PSYCHOLOGY TRAINEE ATTITUDES TOWARD PEOPLE WITH DISABILITIES

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PSYCHOLOGY TRAINEE ATTITUDES TOWARD PEOPLE WITH DISABILITIES

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Dissertation

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ABSTRACT

Attitudes toward people with disabilities are an area important to multicultural competencies. However training in professional psychology does not often include disability as part of multiculturalism. This may be because research has not moved beyond only identifying the need to improve research and practice of disability attitudes. Multiple disability attitude measures have been developed over the past several decades, but many are not developed on theory or are not useful for identifying specific component areas (affect, behavior, or cognition) to improve attitudes. Therefore, a better understanding of current attitudes toward people with disabilities by counseling and clinical psychology trainees was needed to identify a baseline to further connect disability studies to attitude literature. The study used the Multicomponent Model for Intergroup Attitudes (Esses, et al., 1993) to identify an overall attitude measure and components which inform the initial development of the attitude. Participants identified positive attitudes toward people with disabilities as compared to an able-bodied client. Using a stepwise regression analysis, affect and behavior components predicted the overall attitudes toward the client with a disability, but stereotypes predicted attitudes toward the able-bodied client. The results of the Attitudes Toward Disabled Persons Scale (ATDPS) scores showed highly positive attitudes as compared to the overall attitude measure of the multicomponent model which showed slightly favorable to fairly favorable attitudes. The
study also provided content based information that strays from the overly positive ratings of the participants.
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CHAPTER I
THE PROBLEM

Introduction

Psychology has addressed the value of disability as part of multiculturalism, but has not moved beyond just identifying the need to include disability as part of multicultural studies (Olkin & Pledger, 2003). Consequently, disability studies and counseling psychology can benefit by identifying if psychology students are adequately trained in disability as part of multiculturalism. One way to identify what counseling and clinical psychology trainees know about disability is to identify their attitudes toward people with disabilities. Identifying understanding about disability and the attitudes toward those with disabilities helps to clarify if attitudes, one of the multicultural competency characteristics suggested by Sue, Bernier, Durran, Feinberg, Pedersen, Smith, and Vasquez-Nuttall (1982) and Sue, Arredondo, and McDavis (1992), are being challenged and clarified. Training around disability attitudes has been important as part of multicultural competencies because the literature of practicing mental health providers contains mixed reports of attitudes. There are reports of positive attitudes toward people with disabilities by counselors (Huitt & Elston, 1991; Kemp & Mallinckrodt, 1996); and reports that mental health professionals in general to have more negative attitudes towards people with disabilities than do laypersons (Kaplan, 1982; Reeve, 2000; Willis, 1978; Yuker, 1994). Likewise, this history of negative attitudes and psychological
practice toward racial minority persons was the impetus for the formation of the multicultural competencies (Sue et al., 1982; 1992). Training which challenges attitudes and provides education has been one of the suggested mediations toward the negative attitudes. Therefore baseline of attitudes are needed to see if mediations are required for disability considerations.

From the inception of multicultural guidelines and competencies written by leaders of division 17 (Sue et al., 1982, 1992), to the inclusion in "Ethical Principles of Psychologists and Code of Conduct" (APA, 2002) and the 2005 Guidelines and Principles for Accreditation of Programs in Professional Psychology (APPIC, 2005), diversity has been an area of study and interest in professional psychology. Although disabilities were later recognized and added as a component of diversity, starting with the Ethical Principles (APA, 2002), advancement in disability research and awareness of disabilities as part of multicultural graduate training has not increased substantially (Olkin, 1999). In the most recent studies, it has been identified that psychologists in training have generally not been required to take coursework on disabilities (Olkin, 2000), and if they wanted to, only 11% of programs offered a course on disabilities (Olkin & Pledger, 2003). There also has been a minimal awareness of participants’ disability status in research studies, (Munley, Anderson, Baines, Borgman, Briggs, Dolan, & Koyama, 2002). Finally, practicing Psychologists are unable to identify what should be standard care for people with disabilities and rather identify it only as special services (Leigh, Powers, Vash, & Nettles, 2004).
Counselor Attitudes and Disability

These particular oversights by the psychological training community again may be related to practicing psychologists’ inability to identify standard needs for practice with people with disabilities. Similar to attitudes toward other stigmatized cultures, counselors may unwittingly hold negative attitudes toward people with disabilities and allow those attitudes to interfere with the therapeutic relationship and their clinical judgments (Kemp & Mallinkrodt, 1996). There has been a strong suggestion by the disability community that counselors hold more negative attitudes toward people with disabilities than the general public (Olkin, 1999; Reeve, 2000; Willis, 1978).

Nonetheless, studies have evidenced more positive attitudes towards people with disabilities by mental health professionals (Dufree, 1971; Huitt & Elston, 1991; Kemp & Mallinckrodt, 1996). However, no studies exist about just psychologist attitudes (Kemp & Mallinckrodt, 1996 has a mixture of psychologists and other mental health practitioners) and one study exists about counseling psychology trainees (Holliman, 2007). Therefore through this review, attitudes identified as by mental health professionals included masters level and doctoral level counselors, social workers, and rehabilitation counselors.

Psychologists in training attitudes. Only one recent, unpublished dissertation that identified attitudes toward people with disabilities by counseling psychology trainees exists (Hollimon, 2007). This study identified attitudes toward people with disabilities using the Attitudes Toward Disabled Persons Scale (ATDPS) (Yuker, Block, Campbell, 1960), the perceived confidence with students in working with people with disabilities (using the Counseling Clients with Disabilities Survey by Strike (2001)), and the amount
of contact that students had with people with disabilities. The participants’ self-awareness was rated as better than their perceived knowledge and perceived skill and their attitudes were reported to be more positive than the normative sample for the ATDPS.

