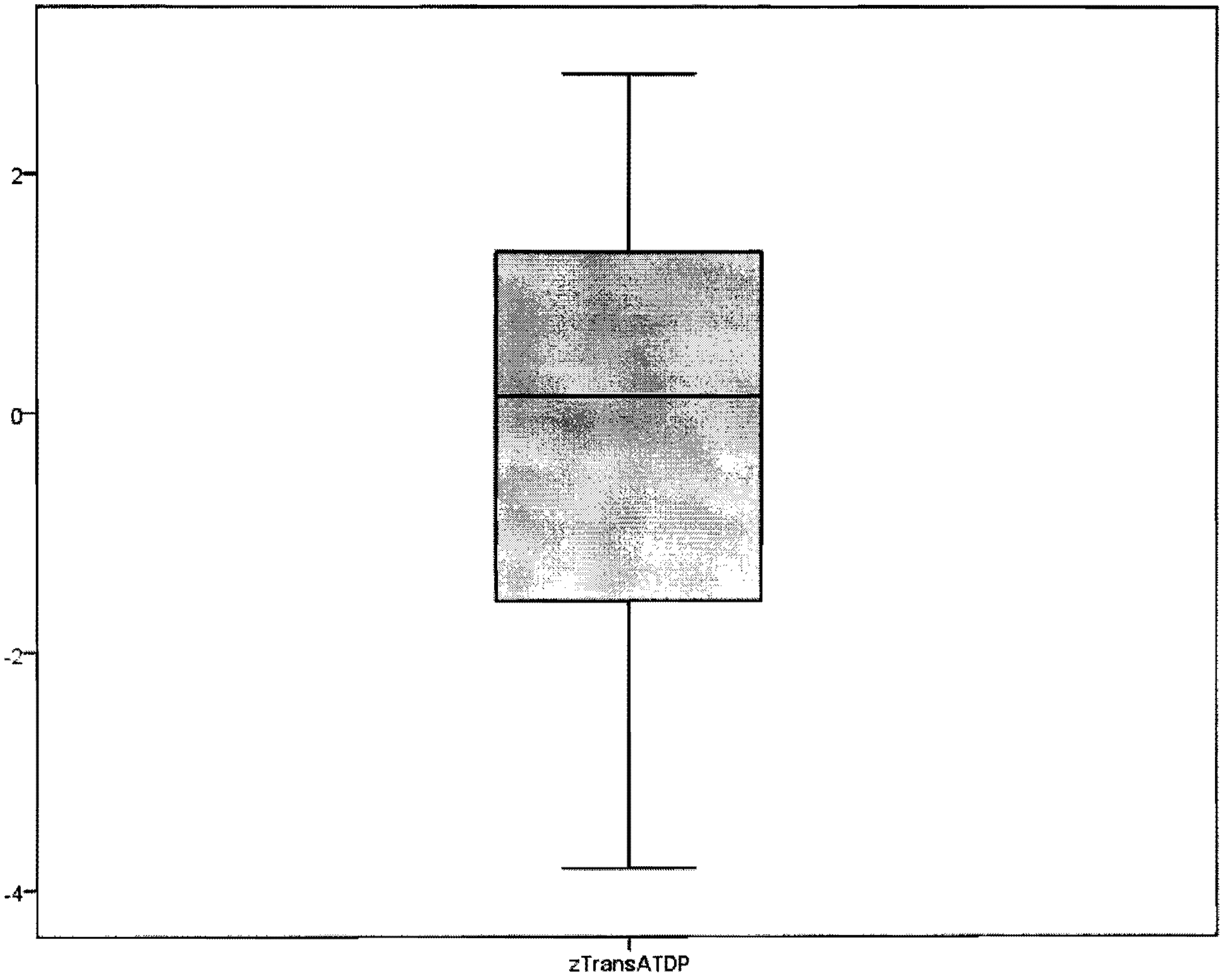

Figure 5d. Box Plot of zTransATDP.

```
Frequency    Stem &  Leaf

     5.00       -1 .      22222
     6.00       -0 .      566777
     5.00       -0 .      12223
     5.00        0 .      02224
     5.00        0 .      57779
     5.00        1 .      02224
     5.00        1 .      77777
     5.00        2 .      22222
     1.00 Extremes        (>=10.0)

Stem width:  1.000000
Each leaf:       1 case(s)
```

Figure 6a. zEngagement Stem-and-Leaf Plot

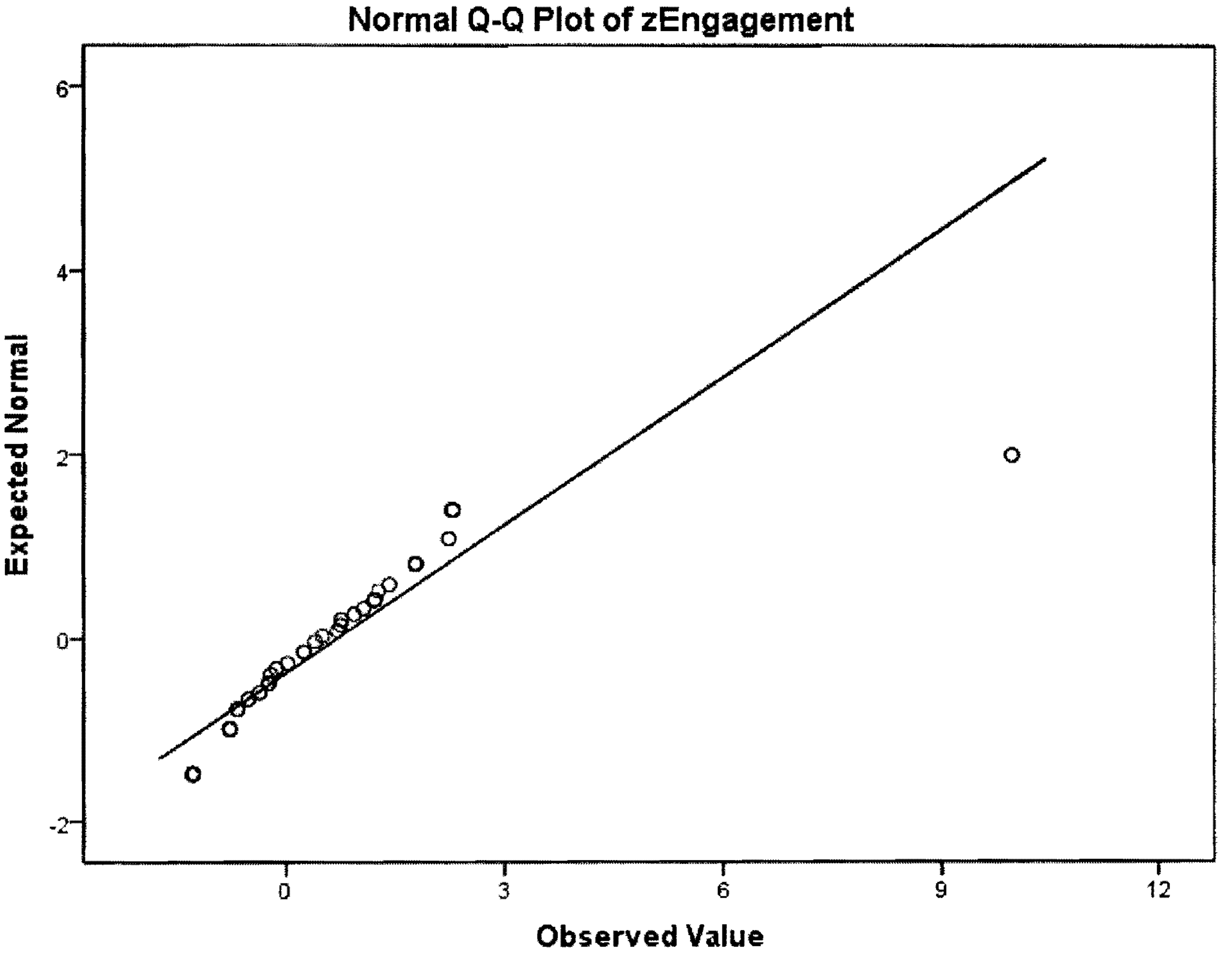

Figure 6b. Normal Q-Q Plot of zEngagement.

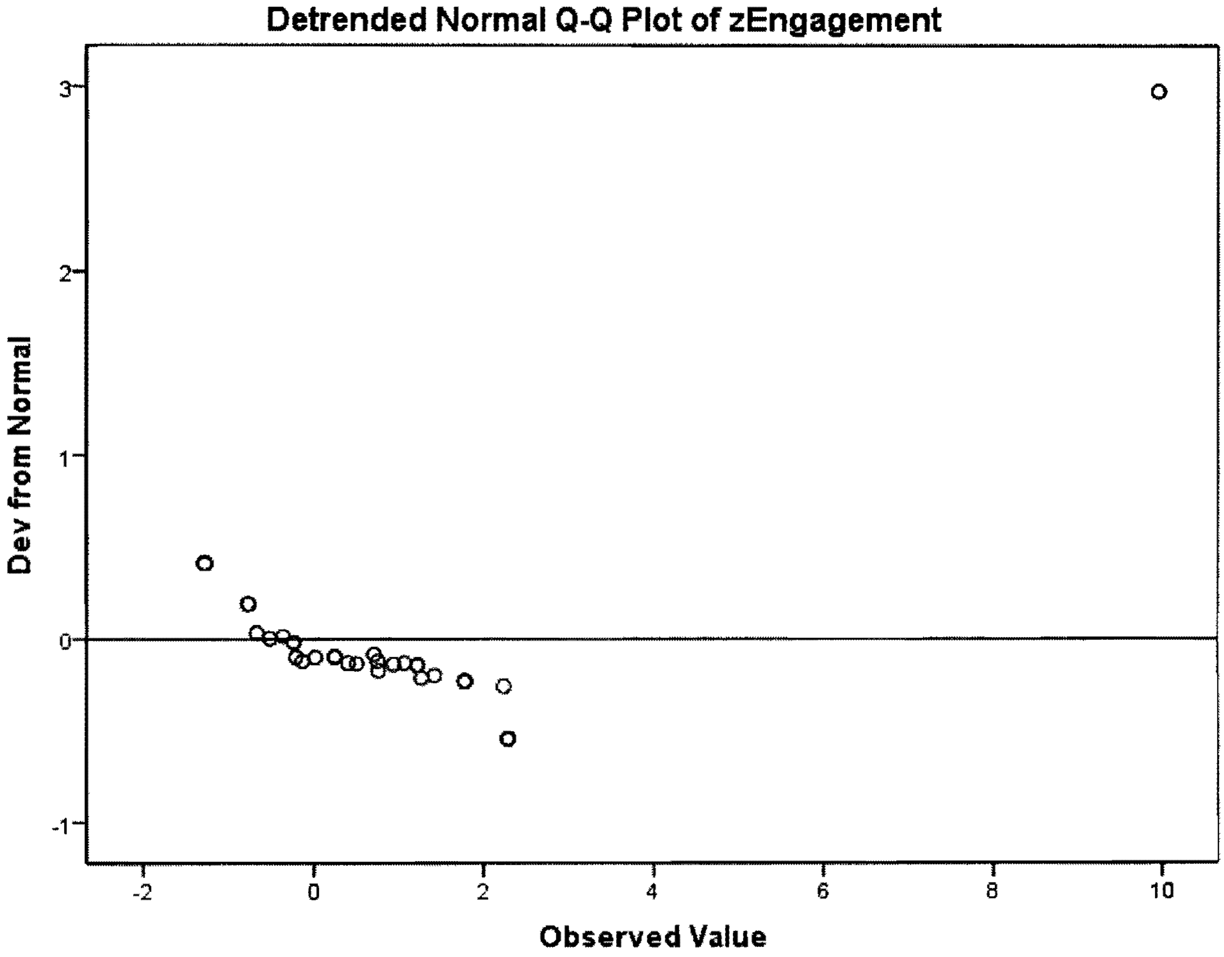

Figure 6c. Detrended Normal Q-Q Plot of zEngagement.