Despite these findings, not many conclusions can be drawn from the results due to methodological concerns. It contains two large methodological problems: (a) there is no social desirability scale; and (b) it used the ATDPS normative sample as a comparison. The sample was compared against the ATDPS normative sample, which are attitudes from a very different sociopolitical time and therefore it is unknown if these are still valid. Secondly, there was not a social desirability scale. Using this instrument without correcting for the previously reported concerns that the ATDPS tended to produce positive attitude ratings (Soder, 1990; Yuker, 1994), had an inconsistent factor structure (Antonak, 1981; Hafer, Wright, Godley, 1983), and was transparent to socially desirable responses (Makas, et al., 1988; Yuker, 1986) brought questions to the validity of the results of Hollimon's (2007) study.

**Disability Attitude Measures**

The problems of the Hollimon (2007) study highlighted the plague of measurement concerns in disability studies. These difficulties were another reason training programs may have found gathering information from the disability literature base difficult. The literature base was often criticized for its lack of a focused, theoretical approach to attitudes measurement and a need to include the components underlying attitudes (Antonak & Livneh, 2000). Multiple criticisms of the current attitude measures available and the methodological approaches of past studies have existed in the literature.
for some time (Antonak & Livneh, 1988; 2000; Chubon, 1982; Yuker, 1994). These concerns include poor connection to theory, evaluations of only certain types of disabilities rather than a global disability attitudes measure, lack of appropriate attitude definitions, poor methodology (Chubon, 1982; Yuker, 1994), repetitive development of attitude measures rather than refining current measures, and ignoring the rating scale development protocols (Antonak & Livneh, 1988; 2000).

Consequently these methodological concerns in the available disability measures may be one reason for the identified inconsistency in attitudes toward people with disabilities. Therefore, an explanation of existing measures and how they are or are not tied to theory, and an attitude framework is necessary to identify an adequate measure. Antonak and Livneh (2000) highlighted the variety of available measures for disability attitudes and implied that researchers should connect the measures to the affect, cognition, and behavior components of attitudes. From the measures critiqued in their review, it appears that some of the measurements may be useful to identify attitude structural components, while most of the measures will not be useful because they do not measure individual components of attitudes or do not connect to theory.

Basic types of measures include comparisons, rating scales, and indirect measures. The comparisons are ways of critiquing reactions to one disability type versus another; a group of researchers have compared disability types (Janicki, 1970; Semmel & Dickson, 1966; Vander Kolk, 1982; Weinburg, 1976; Wong, Chan, Cardoso, Lam, & Miller, 2004). However there has been no consistent report of one disabling condition being rated as more severe over another from these studies (Yuker, 1994). The major
problem is that there is no connection to theory for these measures, and therefore they do not advance what is known about attitudes toward people with disabilities.

The most common measures which have advanced the disability literature are the rating scales. Of those, the ATDPS (Yuker, Block, Campbell, 1960) is the most commonly used scale (Pruett & Chan, 2006; McCaughey & Strohmer, 2005). This scale was developed out of the disability literature and is often criticized for not adequately measuring the valence (positive or negative direction) of attitudes about people with disabilities (Soder, 1990; Yuker, 1994), not allowing for identification of the source of the positive attitudes that are measured with it (Asch, 1984; Soder, 1990), and not having social desirability indicators so positive attitudes are easily faked (Makas, Finnerty-Fried, Sigafoos, & Reiss, 1988; Yuker, 1986).

In reaction to these limitations of the ATDPS, multiple researchers have attempted to correct for the methodological problems and lack of theory. The Disability Factors Scale (DFS) (Siller, Ferguson, Vann & Holland, 1968) and the Scale of Attitudes toward Disabled Persons (SADP) (Antonak, 1981) are scales that were reportedly more psychometrically sound. The DFS is based on psychodynamic theory (Weitzel, Kravetz, Florian, and Shurka-Zernitsky, 1988) and identifies a 6 factor structure of the attitude. However, the factor structure has not held across studies (Linveh, 1985; Weitzel, et al., 1988). The SADP reportedly has difficulty with a skewed response bias in the positive direction (Beckwith & Matthews, 1995), but others find participants responding in a more negative way (Tervo, Palmer, & Redinius, 2004).

Additional rating scales include the Disability Social Relationship Scale (DSR) (Grande, Bernier, & Strohmer, 1982), Issues in Disability Scale (IDS) (Makas, Finnerty-
Fried, Sigafoos, & Reiss, 1988), Interaction with Disabled Persons Scale (IDP) (Gething & Wheeler, 1992), and the Multidimensional Attitudes Scale (MAS) (Findler, Vilchinsky, & Werner, 2007). The DSR scale is similar to paired comparisons where participants identify at what level of intimacy they are willing to have relationships with a person who is disabled (visual impaired, epilepsy, and amputation) as measured by yes/no questions (Grande et al., 1982). The IDS is an attempt at developing an attitude measure that identifies affective and cognitive components. However, it is another measure developed out of items from prior disability measures, and loses validity due to the poorly designed measures of the past and their continued methodological problems identified through the disabilities studies history. The author reports a good factor structure that analyzes to 6 subscales, but also reports that it has a high amount of inter-item correlation (Makas, et al., 1988). This high inter-item correlation may have caused researchers to avoid using it. The main problem with both the IDS and DSR is that even though they are from the 1980s, they do not have much research behind them to report strong replication of the factor structures outside of the authors’ studies.