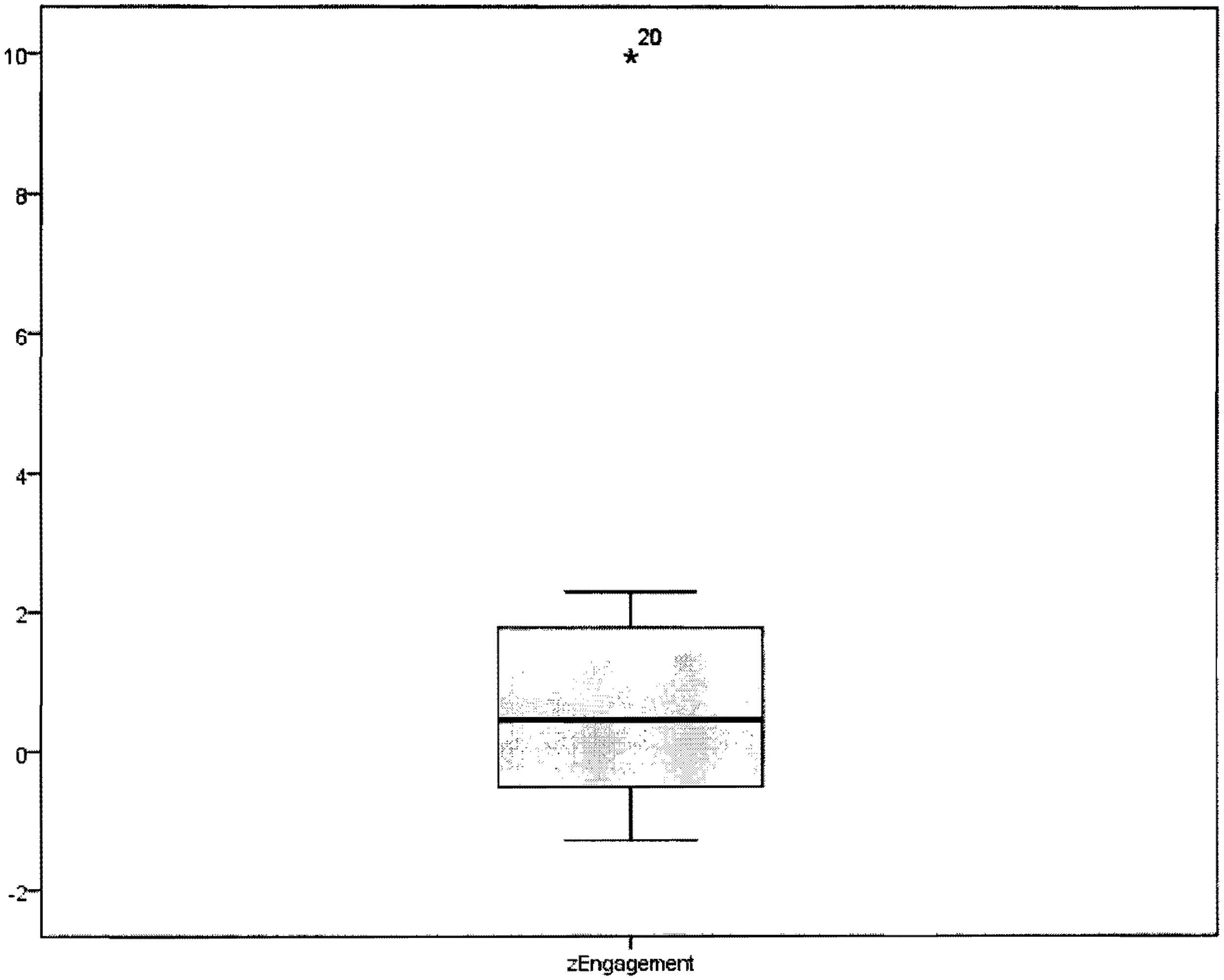

Figure 6d. Box Plot of zEngagement.

```
Frequency    Stem &  Leaf

    1.00      -2 .    4
    7.00      -1 .    8888888
    5.00      -1 .    11111
     .00      -0 .
    9.00      -0 .    444444444
    4.00       0 .    1111
   10.00       0 .    8888888888
    4.00       1 .    4444
     .00       1 .
    2.00       2 .    11
Stem width:  1.000000
Each leaf:       1 case(s)
```

Figure 7a. zExposure Stem-and-Leaf Plot.

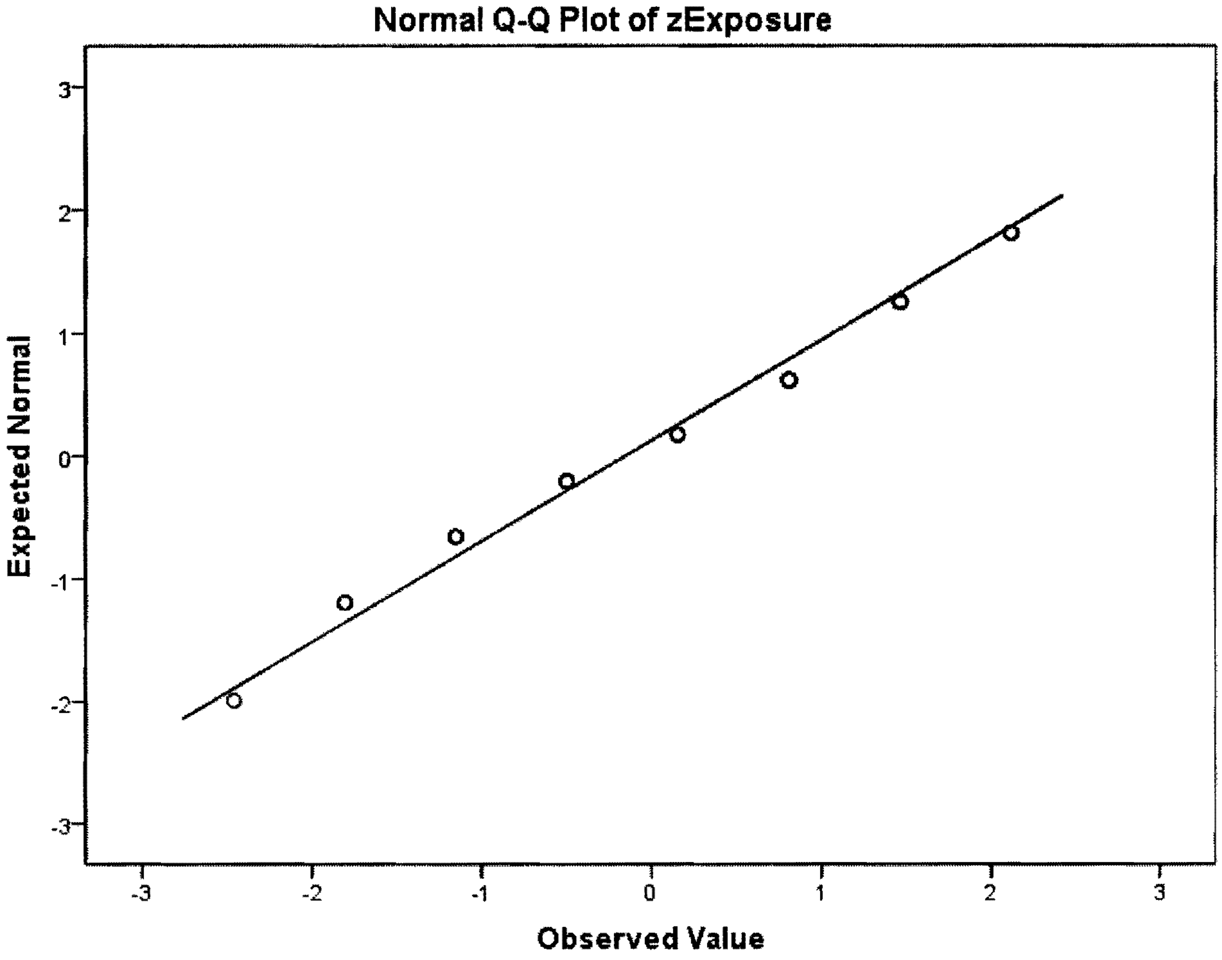

Figure 7b. Normal Q-Q Plot of zExposure.

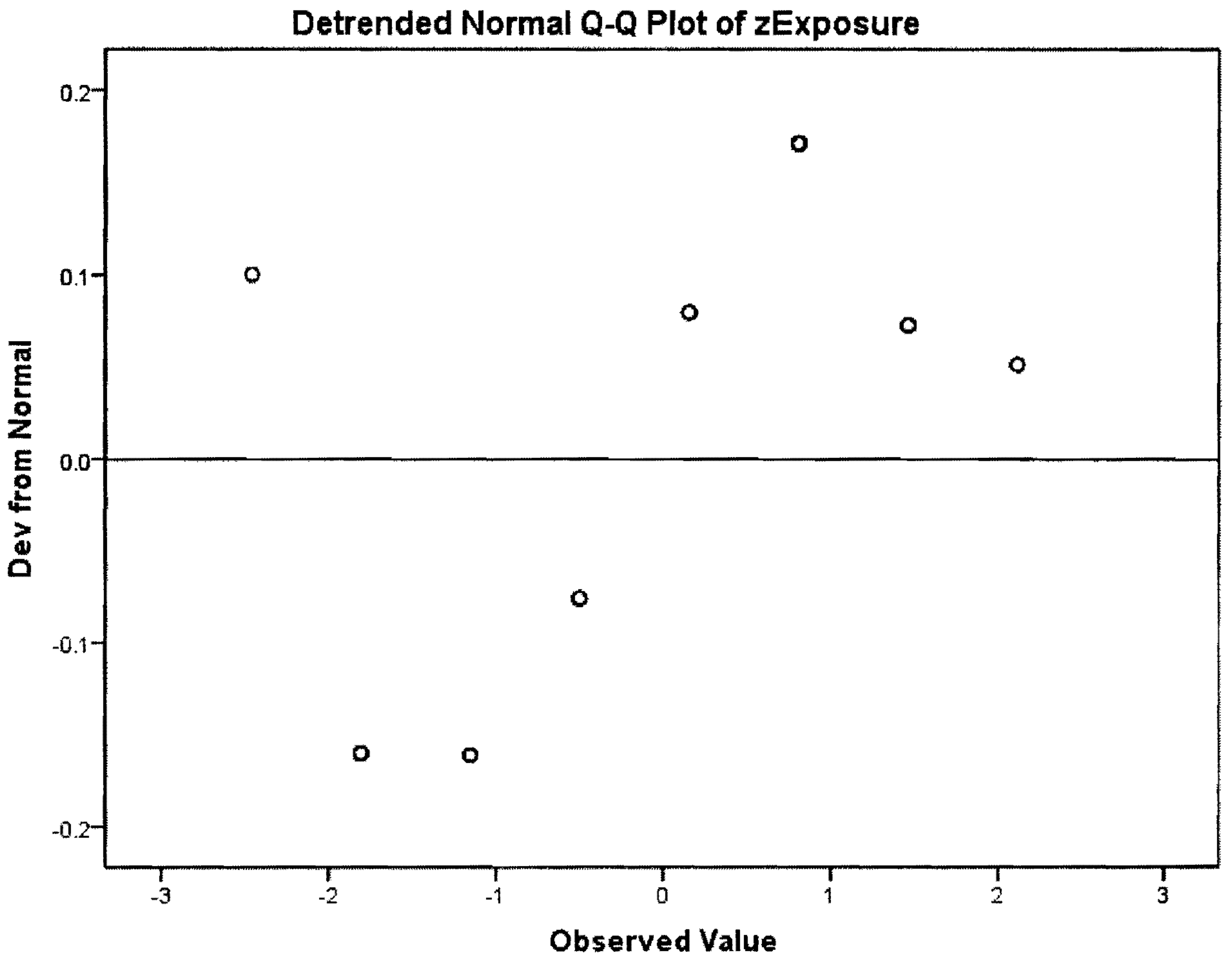

Figure 7c. Detrended Normal Q-Q Plot of zExposure.

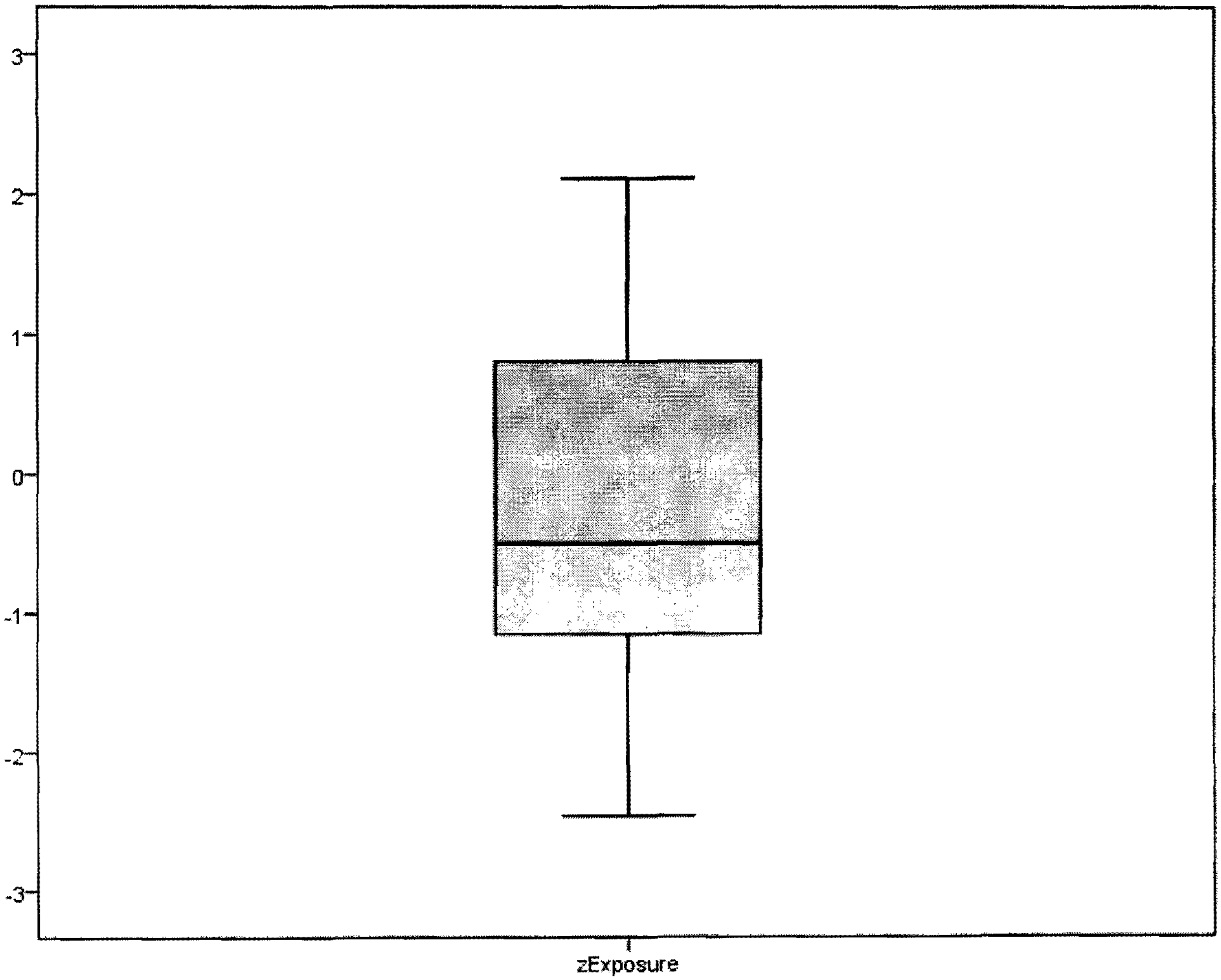

Figure 7d. Box Plot of zExposure.

```
Frequency    Stem &  Leaf

   1.00       -2 .  2
   5.00       -1 .  11149
   8.00       -0 .  00333669
  11.00        0 .  11147777999
   4.00        1 .  5888
   9.00        2 .  003333669
   4.00        3 .  1144

Stem width:  1.000000
Each leaf:      1 case(s)
```

Figure 8a. zTraining Stem-and-Leaf Plot

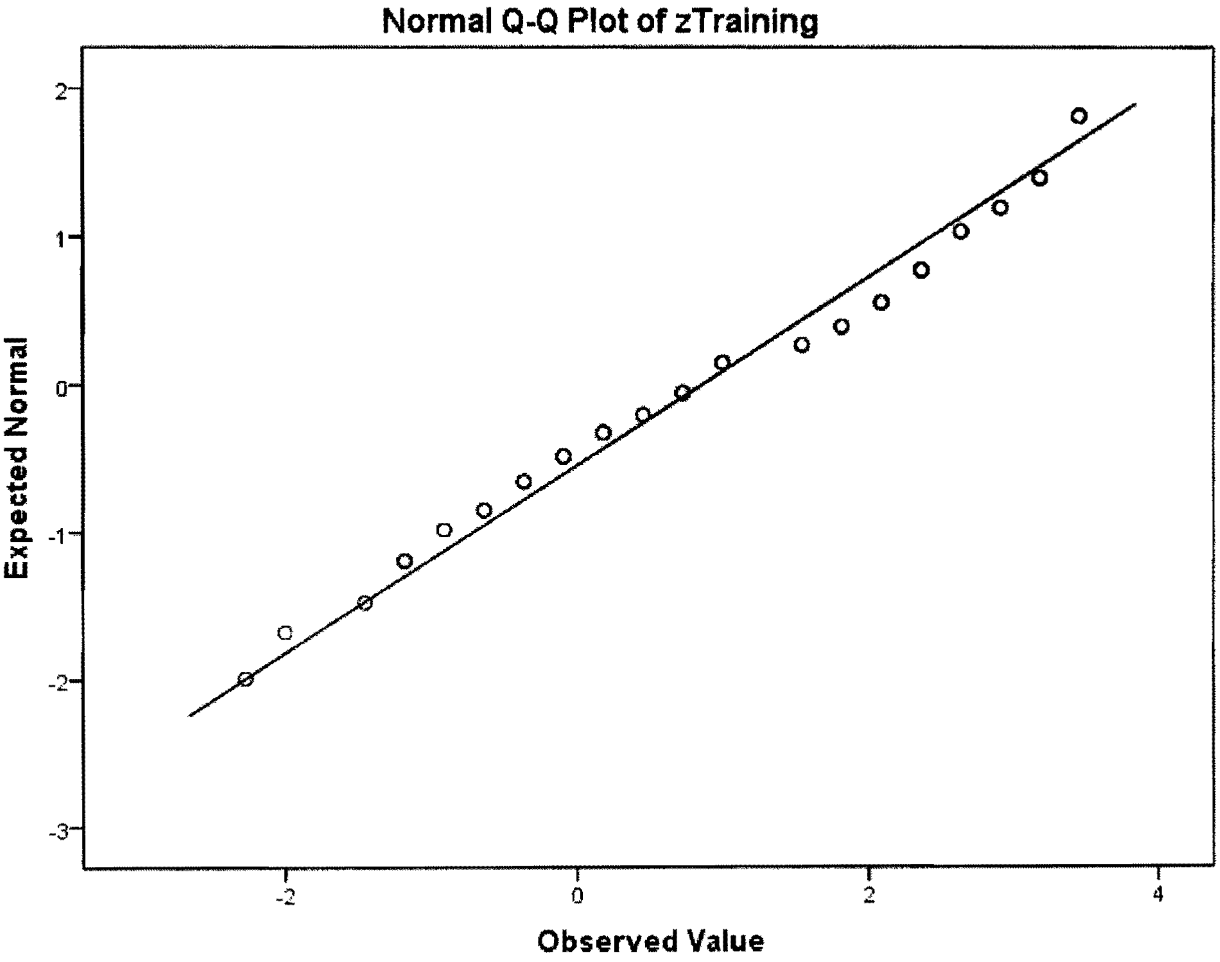

Figure 8b. Normal Q-Q Plot of zTraining.

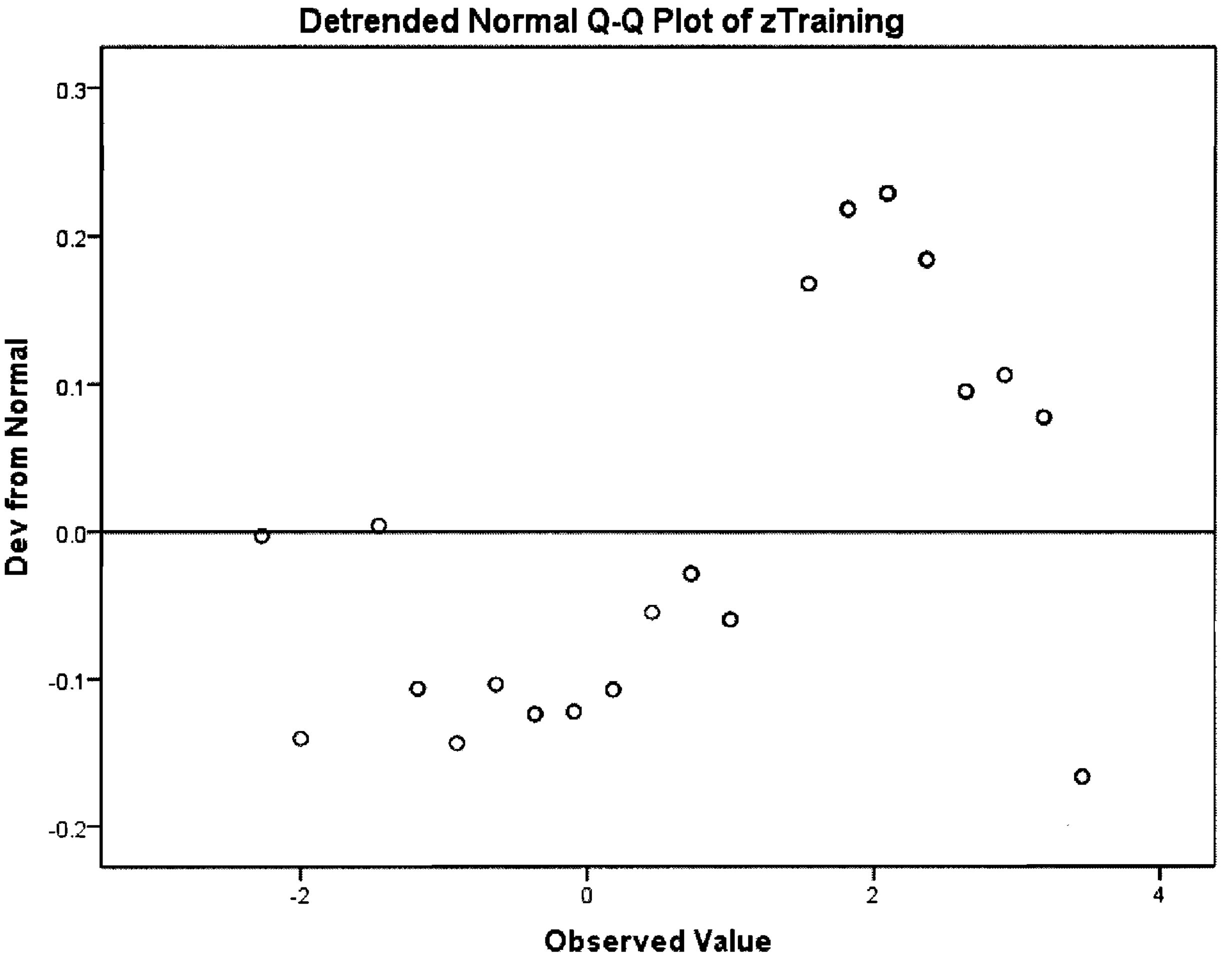

Figure 8c. Detrended Normal Q-Q Plot of zTraining.