Unlike the prior instruments when the IDP (Gething & Wheeler, 1992) was developed, it offered promise for a good disabilities attitudes measure because it was based on a theory and it had a long history of studies which documented the development of this scale through qualitative means. The authors report finding a 6 factor structure which they later revised to be a 5 factor structure (Gething, 1994). However the promise was not realized because the factor structure has not held in experimental replications (Campbell, Gilmore, & Cuskelly, 2003; Loo, 2001; Wallymahmed, McDay-Moffat, & Cunningham, 2007).
The next promising measure, the MAS (Findler, et al., 2007), follows the suggestion of Antonak and Livneh (2000) to include affect, behavior, and cognition in the measures. It is based on a theory of affect (circumplex model, Russell, 1980), a prior cognitive scale (Fitchen & Amsel, 1988), and a rationally developed behavioral scale based on approach avoidance in a social situation with people with disabilities. Again this instrument appears promising, but has a very specific context connected to the measure and may not be generalizable to other contexts. This particular measure uses a social situation at a college campus union building to rate behavior. Although it may be valid and reliable, it is unlikely to work in a context of a counseling situation because of an inability to avoid the client with a disability.

Other summated rating scales have been developed, but as Antonak and Livneh (2000) note, over 40 normed and validated instruments were available at that time. Since 2000, a sampling of these instruments include ones for specific disability types (Campbell, 2006; Linden, Rauch, & Crothers, 2005; Murray, Lombardi, Wren, & Keys, 2009; Wong, 2008) or addressing attitudes of specific people (Baily, 2004; Baker-Erizen, Mueggenborg, & Shea, 2009; Graf, Blankenship, Sanchez, & Carlson, 2007; Mu, Frank, Konz, 2007). This many separate instruments make understanding and teaching attitudes toward people with disabilities difficult because there is no consistent definition of attitudes; hence what is being measured is unable to be formed into a cohesive knowledge base about attitudes towards people with disabilities.

**Implicit attitudes.** One newly revitalized attitude content area with the potential to fix some of the attitude measurement concerns, because it measures unconscious attitudes, is implicit attitudes. These attitude measures can range from behavioral
observations of participants (Kleck, 1969), physiological measures of emotional reactions (Zych & Bolton, 1972), to reaction time experiments (Pruett & Chan, 2006).

Within the disability studies literature, the older studies have used behavioral observations or physiological measures of emotional reactions. Zych and Bolton (1972) and Marinelli and Kelz (1973) each measured Galvanic Skin Response to stimuli of people with disabilities. Correspondingly, Kleck and colleagues (Kleck, 1968; Kleck et al., 1966) used a live confederate with a disability and observed physical distance and conversational behavior between a participant and the confederate. Both of these sets of studies were able to identify discomfort in a participant who was interacting with disability stimuli (picture or live) and have a benefit of not relying on the participant’s perception.

In a similar type of design, disability stimuli have been used to measure attitudes through reaction times. Using Greenwald and colleagues’ (Greenwald, McGhee, and Schwartz, 1998) Implicit Association Test (IAT), Pruett and Chan (2006) developed a version of accessing disability attitudes. Similar to the IAT, the Disability Attitudes Implicit Association Test (DA-IAT) is a procedure that requires the participant to categorize congruent and incongruent disability and non-disability related words and images into positive and negative categories. The results identify that participants have more negative attitudes toward people with disabilities in comparison to able-bodied persons. As opposed to the DA-IAT, on the ATDPS (Yuker et al., 1960), the participants report positively based explicit attitudes. This is expected because there often is no significant relationship between the explicit attitude measure and the implicit DA-IAT.
measures, because what people express is often different than their hidden reaction (Pruett & Chan, 2006).

However, there are some content validity based arguments against these types of measures (Schwarz, 2007). Arkes and Tetlock (2004) offer several alternative reasons for failing implicit tests which may not be connected to negative beliefs about minority groups. For example, the results may be from anxiety, guilt, shame, or other feelings that surface because the participants feel disgrace for the history of mistreatment between majority persons and minority persons and not from their own negative beliefs. People also may be experiencing discomfort about reporting reactions to minority groups in general and the difference in the group measure versus the baseline measures is an artifact. This behavior was seen in Vanderkolk’s (1982) study that clarified the participants were not just anxious around minority group members, (Vanderkolk, 1977) they were anxious around all potential clients.

Another argument against validity of implicit attitudes took into account contextual information when evaluating attitudes (Schwarz, 2007). For example, Wittenbrick, Judd, and Park (2001) demonstrated that by varying the context of a prime the results of implicit attitude measures changed in reaction to that context. Also these measures are not immune to respondent bias, if the participant had a goal in mind, the evaluation was more positive than those participants without a goal (Ferguson & Bargh, 2004). Others have found that specifically for the IAT, even stimuli without minority content (such as nonsense words) can create negative responses patterns (Duckworth, Bargh, Garcia, & Chaiken, 2002). Consequently it may be too early to report that these
measures are solving some of the measurement problems and identifying attitudes without social desirability influence.

**Measuring components.** Another difficulty with these measures is that they do not separate into the components to identify what factors inform the attitude (Antonak and Livneh, 2000). It is important to identify the components that influence the attitude because each of the components may contribute to the attitudes at varying levels (Esses & Beaufoy, 1994; Findler, 2007) and one component may be more responsible for the overall attitude than another. Training in disability, as part of multiculturalism, may benefit by identifying the components responsible because interventions could be geared toward that particular component (Krahe & Altwasser, 2006) and could be used more effectively to challenge the attitudes of psychologist trainees.

Krahe and Altwasser (2006) set up a study to evaluate secondary students’ cognitive and behavioral components of attitudes toward people with disabilities. Their study focused on cognitive, cognitive and behavioral, or no interventions to attempt to change attitudes. What they found was that cognitive interventions alone did not significantly change the student’s attitudes, but cognitive and behavioral interventions together did (Krahe & Altwasser, 2006).