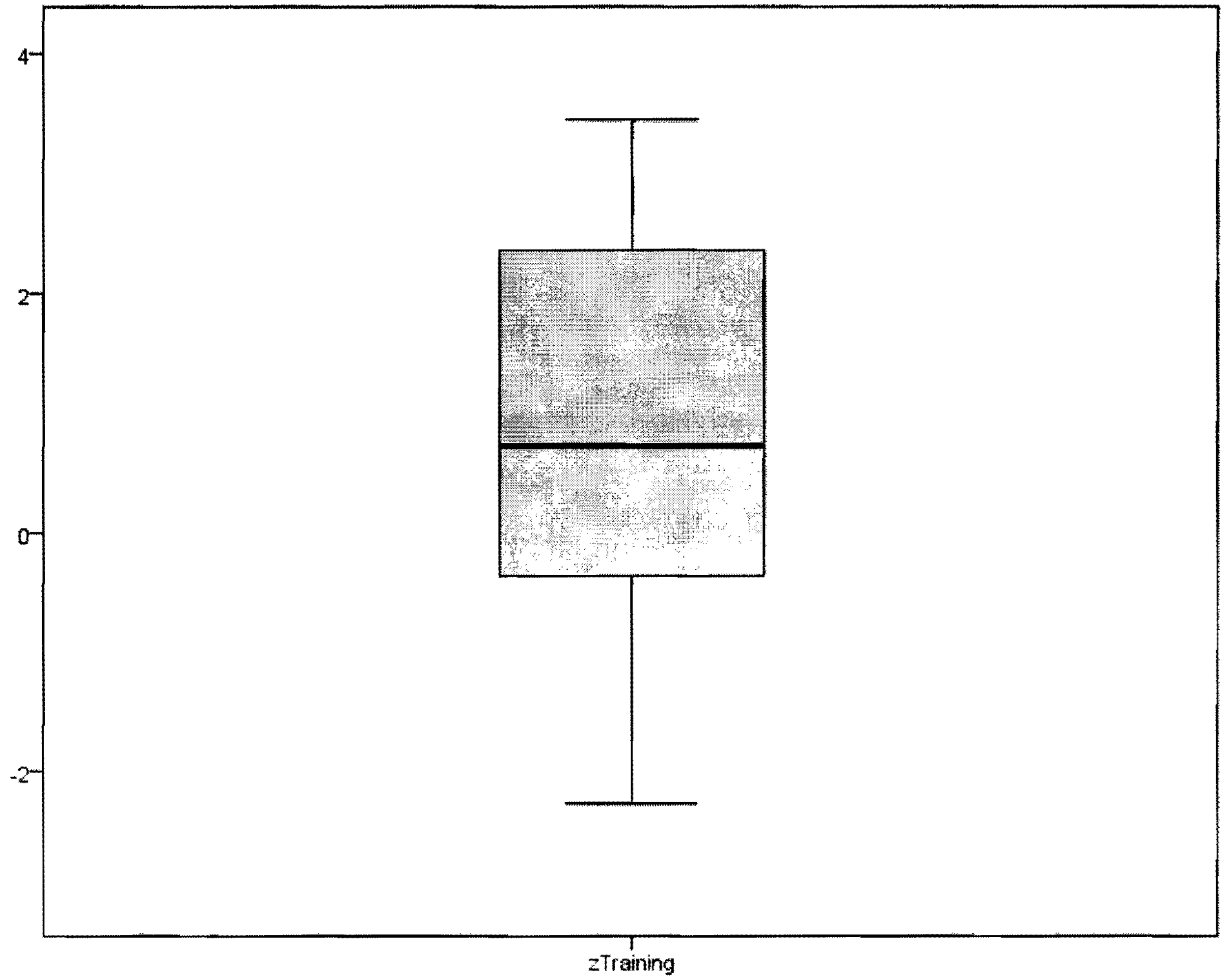

Figure 8d. Box Plot of zTraining.

The variables, the summed composite Z score of exposure to persons with disabilities, the summed composite Z score of training related to persons with disabilities, the Z value of awareness (transformed total scale score of the ATDP Form A), the Z value of perceived multicultural disability competence (transformed total scale score of the CCDS), and the summed composite Z score of engagement in disability specialization and practice, for 783 licensed psychologists, were analyzed via a path analysis in LISREL Version 8.8 (Jöreskog & Sörbom, 2006). The statistical textbook written by Meyers et al. (2006) was utilized to further assess the data output. Statistical output incorporated the goodness-of-fit tests to evaluate the relationships among the variables. These tests consisted of the chi-square test, the goodness-of-fit index (GFI), the comparative-fit index (CFI), the normed-fit index (NFI), and the root mean square error of approximation (RMSEA). Also, path coefficients were assessed for statistical significance at $p< 0.05$, and practical significance at $P > 0.3$. This was done to determine what type of relationship existed between the variables.

An additional statistical procedure in this research investigation called for an execution of three separate multiple regression analyses. This was done to further determine if the predicted hypotheses were supported in this model. The standard regression method, also known as the simultaneous or the direct method, was the statistical procedure employed here. This method calls for all the predictors (independent variables) to be entered into the equation in a single step (Meyers et al., 2006). This method allowed for a full model solution which involved all the predictors (Meyers et al., 2006). According to Meyers et al., the standard regression type centers on the unique contribution that each independent variable makes to the overall prediction of the model when joined with all the other independent variables.

Findings - Path Analysis

The path analysis was conducted twice in LISREL Version 8.8 (Jöreskog & Sörbom, 2006) by first using the maximum likelihood procedure, and then using the unweighted least squares method. This was done to confirm the results. Results of the path analysis indicated that the model had a chi-square statistic, x^2 {5, N=783, = 0.048 (P = 0.83)], which was nonsignificant. The chi-square statistic is applied to test the difference between the predicted and the observed relationships (correlations/covariances) (Meyers et al., 2006). A nonsignificant chi-square is needed when the researcher is proposing a close fit (Myers et al., 2006). In this current study, the chi-square value was nonsignificant, indicating a good match between the proposed model and the observed data. However, I wanted to further confirm this match by reviewing additional goodness-of-fit tests to better determine the overall fit of the model.

Additional statistics obtained in this research investigation resulted in the goodness of fit index (GFI = 1), the comparative fit index (CFI = 1), and the normed fit index (NFI = 1). "The CFI and the NFI are measures assessing the fit of the proposed model relative to the independence model, which assumes that there are no relationships in the data (Meyers et al., 2006, p. 608). Meyers et al. (2006) indicated that these goodness-of-fit indicators specify the enhancement of the hypothesized model compared to the output.

Finally, the root mean square error of approximation (RMSEA = 0) was assessed. This statistic indicates the "average of the residuals between the observed correlation/covariance from the sample and the expected model estimated from the population" (Meyers et al., 2006, p. 608). These results indicated that this model had a relatively good approximation, and it satisfied all indicators suggested by the goodness-of-fit statistics. The following table indicates the expected theoretical result (Meyers et al., 2006) compared to the present study findings.

Table 8
Path Analysis Results Compared to Theoretical Approximation

Goodness of Fit Test Type	Expected theoretical Results (Meyers, Gamst & Guarino, 2006	Current Study Findings Using Maximum Likelihood Approximation	Current Study Findings Using Unweighted least squares Method
Chi-Square Test	Must be nonsignificant	nonsignificant x2{5, N=783, = 0.048 (P = 0.83)	nonsignificant x2{5, N=783, = 0.048 (P = 0.83)
Goodness of Fit Index (GFI)	Should be 0.90 or greater	1	1
Adjusted Goodness of Fit Index (AGFI)	should be 0.90 or greater	1	1
Normed Fit Index (NFI)	Should be greater than 0.95	1	1
Comparative Fit Index (CFI)	Should be greater than 0.95	1	1
Incremental Fit Index (IFI)	Should be greater than 0.95	1	1
Root Mean Square Error of Approximation (RMSEA)	Should be less than 0.08	0	0
Degrees of Freedom	Greater than 1	1	1
Examining Path coefficients	beta weights are above 0.3 and statistical significance at $p < 0.05$	4 out of the 9 paths	4 out of the 9 paths

The following diagram is the path analysis that produced statistical significance:

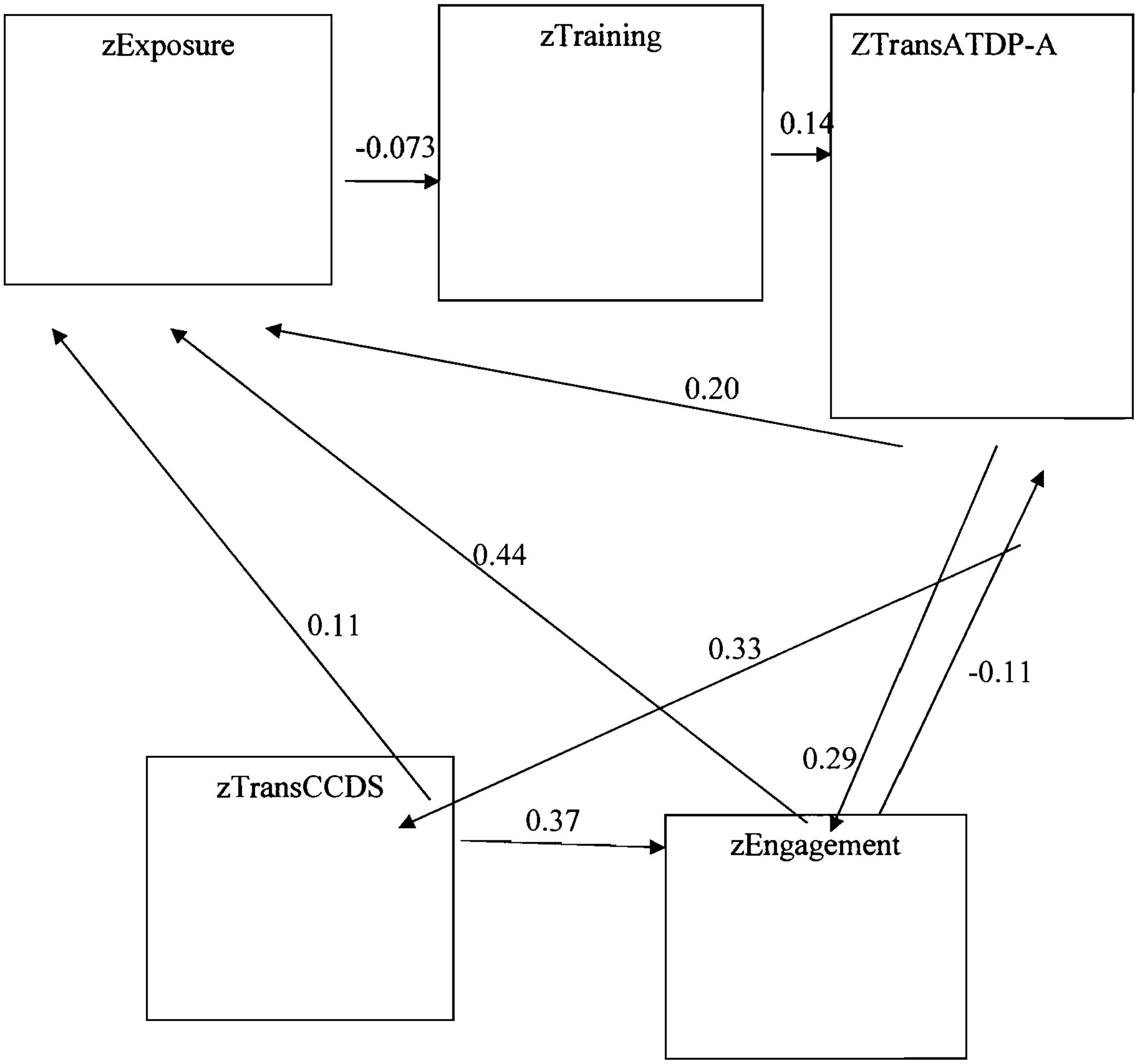

Figure 9. Diagram of Data Supporting Proposed Path.

Path analysis is comprised of both a structural component and a measurement component. As mentioned above, in this investigation, the structural component was supported by the goodness-of-fit tests. The measurement component is further evaluated by using the beta weights for each path coefficient, coupled with the value from the covariance matrix. The above diagram indicates the following paths that were executed in LISREL Version 8.8 (Jöreskog & Sörbom, 2006) and generated the corresponding beta weights:

1. Set Path From zExposure To zTraining (beta weight -0.073)
2. Set Path From zTraining To zTransATDP Form A (beta weight 0.14)
3. Set Path From zTransATDP Form A To zTransCCDS (beta weight 0.33)
4. Set Path From zTransCCDS To zEngagement (beta weight 0.37)
5. Set Path From zTransATDP Form A To zEngagement (beta weight 0.29)
6. Set Path From zEngagement To zTransATDP Form A (beta weight -0.11)
7. Set Path From zTransATDP Form A To zExposure (beta weight 0.20)
8. Set Path From zTransCCDS To zExposure (beta weight 0.11)
9. Set Path From zEngagement To zExposure (beta weight 0.44)

The above paths indicate the strength level of the relationships among the variables in the path model. There were four paths that reach statistical significance at or greater than 0.3. They are as follows:

1. zTransATDP Form A To zTransCCDS (beta weight 0.33)
2. zTransCCDS To zEngagement (beta weight 0.37)
3. zTransATDP Form A To zEngagement (beta weight 0.29)
4. zEngagement To zExposure (beta weight 0.44)

The following paths did not achieve beta weights above 0.3. They are:

1. zExposure To zTraining (beta weight -0.07)
2. zTraining To zTransATDP Form A (beta weight 0.14)
3. zEngagement To zTransATDP Form A (beta weight -0.11)
4. zTransATDP Form A To zExposure (Beta weight 0.20)
5. zTransCCDS To zExposure (beta weight 0.11)

The following matrix indicates the relationships among the variables in the path analysis. This matrix further supports that the variables account for a significant amount of variance in the model. Please refer to the matrix for the covariance values.

```
Sample Size =   783

Covariance Matrix

              zExposure  zTraining  zTransATDP Form A   zTransCCDS  zEngage
          --------  --------  --------  --------  --------
 zExposure       0.95

 zTraining      -0.02      0.86

 zTransATDP      0.36      0.08      0.97

 zTransCCDS      0.32      0.01      0.29      0.88

 zEngagement     0.47      0.01      0.31      0.39      0.84


Number of Iterations = 12

LISREL Estimates (Maximum Likelihood)


Covariance Matrix of Latent Variables

              zExposure  zTraining  zTransATDP  zTransCCDS  zEngage
          --------  --------  --------  --------  --------
 zExposure       0.95

 zTraining      -0.02      0.86

 zTransATDP      0.36      0.08      0.97

 zTransCCDS      0.32      0.01      0.29      0.88

 zEngagement     0.47      0.01      0.31      0.39      0.84
```

Figure 10. Covariance Matrix.

The following structural equations illustrate the numerical weights of each variable in the model. It is as follows:

Structural Equations

1. zExposure = 0.20*zTransATDP Form A + 0.11*zTransCCDS + 0.44*zEngagement, Error var.= 0.64 , $R^2 = 0.33$

(0.032) (0.035) (0.036) (0.032)

6.35 3.05 12.13 19.77

2. zTraining = - 0.073*zExposure, Error var.= 0.86 , $R^2 = -0.0020$

(0.042) (0.044)

-1.74 19.70

3. zTransATDP Form A = 0.14*zTraining - 0.11*zEngagement, Error var.= 1.05 , $R^2 = -0.077$

(0.053) (0.40) (0.33)

2.56 -0.28 3.14

4. zTransCCDS = 0.33*zTransATDP Form A, Error var.= 0.80, $R^2 = 0.093$

(0.12) (0.041)

2.78 19.38

5. zEngagement = 0.29*zTransATDP Form A + 0.37*zTransCCDS, Error var.= 0.64, $R^2 = 0.24$

(0.24) (0.038) (0.048)

1.21 9.79 13.40

Findings - Multiple Regression Analyses on Study's Hypotheses

Multiple regression analyses were conducted on the three hypotheses proposed in this research investigation. Output generated from SPSS (Version 17.0 2008) were observed for multicollinearity. This is specified when a particular variable has a tolerance value of 0.01 or less (Meyers et al., 2006). This was not present in the current findings.

The value of the VIF can also be assessed for multicollinearity. This value is the reciprocal of the tolerance (calculated as 1/tolerance), and it assesses the degree of linear association between a specific predictor variable and the remaining independent variables in the model. VIF scores greater than 10 is a sign of multicollinearity (Meyers et al., 2006). This was not evident in this current analysis.

Another assessment value to use to check for multicollinearity is the Condition Index (CI). This index assesses how reliant one independent variable is on another. If the Condition Index is equal to or greater than 30 and at least two variance proportions for a particular predictor variable are greater than 50, it can be concluded that multicollinearity is present (Meyers et al., 2006). Again, this problem was not present with this current data set. All multivariate outliers were previously removed when executing the path analysis.

Multiple regression analyses further supported this model by demonstrating that all of the hypotheses were supported. They were as follows:

Hypothesis #1: Strike (2001) and Strike et al., (2004) indicated that, when deciphering disability competence among mental health providers, there are three essential ingredients needed to determine one's level of multicultural disability competence. These three components are awareness, knowledge, and skills. Therefore, in this research investigation, it was predicted that psychologists who have had previous exposure, training, and awareness of persons with disabilities will demonstrate higher levels of multicultural disability competence when working with clients with disabilities.

A multiple regression analysis was conducted to evaluate how well the predictor variables, Z-score Values of exposure to persons with disabilities, training related to persons with disabilities, and awareness of personal attitudes and perceptions of persons with disabilities by persons without disabilities measured by the transformed total scale score of the ATDP Form A, would predict a higher level of perceived multicultural disability competence, the criterion variable, assessed by the Z-score of the transformed total scale score of the CCDS. Results of the multiple regression analysis showed that $R^2 = 0.20$, adjusted $R^2 = 0.20$, $F(3, 65.67) = 49.98$, $p = 0.00$. This means that the variables indicated in this hypothesis, the three predictors in this particular weighted linear combination, were able to explain about 20% of the variance of perceived multicultural disability competence.

In the present study, the adjusted R^2 value for this analysis is rounded to 0.20, resulting in the same value as the unadjusted R^2 (the actual R^2 was 0.202 and the adjusted R^2 was 0.199). Therefore requiring such little adjustment, and this is attributed to the sample size (N=783) to the number of independent variables (3) ratio set utilized in the analysis. This is illustrated in the table below:

Table 9
Hypothesis #1 Multiple Regression Statistics Part 1

Variables	R	R Square	Adjusted R Square	Std. Error of the Estimate
zExposure; zTraining; zTransATDP	.449^a	.202	.199	.872357801328

a. Predictors: (Constant), zTransATDP, zTraining, zExposure

Table 10

Hypothesis #1 Multiple Regression Statistics Part 2

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	149.934	3	49.978	65.673	.000[a]
Residual	592.825	779	.761		
Total	742.759	782			

a. Predictors: (Constant), zTransATDP, zTraining, zExposure

b. Dependent Variable: zTransCCDS

The table below indicates that there was statistical significance among the variables, Z-score of exposure to persons with disabilities and Z-score of training related to persons with disabilities. The variable, Z-score of awareness to persons with disabilities, assessed by the transformed scale score of the ATDP Form A, was not statistically significant in this model when compared to the dependent variable, Z-score of perceived multicultural disability competence, measured by the transformed scale score of the CCDS. Therefore, this hypothesis is supported; however; this variable, *awareness*, assessed by the ATDP Form A, is not contributing to the model, compared to the other variables.

Table 11

Hypothesis #1 Multiple Regression Statistics Part 3

Coefficients[a]

Model	Unstandardized Coefficients	Standardized	t	Sig.

	B	Std.	Coefficients		
	Error		Beta		
(Constant)	-.013	.031		-.401	.689
zExposure	.294	.033	.298	8.825	.000
zTraining	.267	.035	.257	7.634	.000
zTransATDP	-.058	.034	-.055	-1.719	.086

a. Dependent Variable: zTransCCDS

Hypothesis #2: Based on findings ascertained by Hollimon (2007) on the perceptions and attitudes of graduate students in psychology programs regarding persons with disabilities, psychologists who have had previous exposure, training (recently obtained their doctoral degree, and/or postdoctoral training via on-the-job training or continuing education certification), and awareness of persons with disabilities will demonstrate a higher level of positive regard for persons with disabilities (assessed by the Z-score transformed ATDP Form A).

A multiple regression analysis was done to assess how well the predictor variables, Z scores of exposure to persons with disabilities and training related to persons with disabilities, would predict a higher level of the criterion variable, Z-score of awareness of personal attitudes and perceptions of persons with disabilities by persons without disabilities, assessed by the transformed total scale score of the ATDP Form A. Results of the multiple regression analysis demonstrated that $R^2 = 0.01$, adjusted $R^2 = 0.01$, $F(2, 3.58) = 3.04$, $p = .028$. This connotes that the variables indicated in this hypothesis, the two predictors in this particular weighted linear combination, were able to explain only 1% of the variance of awareness regarding persons with disabilities.

In the present study, the adjusted R^2 value for this analysis is rounded to 0.01, resulting in the same value as the unadjusted R^2 (the actual R^2 was 0.009 and the adjusted R^2 was 0.007). Therefore, it required little adjustment, and this is attributed to the sample size (N=783) to the number of independent variables (2) ratio set utilized in the analysis. This is shown in the table below:

Table 12
Hypothesis #2 Multiple Regression Statistics Part 1

Variables	R	R Square	Adjusted R Square	Std. Error of the Estimate
zExposure; zTraining	.095[a]	.009	.007	.922487612588

a. Predictors: (Constant), zTraining, zExposure

Table 13
Hypothesis #2 Multiple Regression Statistics Part 2

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.087	2	3.043	3.576	.028[a]
Residual	663.767	780	.851		
Total	669.854	782			

a. Predictors: (Constant), zTraining, zExposure
b. Dependent Variable: zTransATDP

The table below shows that there was statistical significance in the variable, *exposure to persons with disabilities*. The variable, *training related to persons with disabilities*, was not statistically significant in this model. Therefore, this hypothesis is supported; however; this variable training, when compared to the dependent variable assessed by the ATDP Form A, is not contributing to the model compared to the other variable.

Table 14

Hypothesis #2 Multiple Regression Statistics Part 3

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.011	.033		.322	.748
zExposure	.094	.035	.100	2.664	.008
zTraining	-.022	.037	-.022	-.594	.553

a. Dependent Variable: zTransATDP

Hypothesis #3: It was proposed that psychologists who have had exposure to persons with disabilities, training about persons with disabilities, awareness regarding individual perceptions and attitudes about persons with disabilities will have higher levels of disability competence, and would be more likely to seek specialized training to work specifically with persons with disabilities.

A multiple regression analysis was executed to evaluate how well the predictor variables, Z-score of exposure to persons with disabilities, Z-score of training related to persons with disabilities, and awareness of personal attitudes and perceptions of persons with disabilities by persons without disabilities (measured by the Z-score of the transformed total scale score of the ATDP Form A), would predict a higher level of perceived multicultural disability competence (assessed by the Z-score of the transformed total scale score of the CCDS); and therefore predict the criterion variable, the Z-score of engagement in specialized training and practice to work specifically with persons with disabilities. Results of the multiple regression analysis demonstrated that

$R^2 = 0.37$, adjusted $R^2 = 0.37$, F(4, 113.78) = 60.87, p = .000. This denotes that the variables indicated in this hypothesis, the four predictors in this particular weighted linear combination, were able to explain about 37% of the variance of engagement in specialized work with persons with disabilities.

In the present study, the adjusted R^2 value for this analysis is rounded to 0.37, resulting in the same value as the unadjusted R^2 (the actual R^2 was 0.369 and the adjusted R^2 was 0.366). Therefore, it required little adjustment, and this is attributed to the sample size (N=783) to the number of independent variables (4) ratio set used in the analysis. This is illustrated in the table below:

Table 15
Hypothesis #3 Multiple Regression Statistics Part 1

Variables	R	R Square	Adjusted R Square	Std. Error of the Estimate
zTransATDP; zTraining; zExposure; zTransCCDS	.608[a]	.369	.366	.731425332228

a. Predictors: (Constant), zTransATDP, zTraining, zExposure, zTransCCDS

Table 16
Hypothesis #3 Multiple Regression Statistics Part 2

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	243.487	4	60.872	113.782	.000[a]
Residual	416.217	778	.535		
Total	659.703	782			

a. Predictors: (Constant), zTransATDP, zTraining, zExposure, zTransCCDS

b. Dependent Variable: zEngagement

The table below indicates that there was statistical significance among the variables, exposure to persons with disabilities, training related to persons with disabilities, and perceived multicultural disability competence. The variable, awareness to persons with disabilities assessed by the transformed scale score of the ATDP Form A, when compared to the dependent variable, engagement in specialized work with persons with disabilities, was not statistically significant in this model. Therefore, this hypothesis is supported; however; this variable, assessed by the ATDP Form A, is not contributing to the model, compared to the other three variables.

Table 17
Hypothesis #3 Multiple Regression Statistics Part 3

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.018	.026		-.674	.500
zExposure	.108	.029	.116	3.670	.000
zTraining	.273	.030	.279	9.003	.000
zTransCCDS	.364	.030	.386	12.115	.000
zTransATDP	.010	.028	.010	.343	.732

a. Dependent Variable: zEngagement

To conclude, the results from both the path analysis (performed using both maximum likelihood approximation and the unweighted least squares methods) and the three separate multiple regression analyses indicated that this was a viable model. The variables, exposure to persons with disabilities, training related to persons with disabilities, perceived multicultural disability competence (measured by the transformed scale score of the CCDS), and engagement in specialized work or practice with persons with disabilities, are critical in determining the level of competence for psychologists when working with clients with disabilities. These results will be further discussed in Chapter V.