Therefore, despite the admonition of Antonak and Linvenh (2000) against new measures, either a new measure for disability studies or a procedure borrowed from other disciplines which allows for comparisons of attitude components and inconsistency is needed. To that end, I suggest using a newer open-ended measure which allows for analysis of both quantitative evaluations and content analysis of individually listed descriptors to explore the components of these disability attitudes (Esses & Maio, 2002).
The participant first evaluates an overall attitude toward the group on an evaluative thermometer. Then, he or she lists out descriptors for feelings, past behavior, and thoughts (separated into both stereotypes and symbolic beliefs). Lastly, the participant rates how strongly the descriptor applies to the component by adding a value (by rating -3 to +3) (Bell, Esses, & Maio, 1996; Esses & Maio, 2002). Using that information, the researcher can calculate participant attitudes to identify positive, negative, or inconsistent attitudes (Bell et al., 1996).

Using this procedure, Esses and Beaufoy (1994) assessed the overall evaluation of people with disabilities on an evaluative thermometer and asked participants to list adjectives or phrases they think apply to people with disabilities for components of stereotypes, symbolic beliefs, and affect. As applied to attitudes toward people with disabilities, affect and stereotypes were the strongest predictors of attitudes towards a person with a physical disability, but attitudes were more favorable toward a person with a physical disability that developed beyond the person's control (amputations) than ones that were perceived to be within the person’s control (HIV, depression) (Esses & Beaufoy, 1994).

**Significance of the Study**

As a result, by using the open ended procedure (Bell, Esses, & Maio, 1996; Esses & Maio, 2002) to study attitudes toward people with disabilities, the underlying component source, structure (i.e. positive, negative, and/or inconsistent) and the function of attitudes within the context of counseling can be determined. This information can be used to identify what attitudes counseling and clinical psychology trainees have toward people with disabilities and ways to educate and challenge them.
Psychology has addressed the value of disability as part of multiculturalism, but has not moved beyond just identifying the need to include disability as part of multicultural studies (Olkin & Pledger, 2003). Disability studies and counseling psychology can benefit by identifying if psychology students are adequately trained in disability as part of multiculturalism. This area is important to multicultural competencies for psychologists because counselors have been suggested in general to have more negative attitudes towards people with disabilities than do laypersons (Kaplan, 1982; Reeve, 2000; Willis, 1978; Yuker, 1994). At the same time, positive counselor attitudes toward people with disabilities have been reported (Huit & Elston, 1991; Kemp & Mallinckrodt, 1996). These attitudes can interfere with the future service to people with disabilities when the trainees become psychologists. Therefore, the nature of attitudes toward people with disabilities and training experienced by counseling and clinical psychology trainees is still unclear.

**Research Questions**

The following questions were developed based on the literature review regarding disability studies.

1. What are psychologists’ in training attitudes toward clients with physical disabilities in comparison to psychologists in training attitudes toward able-bodied clients?
2. Will psychologists in training display differences between the component measures of cognitions, affect, and behaviors in their attitudes toward clients with physical disabilities?
3. What adjectives are most commonly identified for affective based adjectives, stereotype based adjectives, symbolic belief based adjectives, and behaviorally based adjectives?

4. Does the ATDPS questions address the components of attitudes toward people with disabilities that counseling and clinical psychology trainees report are salient?
CHAPTER II
LITERATURE REVIEW

Rational for Studying Attitudes Toward People with Disabilities: Multicultural Issues in Training

Cultural competencies for multicultural groups, including people with disabilities, have been repeatedly called for by counseling psychology scholars (Olkin & Pledger, 2003), but little or inadequate attention has been devoted to disabilities by the psychology community. Scholars within counseling psychology such as Sue, Bernier, Durran, Feinberg, Pedersen, Smith, and Vasquez-Nuttall (1982) were the initiators of cross-cultural competencies specifically for racial/ethnic minority groups. They initiated the movement after noting that the history of mental health research and practice conceptualized those of racial minority groups as genetically or culturally deficient (Sue et al., 1982). This form of stereotyping led to continued oppression of minority individuals by mental health providers (Sue et al., 1982). As a way to remediate prior oppressive treatment of minorities and develop more culturally appropriate therapy and research, Sue et al. developed characteristics which would define a culturally competent psychologist. Then again in 1992, Sue, Arredondo, and McDavis revisited the call for awareness of multicultural competencies, this time with the American Association for Counseling and Development, and requested the association to have their programs adopt the guidelines.
The 2003 cultural guidelines put forth to the American Psychological Association (APA) by both Division 17, Society for Counseling Psychology, and Division 45, Society for the Psychological Study of Ethnic Minority Issues, built on the previous competencies suggested by Sue et al. (1982) and Sue et al. (1992). Those competencies specifically addressed racial issues, but discussed other minority groups, such as people with disabilities. Although the guidelines encouraged understanding of other minority groups regarding cultural dimensions, they did not specifically add other minority groups to the competencies. Persons with disabilities, as well as members of other minority groups, were added formally as part of the "Ethical Principles of Psychologists and Code of Conduct" (APA, 2002) and the Guidelines and Principles for Accreditation of Programs in Professional Psychology (APPIC, 2005) effective as of July 1, 2005 requiring psychology training programs to recognize cultural and individual diversity.

Even with the major influence of multiculturalism in counseling psychology and the APA ethical mandate to be competent in issues pertinent to various cultural backgrounds, persons with disabilities have mostly been ignored as part of multicultural competencies. Recent research programs have produced few studies regarding attitudes toward people with disabilities, especially with a more culturally oriented, social model perspective which identifies disability as part of the societal bias and not as a result of the medical condition solely (Olkin & Pledger, 2003).

Training also has been lacking inclusion of disabilities as part of multicultural studies. Using application materials for internship sites between 1989 and 1999, Olkin (2000) compared all APA accredited graduate training programs for clinical and counseling psychology and discovered the modal number of required courses on
disability was zero. Furthermore, only 11% of programs offered at least one course on disabilities.

It appears that, for counseling and clinical psychology programs, disability studies itself is often relegated to the area of rehabilitation (Olkin & Pledger, 2003) and then often forgotten. This lack of inclusion in training ignores that people with disabilities require counseling for many issues, not just adjustment to disability. As a result of the system ignoring disability, professional psychologists do not address their attitudes toward people with disabilities and may be practicing unethically (Olkin, 1999).

One potential reason for psychologists not addressing attitudes toward people with disabilities may originate from the lack of training in psychology programs. Because counseling and clinical psychology trainees are part of society, they, like most people and other practitioners, are exposed to societal disabling attitudes, beliefs, and assumptions (Reeve, 2000). Without providing opportunities for psychology trainees to challenge those attitudes, the attitudes may carry over into the psychologist’s professional practice (Olkin, 1999). By extending multicultural competencies to disabilities, psychologists are again given a framework to identify their negative beliefs and attitudes toward people with disabilities. In working within the multicultural competencies suggested by Sue and his colleagues (1992), counselors need to become aware of their own assumptions, values, and biases within the three areas: beliefs and attitudes, knowledge, and skills. From the suggested beliefs and attitudes competency, it is recommended that “Culturally skilled counselors are aware of how their own cultural background and experiences, attitudes, and values, and biases influence psychological processes” (Sue et al., 1992, p. 482).
However, programs may have a difficult challenge educating their trainees about their attitudes and biases toward disability because the disabilities literature lacks theoretical cohesion for explaining and measuring disability attitudes. One of the main concerns about the literature is that very few studies exist about mental health professionals' attitudes toward people with disabilities--let alone counseling and clinical psychology trainees. Of the available studies, very few are within the last two decades due to a general decline in studies about attitudes toward people with disabilities. Other problems that interfere with understanding attitudes toward people with disabilities are connected to methodology. Of the measures available, few are connected to theory. Therefore, attitudes toward people with disabilities are an area that should be further investigated to clarify the attitudinal influence upon the therapeutic work with clients with disabilities.

In this chapter, first, I will explore more about multicultural competencies and psychology’s inclusion of the disability culture. I will furthermore discuss attitudes of mental health providers, and then specifically counseling psychologists in training, toward people with disabilities. Lastly, I will identify and critique different approaches to measuring attitudes toward people with disabilities and identify a method that will help identify current attitudes.

**Disabilities and Multicultural Competencies**

The inclusion of multicultural competencies in psychology has greatly influenced an awareness of minority groups as consumers of psychotherapy and the need for awareness of attitudes toward minority groups, including people with disabilities. Sue, et al., (1992, 1982) identified the multicultural competencies and brought forth the call to
the Society for Counseling Psychology and the American Association for Counseling and Development. The multicultural competencies include characteristics of: “(a) counselor awareness of own assumptions, values, and biases; (b) understanding the worldview of the culturally different client; and (c) developing appropriate intervention strategies and techniques would each be described as having three dimensions: a) beliefs and attitudes, b), knowledge and c) skills” (Sue et al., 1992, p. 481). However, these competencies address only the needs of racial or ethnic minorities. Other minority groups such as those based on gender, sexual identity, and disability are discussed as part of the 2003 cultural guidelines from the APA, but those guidelines fall short of specifically including disability as a minority culture. Awareness of disability as a minority grouping began to be remedied in the 2002 "Ethical Principles of Psychologists and Code of Conduct" (APA, 2002) and the 2005 Guidelines and Principles for Accreditation of Programs in Professional Psychology (APA, 2005), both of which include awareness of disability as a multicultural group.

Even with the major influence of multiculturalism in Counseling Psychology and the APA ethical mandate to be competent in issues pertinent to various cultural backgrounds, persons with disabilities have been ignored. When reviewing the literature, one can also see the lack of disability awareness. In a review of APA journal articles published in 1999, Munley, Anderson, Baines, Borgman, Briggs, Dolan, and Koyama (2002) found only 24.63% of the articles identified disability/ability status of the research participants. Likewise, in an analysis of multicultural topics in the Journal of Counseling and Development between 1990-2001, the authors found disability, along with other diverse population topics, mostly in the “special sections” area. Therefore, the authors
were unable to complete an analysis on these groups and hence, focused the rest of the article on race and ethnicity (Arredondo, Rosen, Rice, Perez, & Tovar-Gamero, 2005). Furthermore in a search of Psycinfo for permutations of attitudes and disability, the yield is only a total of 281 journal articles over the past decade (“disability attitudes” only yields 37 results, “disabilities attitude” yields one, “disabilities attitudes” yields 228, “disability attitude” yields 15). From even the few studies that address awareness of disability issues, it is easy to perceive that disability groups have not been included in the current literature on multiculturalism adequately.

The field is also ignoring disability as part of multicultural training and may not be preparing psychologists in training to be aware of their own attitudes toward people with disabilities. As noted earlier, using application materials for internship sites between 1989 and 1999, Olkin (2000) compared all APA accredited graduate training programs for clinical and counseling psychology and determined the modal number of required courses on disability was zero. Furthermore, only 11% of programs offered at least one course on disabilities (Olkin & Pledger, 2003). This lack of training with disability as part of multiculturalism appears to carry through to practicing psychologists. In a survey of members of the APA, practicing psychologists responded that the number one difficulty to providing services to people with disabilities was accessibility problems (Leigh, Powers, Vash, & Nettles, 2004). Following closely behind accessibility, the respondents reported lack of funding for services was another strong limiting factor to providing psychotherapy to people with disabilities. Of interest, some of their respondents suggested examples of special services that would facilitate treatment to people with disabilities including: providing a high level of care, providing accessible
office space, and receiving mentoring from disabled psychologists. However, the authors (Leigh, et al., 2004) highlight the ignorance of the general psychological public by noting that these examples really should be known as standard service not special service.