CHAPTER V

DISCUSSION

Introduction

This chapter will provide an overview of the findings related to this research investigation. It will begin with a summary of the study's results and interpreting its findings. Next, an overview of limitations inherent to the study will ensue, followed by a conclusion that will contain suggestions for future research and overall clinical implications.

Summary of Findings

In sum, numerous statistical analyses were executed in order to obtain the following results. Multivariate tests performed before the execution of the path analysis and multiple regression analyses demonstrated that there was a presence of multivariate outliers. These cases were deemed multivariate outliers based on the robust Mahalanobis distance. To assess for a multivariate Outlier, the researcher checked for the Extreme Values output. This is carried out by evaluating these distance measures with a chi-square criterion (e.g., the square root of the 0 point .975 quantile of the chi-square distribution with five degrees of freedom).

To eliminate a residual outlier from the data set, it must satisfy having this criterion. The method employed here in the SAS VERSION 9.3 (2012) program was the minimum value tolerance ellipsoid using robust Rousseuw Mahalanobis distances to screen for outliers with respect to the data centroid. This procedure was accomplished by first converting all the variables in the model to Z scores. This process had to be implemented because of the wide range of scores for each variable in the model (e.g., exposure to persons with disabilities; containing seven categorical items from the biographical sheet, training related to persons with disabilities; containing 12 categorical and continuous items from the biographical sheet, awareness of personal attitudes and perceptions related to persons with disabilities; measured by the ATDP Form A scores are from 0 to 180, perceived multicultural disability competence; measured by the CCDS scores are from 0 to 360, and engagement in specialized work or practice with persons with disabilities; containing six categorical and continuous items from the biographical sheet). To accomplish this task, each variable in the model (5) mean divided by its standard deviation for the entire data set (N=825) was calculated. This resulted in 42 observations that needed to be removed from the final data set (N= 825-42= 783).

Therefore, a path analysis conducted in LISREL Version 8.8 (Jöreskog & Sörbom, 2006) and three separate standard multiple regression analysis using SPSS Version 17.0 (2008) with data from 783 licensed psychologists from the United States was performed to answer the following research question: What are the unique contributions of the variables, exposure to persons with disabilities, training related to persons with disabilities, and individual awareness of attitudes and perceptions of persons with disabilities, to perceived multicultural disability competence, and engagement in specialized work with clients with disabilities among practicing licensed psychologists in the United States?

The Likert scales used in the study, the ATDP Form A and the CCDS, had to be transformed based on the data distribution. Prior to the transformation, there was negative skewness to the left and Kurtosis. To rectify this condition, I squared the scores of each of the Likert scale by using SPSS version 17.0 (2008). Once this was done, it significantly helped the overall distribution of the data with respect to these scales.

The final variables used in the model were the Z-score for exposure, the Z-score for training, the Z-score for awareness (measured by the transformed ATDP Form A), the Z-score for multicultural disability competence (measured by the transformed CCDS), and the Z-score for engagement in specialized work or practice with clients with disabilities. These variables were entered into both the path analysis and the standard multiple regression analyses.

The path analysis executed in LISREL Version 8.8 (Jöreskog & Sörbom, 2006) was done using two different approaches. The first approach entailed the use of the maximum likelihood approximation procedure. The second approach incorporated the unweighted least squares method. The results achieved on both procedures matched. This was the expected result according to Meyers et al., (2006). This was done to further strengthen the proposed model.

Results of the path analysis for this current research investigation indicated that the current path model (structural component) had a good approximation regarding the hypothesized plan compared to the observed data. The goodness of fit statistics generated in this study, nonsignificant chi-square test, GFI =1, AGFI =1, NFI =1, CFI = 1, and RMSEA = 0, suggests that this path model had a close fit among the proposed variables observed in the current data.

Path coefficients for each variable were also reviewed. This was done to evaluate the measurement part of the path analysis. The criteria used, when evaluating path coefficients, was that the beta weights should be above 0.3 and assessed at statistical significance at $p < 0.05$. The following paths were deemed to have statistical significance:

1. zTransATDP Form A To zTransCCDS (beta weight 0.33)
2. zTransCCDS To zEngagement (beta weight 0.37)
3. zTransATDP Form A To zEngagement (beta weight 0.29)
4. zEngagement To zExposure (beta weight 0.44)

The following paths did not achieve beta weights above 0.3, but are still important factors in the model. They are:

1. zExposure To zTraining (beta weight -0.07)
2. zTraining To zTransATDP Form A (beta weight 0.14)
3. zEngagement To zTransATDP Form A (beta weight -0.11)
4. zTransATDP Form A To zExposure (Beta weight 0.20)
5. zTransCCDS To zExposure (beta weight 0.11)

In addition, three standard multiple regression analyses were conducted in SPSS Version 17.0 (2008) to further confirm the three hypotheses proposed in this research investigation. Hypothesis 1 predicted that psychologists who have previous exposure, training, and awareness of persons with disabilities will demonstrate higher levels of multicultural disability competence when working with clients with disabilities.

Multiple R for regression was statistically significant, $F(3, 65.67) = 49.98$, $p = 0.00$, $R^2 = 0.20$, R^2 adj = 0.20. Two of the three independent variables (Z-score of exposure to persons with disabilities and Z-score of training related to persons with disabilities) contributed significantly to the prediction of the Z-score of multicultural disability competence, assessed by the transformed CCDS, ($p < .05$). the Z-score of awareness of perceptions and attitudes regarding persons with disabilities, assessed by the transformed ATDP Form A, while negatively correlated to multicultural disability competence, did not make a statistically significant contribution ($p > .05$) to the prediction of multicultural disability competence.

Hypothesis 2 projected that psychologists who have had previous exposure, training (recently obtained their doctoral degree, and/or postdoctoral training via on-the-job training, or continuing education certification), and awareness of persons with disabilities will demonstrate a higher level of positive regard for persons with disabilities (assessed by the Transformed scale score of the ATDP Form A). Multiple R for regression was statistically significant, $F(2, 3.58) = 3.04$, $p = .028$, $R^2 = 0.01$, R^2 adj $= 0.01$. One of the two independent variables (Z-score of exposure to persons with disabilities) contributed significantly to the prediction of awareness of perceptions and attitudes regarding persons with disabilities held by persons without disabilities, assessed by the Z-score of the transformed ATDP Form A, ($p < .05$). The Z-score of training related to persons with disabilities, while negatively correlated to awareness of persons with disabilities, did not make a statistically significant contribution ($p > .05$) to the prediction of awareness of perceptions and attitudes of persons with disabilities held by persons without disabilities assessed by the Z-score of the transformed ATDP Form A.

Hypothesis 3 put forward that psychologists who have had exposure to persons with disabilities, training about persons with disabilities, awareness regarding individual perceptions and attitudes about persons with disabilities will have higher levels of disability competence, and would be more likely to seek specialized training to work specifically with persons with disabilities.

Multiple R for regression was statistically significant, $F(4, 113.78) = 60.87$, $p = .000$, $R^2 = 0.37$, R^2 adj = 0.37. Three of the four independent variables (Z-score of exposure to persons with disabilities, Z-score of training related to persons with disabilities, and the Z-score of multicultural disability competence, assessed by the transformed CCDS) contributed significantly to the prediction of the Z-score of engagement in specialized work or practice with persons with disabilities ($p < .05$). The Z-score of awareness of perceptions and attitudes regarding persons with disabilities, assessed by the transformed ATDP Form A did not make a statistically significant contribution ($p > .05$) to the prediction of Z-score of engagement in specialized work or practice with persons with disabilities.

Finally, reliability statistics for the variables involved in this current research investigation indicated the following: Exposure to persons with disabilities had a Kuder Richardson statistic (KR20) value of 0.53; training related to persons with disabilities had a Kuder Richardson (KR20) value of 0.66; awareness of personal attitudes and perceptions regarding persons with disabilities, assessed by the ATDP Form A, had an internal consistency for the total scale score to be Cronbach's alpha of 0.85; perceived multicultural disability competence, assessed by the total scale score of the CCDS, had an internal consistency for the total scale score to be Cronbach's alpha of 0.78; and engagement in specialized work and practice with persons with disabilities had a Kuder Richardson (KR20) value of 0.67. The next section will further explain the meaning behind these statistical findings.

Interpretation of Findings

This was a nationwide study that demonstrated that multicultural disability competence among practicing psychologists is a salient topic when exploring the diversity competency core areas in the field of psychology. Data was collected from 825 practicing licensed psychologists in 41 states and the District of Columbia, and the participants were concerned about the aspect of disability. This assumption can be made because this study asked the respondent to complete an electronic protocol located on the Asset Programming (2011) website for at least 30 minutes, and there was no monetary gain received for participating in the study.

Those who participated in the study took the time to complete the survey in hopes of developing research findings that either supported or negated the proposed research question. This was a heterogeneous sample of licensed psychologists throughout the United States. The states that had the highest number of participants were: Texas (N= 128), North Carolina (N = 121), Florida (N = 82), Ohio (N = 51), New York (N = 33), New Mexico (N = 29), and Louisiana (N= 24). Participants for this study were majority female (61.8%), Caucasian/White (89.8%), married (72.8%), did not have a disability (83.0%), have a Ph.D. (76.7%), graduated from a clinical doctoral program (61.5%), had a mean age of 50.99 (N = 825; SD = 12.09), and had an average years of work experience as a Licensed Psychologist of 15.85 (N = 825; Sd = 11.00).

Additional data compiled from this study showed that there are several states that currently have a mandate for continuing education (CE) credits in order to renew a psychological license. Please refer to Table 2 for the states that have such a requirement. States who have such a requirement also call for some of the CE credits to be in a particular concentration area. Most states require this concentration area to be in the area of ethics and legal issues associated with working with clients as a licensed psychologist. The aspect of disability is not a major concentration area in the current CE requirements for most states.

Statistical analyses demonstrated that the findings procured from the path analysis indicated that the goodness-of-fit tests supported the structural part of the proposed model. This also means that the observed data matched the proposed model. In fact, the goodness-of-fit tests showed that the model fit perfectly. This perfect model solution can be attributed to the following factors:

1. The data was carefully cleaned to eliminate any multivariate outliers in the data set by using the minimum value tolerance ellipsoid using robust Rousseuw Mahalanobis distances.
2. The data set was large, and final multivariate screening resulted in a final sample size of 783.
3. This path model was comprised of only 5 variables in total.
4. This model used most of the degrees of freedom, except for one degree.
5. The proposed model incorporated standardized instruments that had good reliability and validity statistics that could accurately measure the variable, awareness of attitudes and perceptions of persons with disabilities; and the variable, multicultural disability competence. This is further determined by the reliability statistics obtained during this current review for the awareness variable, assessed by the ATDP Form A (internal consistency for the total scale score to be Cronbach's alpha of 0.85); and the variable, perceived multicultural

disability competence, assessed by the total scale score of the CCDS (internal consistency for the total scale score to be Cronbach's alpha of 0.78).

The measurement part of the path analysis assessed by the path coefficients can also help to bolster the propose plan. In this type of path analysis, coupled with multiple regression analyses, the beta weights are used, and can be interpreted that "low values of some beta weights (e.g., < .2) are potentially as informative as high values (e.g., > .3) of others if we are evaluating hypotheses of weaker, as well as stronger causal influences in the model" (Meyers et al., 2006, p. 596).

Therefore, in this model, I evaluated all the paths because structurally, they provided a perfect fit. The following paths were able to achieve the 0.3 criteria:

1. zTransATDP Form A To zTransCCDS (beta weight 0.33)
2. zTransCCDS To zEngagement (beta weight 0.37)
3. zTransATDP Form A To zEngagement (beta weight 0.29)
4. zEngagement To zExposure (beta weight 0.44)

The following paths did not achieve beta weights above 0.3. They are:

1. zExposure To zTraining (beta weight -0.07)
2. zTraining To zTransATDP Form A (beta weight 0.14)
3. zEngagement To zTransATDP Form A (beta weight -0.11)
4. zTransATDP Form A To zExposure (Beta weight 0.20)
5. zTransCCDS To zExposure (beta weight 0.11)

The above paths for this current model did not achieve the 0.3 criteria; however; the values achieved in the covariance matrix (refer to Figure 10) for these paths further support the fact that these variables have a relationship that is noteworthy. The relationship may be a weaker one; but nevertheless, made a necessary contribution to the structural model. This assumption is further supported by the goodness-of-fit tests also in conjunction with the three separate multiple regression analyses executed for each hypothesis. These results demonstrated that when considering multicultural disability competence, the factors of exposure to this referent group, and training about the referent group are essential ingredients to possess when trying to acquire a level of multicultural disability competence. Additionally, the more opportunities for experiences in working with this referent group will encourage him or her to think about pursuing engagement in specialized work with individuals with disabilities.