These examples demonstrate a systemic lack of awareness of disability as part of psychology’s multicultural movement. It is apparent that neither the training programs, nor the psychology literature have provided adequate inclusion of disability as part of multiculturalism. As a result, it is not surprising that most psychologists-in-training believe that they will not see people with disabilities in their practice unless they are part of the rehabilitation sub-domain (Olkin, 1999) and practicing psychologists identify what should be standard practice as special services (Leigh, et al., 2004). However, millions of Americans have some form of a disabling condition, and by extension, there will be clients presenting for treatment who have a disability. By assuming disability studies are only applicable to rehabilitation, it ignores that people with disabilities require counseling for many concerns, not just adjustment to disability. However, training psychologists is difficult without an adequate understanding of trainees’ attitudes or adequate information in the literature base.

**Helping Professions and Attitudes Toward People with Disabilities**

What is known about mental health providers' attitudes toward people with disabilities is sparse. When disability attitudes have been studied, very few of the studies used counselors to identify attitudes. Of the few recent articles that have focused on counselor attitudes, even fewer have utilized psychologists or psychologist trainees. Since so few recent studies regarding attitudes toward people with disabilities using mental health providers are found, I will use one from 1977 as the earliest study.
For the most part, studies of mental health workers' attitudes generally have used counselors from both rehabilitation counselors and general mental health counselors as participants. Due to the scope of this study with the focus on mental health attitudes, for this review none of the special education or guidance counselor literatures were used.

A study by Martin, et al. (1982) using the ATDPS self-report scale identified beginning rehabilitation counselors' attitudes toward people with disabilities. The study found positive counselor attitudes toward people with disabilities over ATDPS norms (males: $t(388)=13.21$, $p<.05$) and females: $t(472)=5.58$, $p<.05$), and males were reported to have more positive attitudes than females ($t(138)= 2.52$, $p<.05$). Another study, again with the ATDPS, identified attitudes toward people with disabilities by practicing counselors. Huitt and Elston (1991) mailed surveys to counselors in Kentucky. Rehabilitation, school, and mental health counselors replied to the survey. Using a one way ANOVA, the authors found no difference between specializations. They also identified that the participants expressed more positive attitudes toward people with disabilities than the normative group for the ATDPS. Despite finding positive attitudes toward people with disabilities, there were considerable problems with these two studies. The most prominent problem was the lack of a social desirability scale. A social desirability scale is important because, as discussed in chapter one, the ATDPS is transparent, and easily faked to the correct socially responsible attitudes (Yuker, 1986). Secondly there may be a more positive attitude bias because the respondents in the first study were at a voluntary training seminar about disabilities. In the second study respondents had to mail back a survey (only 46% responded (Huitt et al., 1991)) and those who responded may have more interest in disability concerns than those who did
not and therefore more positive attitudes. So, the positive attitudes measured by the ATDPS may only be because those participants with positive attitudes toward people with disabilities were represented. With these concerns, no strong conclusions can be reached from these studies that will help inform training of psychologists.

**Attitudes of mental health trainees.** The current study is intended to assist in information for training psychology trainees by identifying attitudes toward people with disabilities. This is important because if they are unable to identify and challenge attitudes toward people with disabilities, those attitudes carry through to when they become practicing psychologists and may be a reason for the perceived negative attitudes of therapists by people with disabilities. The first type of study using counselor trainees was by Vander Kolk (1977). He used graduate student counselors and measured physiological stress reactions when students were presented with pictures and a descriptive paragraph of either a racial minority person or people with a variety of disabilities. In the pictures, different disability cues such as a cane or wheelchair were used to depict a person with a disability. The students were asked to identify who they would be most comfortable with as a client: the person with different disability types or minority status. Through a series of $t$-tests, he found that student counselors experienced stressful reactions toward all of the clients in the study above baseline reading. However they experienced more stress toward the racial minority client versus persons with amputations ($t(26) = 1.86, p < .05$), paraplegia ($t(26) = 1.86, p < .05$), and mental retardation ($t(26) = 2.62, p < .05$). Of the disability groups, counselors had the most stressful reaction to a person with blindness.
In a replication and extension of his previous study, Vander Kolk (1982) did not find a significant difference between counselors in training’s attitudes toward disabled and non-disabled clients; the counselors experienced significantly higher stress above the baseline with all client types. The only significant difference was that students had more stress with clients with cerebral palsy as compared to clients with epilepsy ($t(19)=1.78$, $p=.05$). This study provides some valuable information about the internal state of trainees and potentially their attitudes. However, does anxiety equal a negative attitude toward a person with a disability? It does identify a level of discomfort as measured in the first Vander Kolk (1977) study. Regardless of the identification of a negative attitude versus stress, this result still leads one to argue a need to explore the counselor in training’s attitudes and reactions toward his or her client. Furthermore, training may still be needed to overcome potential attitude biases.

These results of the trainees' reactions could be related to the counselors' level of training. In this next study the ATDPS was again used to identify attitudes toward people with disabilities, but level of training was also assessed: professional therapist versus therapist in training. In one of the very few studies that focused on outcomes of mental health counselor attitudes toward people with disabilities, Kemp and Mallinckrodt (1996) determined that attitudes toward people with disabilities were more positive as compared to the sample on the ATDPS. Procedures included both student therapists and professionals watching a clinical vignette and then responding on how they would conceptualize the case. This video was of a client with a disability and an able-bodied client coming to therapy for sexual abuse concerns. These authors stated that therapists often can commit errors of omission (ignoring topics based on stereotypes of people with
disabilities, for example, sexual involvement) and errors of commission (focusing on areas that have nothing to do with presenting issues such as employment needs) when it comes to persons with disabilities as clients. In comparison of the able-bodied versus client with a disability, there were no significant differences in expected number of sessions needed for the client or bias in disability topics. However in a set of comparisons based on level of training, the researchers found, by using a MANOVA ($F(12, 126)=2.13, p<.05$), that untrained therapists were more likely to focus on extraneous issues than more seasoned therapists. Furthermore, those therapists who had more training had significantly more positive scores on the ATDPS-A ($t(45)=2.25, p<.05$) than those with less training. This study indicates that the more training a therapist has, the more positive their attitudes toward people with disabilities are. Then the therapists are better focused on disability concerns in treatment. Although the ATDPS has many problems with it, including the positive bias of the instrument and using normative data from decades that had a different social and political influence, the finding of more positive attitudes of those with more training versus less training speaks to the need to include disability concerns at the graduate coursework level.

In yet another study using the ATDPS to identify attitudes of counselors in training toward people with disabilities Carney and Cobia (1994) also identified years of counseling experience, level in education, program of counseling training, and demographic information. Rehabilitation counseling, school counseling, and community counseling students were asked to respond to the ATDPS and were compared to the ATDPS normative scores. The authors used a t-test to determine that the scores were significantly higher than the ATDPS normative score ($t (189) = 18.57, p < .001$). They
also found a significant difference in attitudes by major using 5 one-way ANOVAs. The rehabilitation counseling majors were more attitudinally positive than all of the other majors and community counseling majors were significantly different than the school counseling trainees ($t(170)= 92.29, p<.001$).

Again this study lacks a social desirability scale and, as noted above, the ATDPS has difficulties with its ability to be easily faked in a positive direction and the incorrect assumption of positive attitudes for lack of negative evaluation. Furthermore, the participants were again compared to the normative sample of the ATDPS that was from the 1960s and this study is in a very different sociocultural time period of the 1990s, after the passage of the Americans with Disabilities Act and multiple changes in civil rights. The identification of one program over another does not add to the understanding of disability attitudes, and another positive result from the ATDPS does not clarify the nature of disability attitudes by counselors in training.

**Counseling psychology trainees.** Lastly, a recent unpublished graduate dissertation attempted to identify competence toward working with people with disabilities and attitudes toward people with disabilities by counseling psychology trainees (Hollimon, 2007). Yet again, this study identified attitudes toward people with disabilities using the ATDPS. The perceived confidence with students in working with people with disabilities was determined through the Counseling Clients with Disabilities Survey by Strike (2001), and the amount of contact that students had with people with disabilities was also identified. Hollimon indicated that across the three components of the Counseling Clients with Disabilities Survey (self awareness, perceived knowledge, and perceived skills) using a repeated measures ANOVA there was a significant
difference between these three components ($F(1,130)= 281.66, p<.001$). Specifically the participants rated their self awareness as better than their perceived knowledge and perceived skill. Regarding valence of attitudes, using a t-test the sample was reported to be more positive than the normative sample for the ATDPS ($t(129) = 26.29, p<.001$). He reported no significant differences in the ATDPS scores for people with varying levels of prior contact with people with disabilities (Hollimon, 2007).

Just as with the prior studies, there are multiple problems with this study mostly related to the ATDPS. The major difficulty of this study is that it uses the ATDPS without a social desirability scale. This ignores the previously noted concerns over the tendency to produce positive attitude ratings (Soder, 1990; Yuker, 1994), the inconsistent factor structure (Antonak, 1981; Hafer, Wright, Godley, 1983), and transparency to socially desirable responses (Makas, et al., 1988; Yuker, 1986). Just like the prior studies, it also compares the responses to the ATDPS normative sample which are measurements from a different sociopolitical time. Comparing responses to this normative sample is unlikely to identify current attitudes. The study reports the contact that trainees have with people with disabilities, but does not identify knowledge based training with people with disabilities.

Furthermore, it falls into the problems of the discipline as identified in the multicultural section at the beginning of this chapter. It identifies persons’ demographic characteristics, but does not identify ability status as part of demographics; instead it is made into a data point where ability status is identified in contact with people with disabilities. Lastly, the language of the dissertation (Hollimon, 2007) reduces the person first language used to identify people with disabilities into an acronym of PWD. The
person first language is a way to reduce discrimination by attempting to focus language on people with disabling conditions as people rather than just their disabling condition. If studies attempting to improve multicultural awareness fall into the same problems from the past, then movement forward in awareness of disabilities as part of multicultural competence may be difficult.

**Measuring Disability Attitudes**

Based on the review of the above studies, the most commonly used measure is the ATDPS and I have highlighted several problems with this particular measure. It is doubtful that the ATDPS is the best measurement to capture the most current attitudes. In order to identify the best measure to report attitudes toward people with disabilities, a brief review of available measures for attitudes toward people with disabilities and what is known about general attitudes toward people with disabilities is provided. Often when people with disabilities are spoken about or studied as members of a minority group, the assumption is that able-bodied persons hold negative attitudes toward people with disabilities. These negative attitudes are the basis for many of the attitude surveys (Antonak & Livneh, 1988).

Antonak and Livneh, (2000) reviewed several direct and indirect methods of evaluating attitudes toward people with disabilities. Examples included ranking people with various disabilities, adjective checklists, paired comparisons, semantic differential scales, summated rating scales, and social distance scales. Antonak and Livneh (1988; 1995; 2000) generally criticize the disability measurement literature noting that measurements are often developed for specific groups or situations, are developed to be used only once, or are “subjective, informal, and (usually) psychometrically unsound”
(2000, p.16). These criticisms of the available disability attitudes measurements may help to partially explain why the disability attitudes literature has had difficulty moving forward despite decades of investigation.

One way to improve these measures, suggested by Antonak and Livneh (2000), is “to further clarify the nature, structure and correlates of attitudes toward persons with disabilities, researchers should continue to investigate the relationships between the attitude components (e.g. affective, cognitive, behavioural)…” (p. 220) and other types of variables including context. With this suggestion, a measure which allows for the exploration of affect, cognition, and behavior is needed. Therefore, to explore the attitude components toward people with disabilities and address the lack of theory driven research, the available measures first will be reviewed, second what is known about general disability attitudes will be reviewed, and lastly an appropriate model will be discussed.