This study's path and multiple regression findings confirm that psychologists who have had previous exposure to persons with disabilities, and training related to persons with disabilities, report higher levels of multicultural disability competence. Thus, the more comfortable the professional is in being charged to work with this minority group, the better the outcomes for clients with disabilities in psychotherapy. Mental health professionals who receive the exposure and training to persons with disabilities will develop the understanding of the needs of persons with disabilities with respect to resources, treatments, legislation, technology, and services. Although this study generated some robust findings regarding this diversity domain area, there were some limitations to this study that will be discussed in the next section.

Limitations

With all research investigations, there are some limitations that can be addressed in future studies. In this current study, the first limitation was regarding the sample size. This study was able to obtain a sample size of 825 licensed psychologists in the United States. However, it was reported that practicing licensed psychologists are comprised primarily of clinical, counseling, and school psychologists. There are approximately 95,120 psychologist classified as clinical, counseling, and school psychologists practicing in the United States (United States Bureau of Labor Statistics, 2007). Therefore, it would be useful to find a meaningful way to involve more licensed psychologists in the determination process of deciphering the salience of the aspect of disability when working with clients.

The second limitation of this study was that participation in the study was tendered electronically from psychologists. Participation requests were sent via e-mail to all divisions of the American Psychological Association, individual state psychological associations, and finally to each state licensing boards. Each state licensing board had a particular format to follow when requesting e-mail addresses for licensed psychologists.

Many states did not have e-mail addresses readily available for licensed psychologists (refer to Table #5). This impacted the number of states involved in the overall study. Also, this type of data collection process demanded that the participant have good computer skills in order to navigate through an electronic protocol.

If the participant had limited skills, it could have resulted in the participant's taking a long time to complete the survey, or even terminating the survey before it was completely finished. Therefore, a future investigation must consider a way to reach out to all licensed psychologists from each state that does not involve the use of e-mail. This could help to prevent, and further avoid, the problem of receiving incorrect e-mail addresses.

The third limitation for this study was that this was an anonymous, voluntary, electronic survey study with no monetary gain for the participant. Therefore, the response rate was low, and not all 50 states were represented in the final sample. Future studies should consider offering continuing education credits to psychologists who complete a particular study's survey items.

The fourth limitation of this study was the impact of self-report instruments such as social desirability scales and monomethod bias. This study questioned a psychologist's level of multicultural disability competence and related ethics. It is possible that social desirability will dictate the manner in which a participant might respond to survey items. The responses could be influenced by a psychologist's not truly admitting her or his negative perceptions and attitudes regarding a particular referent group. This is done to mask how the psychologist is viewed. He or she does not want to be viewed in a negative manner (Edwards, 1957, as cited in Pedhazur & Schmeikin, 1991; Nunnally, 1978, as cited in Pedhazur & Schmeikin, 1991).

Additionally, a psychologist might not want to freely admit to the fact that he or she could be providing treatment to a client with a disability without having the appropriate skills, awareness, and knowledge needed to work effectively with this specialized group (Allison et al., 1996; Allison et al., 1994). Future studies could consider using some type of social desirability scale to further rule out this phenomenon.

The fifth limitation of this study was that the definition of the word "disability" was given to the research participants prior to completing the third assessment tool (CCDS) in the survey. For the completion of the biographical sheet and the ATDP Form A, participants were not provided the definition of the word "disability". Participants had to choose if they defined a disability to include both physical and mental impairments.

This study design was selected to further evaluate what type of impairments psychologists consider to be disabilities. Most of the survey participants provided answers that suggested that they were using the definition of disability indicated in the legislation for persons with disabilities (Americans with Disabilities Act Amendments Act, 2008; Americans with Disabilities Act, 1990). However, a future investigation could provide more clarification from the beginning of the questionnaire regarding this definition of disability.

The last, but critical, limitation of this study was that a category for same-sex unions was not made available on the demographic questionnaire. This current research exploration was about addressing diversity concerns regarding the aspect of disability in the psychological literature. The category of same-sex unions, as an aspect of diversity, should have been incorporated in the construction of survey items for this study. It is highly recommended that future research studies requesting biographical information regarding marriage and partnerships contain all types of partnerships, including same-sex unions. The next section will discuss how to address these limitations in future research investigations.

Future Research

Once again, it is essential to note that multicultural disability competence is a research topic that is not heavily studied within the psychological arena. This is the reason for this present study. It is clear that persons with disabilities are a minority group who face discrimination and disadvantages in American society. This is why aggressive action was taken to enact legislation to help balance the playing field for members of this group, especially when it comes to engaging in basic life activities such as employment, education, recreational activities, and so much more.

Because of the growing population with respect to age and population size, it becomes a more than likely situation that persons with disabilities will continue to grow as a minority group. Therefore, psychologists will have to prepare themselves to better serve the psychological needs of this referent group. The present study revealed that there is a strong association between the variables, exposure to persons with disabilities and training related to persons with disabilities, and this could precipitate the psychologists' obtaining a greater level of multicultural disability competence to pursue specialized work with persons with disabilities. Future studies should consider what type of training is needed to assist psychologists in acquiring the knowledge and skills needed to work effectively with this minority group.

In addition, future research investigations should evaluate all the graduate doctoral and master's level psychology program curricula in the United States to determine if the diversity issue of disability is currently being addressed with trainees. If the graduate training programs are not universally addressing this essential diversity core issue, then it becomes imperative for practicing psychologists to obtain skills in this concentration area during their postdoctoral years. Future research explorations could evaluate if current practicing licensed professionals should obtain this critical knowledge as a prerequisite skill area when obtaining continuing education credits in order to maintain their psychological license.

This present study demonstrated that there are currently a handful of states that do not mandate continuing education credits as a requirement for a renewal of a license to practice psychology. Future research studies could evaluate the implications of this current practice to determine whether or not this is a good and ethical way to provide treatment to clients. Most states require the concentration area of psychological ethics when working with clients, and a future study could consider if another concentration area of training like the aspect of disability is needed.

Finally, this current study had some limitations that could be addressed in a future study. One of them is that of participant participation. Although this current study had a sample size of 825, there are thousands and thousands of psychologists practicing in the United States. A future study might consider revising the method of collecting data in hopes of obtaining a more robust sample size. Overall, findings from this current study demonstrated that this is an important referent group, and the persons who are charged to serve their psychological needs require additional training and knowledge to better address their concerns.

Conclusion/Clinical Implications

This research was conducted to assess whether or not practicing psychologists are multiculturally competent to work with clients with disabilities. It was important to evaluate this because, as indicated in the literature review presented in Chapter II, individuals with disabilities are considered a minority group, based on the definition of a minority group developed by Wertlieb (1985). This definition states that individuals with disabilities are exposed to the discrimination put forth by members of the majority group, individuals with disabilities are exposed to stigma, individuals with disabilities exhibit a joint expression of group solidarity, individuals with disabilities have involuntary group status, and individuals with disabilities experience strong encouragement from society to marry within their disability groups (Wertlieb). Also, it was estimated that individuals with disabilities are the largest growing minority group in the country (Olkin, 2002; United States Census Bureau, 2006; Hollimon, 2007). Additionally, it is estimated that there are over 51 million people in the United States classified as having some type of disability (United States Census Bureau, 2006). Therefore, individuals with disabilities are clients that could be seen in psychotherapy.

The literature presented in Chapter II indicated that the aspect of disability is a diversity domain area that is not heavily researched in the field of psychology, in comparison to other aspects of diversity (e.g., race, ethnicity, gender, social class, and religion). Studies conducted by Hollimon (2007) and Strike (2001) further suggested the need for more exploration in this area. This current research investigation was done to further add to the limited body of research regarding this topic.

Statistical results from this investigation supported the proposed path model of disability competence and research hypotheses. In particular, exposure to persons with disabilities and training about persons with disabilities are needed to determine a psychologist level of multicultural disability competence. Moreover, having a high level of disability competence can further cause the mental health professional to pursue specialized engagement with this referent group. Additionally, participants in the study indicated that they felt more competent working with clients when they had attended psychological training.

Thus, study findings acquired during this research process gives evidence for making the following practice recommendations:

1. All practicing licensed psychologists should receive up-to-date information in the core competency areas of diversity including disability.
2. All states should consider a continuing education requirement for renewal of a psychological license.
3. States who have continuing education requirements for a renewal of a psychological license should consider if there should be a continuing education requirement for the concentration area in disability.
4. All graduate programs in psychology approved by the American Psychological Association should consider incorporating the aspect of disability in their curriculum as an important domain area in diversity.

Therefore, the results from this dissertation research bolster the need for further education and training in this area for practicing psychologists in the United States. Specifically, for the field of counseling psychology, the aspect of disability is a domain area that may cause for the need for social justice. Counseling psychologists are known for embracing the social justice model of psychology; and therefore, can help to bridge the gap of inadequate knowledge, awareness, and skills needed to work effectively with this referent group. This dissertation study was done to help add to the limited number of research investigations conducted in this area. My hope was to assist persons with disabilities, when faced with a psychological dilemma, to reach out to psychologists who will be better equipped to help them with their presenting issues. I also hope that clinicians practicing in the field of psychology will recognize the need for specialized training in the area of disability, seek it, and to further incorporate it in their everyday practice.

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KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

(Appendix A)

Biographical Questionnaire

1. DOB (dd/mm/yyyy):

2. Age:

3. Gender: Male Female Other

4. Marital Status:
    - Single
    - Married
    - Divorced
    - Widowed

5. Ethnicity:
    - Caucasian
    - African American
    - Middle Eastern
    - Hispanic
    - Asian/Pacific Islander
    - Native American
    - Other

6. Primary Language: English Other (please specify):

7. Fluent in English: Yes No

8. What type of doctoral degree do you have? Ph.D. PsyD. EdD.

9. What branch of psychology was your degree obtained? Clinical Counseling School Other

10. What school did you attend to obtain your doctoral degree?

11. Was your doctoral program accredited through the American Psychological Association?
    Yes No Do not know

12. Did your doctoral program have any coursework or training addressing working with clients with disabilities? Yes No

13. If yes, please describe type of coursework dealing with disability related issues.

14. How many years did it take you to complete your doctoral degree?

15. What age did you start your psychology doctoral program?

16. Did any of your internship, externships or practicum experiences allow you an opportunity to work with persons with disabilities? Yes No

17. If yes, what types of disability did your clients have during externship or practicum?

18. Did you have any experience working with persons with disabilities before your doctoral program?
Yes No

19. Did you have any personal contact with persons with disabilities before your doctoral program?
Yes No

20. Do you have a disability?
No Yes (please specify)

21. Does anyone in your family have a disability?
No Yes (Please specify)

22. Do you know any friends or coworkers who have a disability?
No Yes (please specify)

23. Do you know about any specific legislation for persons with disabilities? Yes No

24. If yes, please name the legislation:

25. Did you learn about people with disabilities through the media? Yes No

26. If yes, please explain:

Occupational History:
27. Are you currently working? Yes No

28. If yes, answer the following:

Occupation:________________
Hours per week: ___________
Years in this position:___________

29. Do you currently work with persons with disabilities? Yes No

30. Does your employer offer any training in the area of disability? Yes No

31. Do you have any additional certifications or credentials to work with persons with disabilities? Yes No

32. If yes, please explain:

33. Have you attended any post doctoral training in the area of disability? Yes No

34. If yes, please explain:

35. Are you involved in any professional associations? Yes No

36. If yes, please explain:

37. Are any of your professional involvements in professional organizations associated with disability? Yes No

38. If yes, please explain:

39. What percentage of your current client caseload deals with working with persons with disabilities?

40. Do you supervise any cases that are associated with disability concerns?
Yes No

41. If yes, what is the percentage of client cases that specifically deals with disability concerns?

42. Are you a licensed psychologist? Yes No

43. What year did you obtain your psychological license? Please write your response in the form YYYY. If not applicable, please enter 0.