Explicit Attitude Measures

**Attitudes Toward Disabled Persons Scale (ATDPS) (Yuker, Block, & Campbell, 1960).** The first measure, the ATDPS, is the most widely used attitude scale for studying attitudes toward persons with disabilities (Pruett & Chan, 2006; McCaughey & Strohmer, 2005). It is a scale designed to measure general attitudes toward people with disabilities where participants evaluate statements from +3 to -3 with no 0 point (Yuker, Block, & Young, 1966). The scale was developed from a review of the literature and then items were rationally created to reflect attitudes toward persons with disabilities. There are both positive and negative evaluative statements, but primarily
negative statements. Then the results were subjected to factor analysis to identify the number of factor scales.

However, there is criticism that the ATDPS (Yuker et al., 1960) has a negative bias that does not adequately address the actual attitudes about people with disabilities (Soder, 1990; Yuker, 1994). The ATDPS (Yuker et al., 1960) includes primarily negative items that represent thoughts or beliefs about people with disabilities and does not completely tap the positive attitudes that exist simultaneously (Asch, 1984; Soder, 1990). Other researchers criticize this measure because positive attitudes are easily faked (Makas, et al., 1988; Yuker, 1986). Also the factor structure is inconsistent and differs based on context (Antonak, 1981; Hafer, Wright, Godley, 1983). Despite these criticisms of the measure, some recent studies identifying attitudes toward people with disabilities still use the measure without reflecting knowledge of or developing designs that account for these criticisms about the ATDPS (Barnard, Stevens, Siwatu, & Lan, 2008; Hollimon, 2007; Snead & Davis, 2002).

**Disability factors Scale (DFS) (Siller, Ferguson, Vann & Holland, 1968).**

Siller, Ferguson, Vann, and Holland (1968) attempted to compensate for some of the weaknesses of the ATDPS with their development of the DFS. They demonstrated a 6 factor structure based on attitudinal dimensions versus disability type using principle component analysis on responses from participants (N=1480) on three forms of the DFS. These factors included: interaction strain- a level of uneasiness around people with disabilities; rejection of intimacy- rejection of having a partner or child who is disabled; generalized rejection- reluctance to interact with people with disabilities in either a social or formal context; authoritarian virtuousness- warm and sympathetic reactions toward
people with disabilities; inferred emotional consequences- perceived negative reactions of the person with a disability to being disabled such as anger and hostility; distressed identification- the person with a disability as a reminder of the frailty of the able-bodied person; imputed functional limitations- the perceived limits upon a person with a disability due to the condition. This scale is one of the few that has a theoretical basis as Siller and colleagues developed this scale based on psychodynamic theory (Weitzel, Kravetz, Florian, & Shurka-Zernitsky, 1988).

The general scale (DFS-G) is a 69 item Likert-like scale, with responses that range from 1 (strongly agree) to 6 (strongly disagree), that determines a multidimensional attitude for disabilities. The factor structure has been replicated by several researchers. Weitzel, Kravetz, Florian, and Shurka-Zernitsky (1988) replicated the factor structure of the disability factors scale (DFS) for people in Israel. Participants (N=658) answered the DFS and five of the original scales were replicated in this study. General rejection and Interaction Strain were the scales that did not replicate at the same level. Linveh (1985) also identified the same structure with authoritarian virtuou...subsuming all of the other factors except the inferred emotional consequences and imputed functional limitations. Both these last two factors remained separate single factors. Internal consistency coefficients for the DFS-G (Siller, et al., 1970) range from .73 to .87. This scale appears to correct some of the problems of the ATDPS.

**Scale of Attitudes toward Disabled Persons (SADP (Antonak, 1982).** Antonak (1982) also attempted to correct the ATDPS psychometrically unsound and outdated concepts. The SADP is a 24 item scale that has a total score and three subscale scores. This was developed by literature review, measurement reviews, and interviews of experts...
in the fields of special education and rehabilitation. It is a 24 item Likert scale that ranges from -3 to +3. Through factor analysis it was determined that the factors are Optimism-Human Rights 67%, Behavioral Misconceptions 18%, and Pessimism Hopelessness 16%. Validity was demonstrated by a moderate correlation of the three subscales with the ATDPS ($r = .47$, $.35$, $.31$) (Antonak, 1982). Antonak also reported reliability based on Spearman-Brown corrected reliability coefficients ranging from .81 to .85, $\alpha$ coefficients ranging from .88 to .91, and with factor analysis, the three subscales accounted for 76% of the variance (Antonak & Livneh, 1988).

However, Beckwith and Matthews (1995) found coefficient $\alpha$ at .77 in a sample of students in an intellectual disability course. They attributed the lower level of variance versus that cited by Antonak & Livneh (1988) to a tendency of their participants to group responses in a positive direction. It could also be that the participants were responding in a socially acceptable way because the authors did not use a social desirability measure. However, in another study, Antonak (1985) reported, from responses on a social desirability scale, the SADP was not influenced by social desirability. Tervo, Palmer, Redinius (2004) used both the ATDPS and the SADP and found that attitudes toward disabled persons by nursing professionals were more positive toward people with disabilities as compared to the normative sample. Also the SADP was more negative toward people with disabilities than the ATDPS normative sample. The authors report a necessity to teach disability rights early in the education process. However correct their suggestion may be, the reason for the differences seen between positive and negative items on the scales may be the result of the difficulties in the scales themselves.
Disability Social Relationship Scale (DSR). (Grande, Bernier, & Strohmer, 1982). This measurement was made by a panel of practitioners with experience in disability issues. It identifies attitudes toward disabled persons across disability types and in different social contexts. This measure in particular focuses on the idea that attitudes are different in different contexts. The situations are for marriage, dating, and work and the authors note the reason for these situations is that these represent different levels of intimacy. The responses are in a true or false format toward four disability groups of: cerebral palsy, visual impairment, amputation, and epilepsy.

In the normative experiment, there were significant main effects