____

44. How many years have you been working as a licensed psychologist? If not applicable, please enter 0. _________________

45. What state are you currently licensed in to practice as a psychologist? Example: please write Texas, not TX. If not applicable, please enter 0.

____

46. Please list previous states that you were licensed to work as a psychologist. Example: Please write Texas, not TX. If not applicable, please enter 0.

____

47. Does the state that you currently practice in require continuing education credits as a mandate for renewal of your psychological license?
Yes No Not applicable

48. If your state requires continuing education as a mandate of renewal of a psychological license, do you know how many credits your state requires? Yes No
Not applicable

49. If yes, how many credits does your state require? If not applicable, please enter 0.

____

50. If your state requires continuing education as a mandate of renewal of a psychological license, are any of these continuing education credits required in the area of disability? Yes No Not applicable

51. If your state requires continuing education as a mandate of renewal of a psychological license, are any of these continuing education credits required in the area of ethics and legal implications?
Yes No Not applicable

52. If your state requires continuing education credits as a mandate for renewal of a psychological license, what area of specialization is required? If not applicable, please enter 0. ____________________________

53. If your state requires continuing education as a mandate of renewal of a psychological license, please specify how long your state has had this requirement? If you do not know or if this is not applicable, please enter 0. _____________________

54. Do you think that having a mandate for continuing education for renewal of a psychological license improves the quality of care that you provide your patients?
Yes No

55. Do you feel more competent when working with clients if you attend continuing education seminars? Yes No

(Appendix B)

Attitudes Towards Disabled Person Scale Form A

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark everyone. Write +1, +2, +3: or -1, -2, -3: depending on how you feel in each case.
+3: I AGREE VERY MUCH
-1: I DISAGREE A LITTLE
+2: I AGREE PRETTY MUCH
-2: I DISAGREE PRETTY MUCH
+1: I AGREE A LITTLE
-3: I DISAGREE VERY MUCH

1. ***Disabled people are often unfriendly.***

2. ***Disabled people should not have to compete for jobs with physically normal people.***

3. ***Disabled people are more emotional than other people.***

4. ***Most disabled persons are more self-conscious than other people.***

5. ***We should expect just as much from disabled as from nondisabled persons.***

6. ***Disabled workers cannot be as successful as other workers.***

7. ***Disabled people usually do not make much of a contribution to society.***

8. ***Most nondisabled people would not want to marry anyone who is physically disabled.***

9. ***Disabled people show as much enthusiasm as other people.***

10. ***Disabled persons are usually more sensitive than other people.***

11. ***Severely disabled persons are usually untidy.***

12. ***Most disabled people feel that they are as good as other people.***

13. ***The driving test given to a disabled person should be more severe that the one given to the nondisabled.***

14. ***Disabled people are usually sociable.***

15. Disabled persons usually are not as conscientious as physically normal persons.

16. Severe disabled persons probably worry more about their health than those who have minor disabilities.

17. Most disabled persons are not dissatisfied with themselves.

18. There are more misfits among disabled persons than among nondisabled persons.

19. Most disabled persons do not get discouraged easily.

20. Most disabled persons resent physically normal people.

21. Disabled children should compete with physically normal children.

22. Most disabled persons can take care of themselves.

23. It would be best if disabled persons would live and work with nondisabled persons.

24. Most severely disabled people are just as ambitious as physically normal persons.

25. Disabled people are just as self-confident as other people.

26. Most disabled persons want more affection and praise than other people.

27. Physically disabled persons are often less intelligent than nondisabled ones.

28. Most disabled persons are different from nondisabled people.

29. Disabled persons don't want any more sympathy than other people.

30. The way disabled people act is irritating.

(Appendix C)

Counseling Clients with Disabilities Survey

Please read each statement carefully and circle the number that best describes you from Strongly Disagree (1) to Strongly Agree (6). Please do not skip items.

For the following items, the term disability is defined as a physical or mental impairment that substantially limits one or more major life activity (e.g., hearing, seeing, speaking, breathing, walking, thinking/learning, feeling/behaving, keeping house, living independently, or working).

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. I have respect for people with all types of disabilities.	1	2	3	4	5	6
2. I feel trusted by people with disabilities as much as people without disabilities.	1	2	3	4	5	6
3. If I had a different disability status (disabled or nondisabled) than my clients, it would impair our working relationship.	1	2	3	4	5	6
4. I believe people with disabilities are stigmatized in society.	1	2	3	4	5	6
5. I have thought about how worldviews are influenced by disability status (disabled or nondisabled).	1	2	3	4	5	6
6. I think most people with disabilities wish they were nondisabled.	1	2	3	4	5	6
7. I think people with disabilities are generally more dependent than people without disabilities.	1	2	3	4	5	6
8. I can identify a wide variety of individual differences among people with the same type of disability.	1	2	3	4	5	6
9. I try to examine my stereotypes about various disabilities.	1	2	3	4	5	6
10. I believe being nondisabled has certain privileges in society.	1	2	3	4	5	6
11. I consider people with disabilities to be a minority group.	1	2	3	4	5	6
12. I try to talk with others who have different points of view on disability.	1	2	3	4	5	6
13. It is difficult for me to understand how disability could be a source of pride for people with disabilities.	1	2	3	4	5	6
14. I enjoy hearing about people who overcame their disabilities.	1	2	3	4	5	6
15. I believe disability is essentially a medical problem to be cured.	1	2	3	4	5	6
16. I believe most disability rights activists promote telethons to raise money to cure disabilities.	1	2	3	4	5	6
17. I have participated in events where the majority of people attending had disabilities.	1	2	3	4	5	6
18. Having my mobility temporarily impaired would give me a true picture of living with a mobility disability.	1	2	3	4	5	6
19. I have thought about how a disabling illness or injury would affect my work.	1	2	3	4	5	6
20. I feel satisfied with my level of awareness about disability issues in my work.	1	2	3	4	5	6

Alternate formats are available upon request. Contact the researcher, Diane Strike, at 651-962-6780.

KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Please read each statement carefully and circle the number that best describes you from Strongly Disagree (1) to Strongly Agree (6).
Please do not skip items.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
21. I understand terms used in the ADA, Americans with Disabilities Act, of 1990 (e.g., "reasonable accommodation").	1	2	3	4	5	6
22. I understand terms used in the disability community (e.g., ableism, disability culture).	1	2	3	4	5	6
23. I can state the educational significance of Section 504 of the Rehabilitation Act of 1973.	1	2	3	4	5	6
24. It is unfair to accommodate college students with disabilities by treating them differently than their peers (e.g., extra time).	1	2	3	4	5	6
25. I do <u>not</u> follow current court cases about the legal rights of people with disabilities.	1	2	3	4	5	6
26. I believe that unemployment/underemployment is common among people with disabilities in the U.S.	1	2	3	4	5	6
27. I feel that people with disabilities are portrayed accurately in the media.	1	2	3	4	5	6
28. I am familiar with the sociopolitical history of people with disabilities (e.g., the disability civil rights movement).	1	2	3	4	5	6
29. I can name famous people known to have disabilities.	1	2	3	4	5	6
30. I can name well-known counseling theorists who have disabilities.	1	2	3	4	5	6
31. In my field, professionals with disabilities are underrepresented.	1	2	3	4	5	6
32. I have learned about disabilities through professional development activities.	1	2	3	4	5	6
33. I have general knowledge of <u>all</u> the following types of disabilities: learning, psychiatric, vision, hearing and mobility.	1	2	3	4	5	6
34. I am familiar with the distinction between hidden disabilities and readily observable disabilities.	1	2	3	4	5	6
35. I think English is the native language of Americans who are deaf from birth.	1	2	3	4	5	6
36. I do <u>not</u> know where the accessible entrances are in my place of employment.	1	2	3	4	5	6
37. If I had a new client who is blind coming to my office, I could give directions without using visual references.	1	2	3	4	5	6
38. I recognize signs/symbols of access that welcome people with disabilities.	1	2	3	4	5	6
39. I am <u>not</u> familiar with adaptive technology (e.g., screen readers, captioning).	1	2	3	4	5	6
40. I feel satisfied with my level of knowledge about disabilities.	1	2	3	4	5	6

KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Please read each statement carefully and circle the number that best describes you from Strongly Disagree (1) to Strongly Agree (6).
Please do not skip items.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
41. I am not sure if the terms I use to refer to disabilities are preferred by people with disabilities.	1	2	3	4	5	6
42. I know how to obtain alternate formats of printed materials (e.g., Braille, large print).	1	2	3	4	5	6
43. If I had a new client who is hard of hearing, I would know how to modify my verbal and nonverbal behaviors.	1	2	3	4	5	6
44. I am experienced using TTY/TDD or the state Relay Service to communicate with people with hearing/speech disabilities.	1	2	3	4	5	6
45. I am experienced with communicating through a sign language interpreter.	1	2	3	4	5	6
46. In first appointments, I routinely ask clients if they have disabilities/medical conditions.	1	2	3	4	5	6
47. I know how to determine if a DSM-IV diagnosis is a disability.	1	2	3	4	5	6
48. I could take a client's disability into account when interpreting the results of assessment instruments.	1	2	3	4	5	6
49. I know how to write letters documenting how disabilities affect clients in their work/academic environments.	1	2	3	4	5	6
50. If I had a new client with a disability, I would hypothesize that adjusting to the disability is a problem.	1	2	3	4	5	6
51. I have learned about disability identity development (e.g., Carol Gill's model).	1	2	3	4	5	6
52. I am not aware how disability may interact with human sexuality (e.g., family planning).	1	2	3	4	5	6
53. I would find it hard to deal with strong negative feelings expressed by a client with a disability.	1	2	3	4	5	6
54 I lack confidence in my ability to deal with transference and countertransference about disability.	1	2	3	4	5	6
55. I have advocated in the interests of people with disabilities (e.g., removal of architectural barriers, passage of legislation).	1	2	3	4	5	6
56. I have had opportunities to work effectively with colleagues and/or supervisors who have disabilities.	1	2	3	4	5	6
57. I can readily obtain information/resources about specific disability issues (e.g., disability onset later in life).	1	2	3	4	5	6
58. I would have difficulty locating a disability expert to consult with regarding a client with a disability.	1	2	3	4	5	6
59. I know when to refer clients to agencies that specialize in serving people with disabilities.	1	2	3	4	5	6
60 I feel satisfied with my level of skill to work with clients with disabilities	1	2	3	4	5	6

KNOWLEDGE, ATTITUDES AND SKILLS RELATED TO DISABILITIES

Please circle the letters which best describe you or fill in the blanks. All individual responses will be kept confidential.

For the following items, the term <u>disability</u> is defined as a physical or mental impairment that substantially limits one or more major life activity (e.g., hearing, seeing, speaking, breathing, walking, thinking/learning, feeling/behaving, keeping house, living independently, or working).

61. Sex (circle one).
    a. male
    b. female

62. Ethnicity (circle all that apply).
    a. African American, Black
    b. American Indian, Native American
    c. Asian, Pacific Islander
    d. Caucasian, White
    e. Hispanic, Latino, Chicano
    f. Other (please specify) ________________

63. I have _____ year(s) of experience counseling clients or doing related work.

64. Please circle your highest degree completed.

BA	BS				
MA	MS	MSW	MSE	MBA	RN
PhD	PsyD	EdD	JD	MD	

Other degree or licensure (please specify) ________________

65. If you are currently in training, please circle your degree program.

BA	BS				
MA	MS	MSW	MSE	MBA	RN
PhD	PsyD	EdD	JD	MD	

66. I have worked with client(s) with the following types of disabilities (circle <u>all</u> that apply):
    a. Blind, low vision
    b. Chemical/alcohol dependency history
    c. Deaf, hard of hearing
    d. Learning disability, ADD, ADHD
    e. Mental health, psychiatric
    f. Mobility, orthopedic
    g. Other ____
    h. None

67. My experience with disability includes the following (circle <u>all</u> that apply):
    a. I have a disability.
    b. I have a medical condition (not a disability).
    c. I do not have a disability or a medical condition.
    d. A member of my immediate family or close friend has a disability.
    e. A member of my extended family, co-worker, or acquaintance has a disability.
    f. Disability was the focus of all or most of my academic training.
    g. Disability was addressed in classes, seminars, or workshops I attended.
    h. I have recent work experience involving disability (within the past 5 years).
    i. I have past work experience involving disability (5 or more years ago).
    j. Other (please specify) ____
    k. None

Please return the questionnaires in the enclosed postage paid envelope. Thank you.

Comments: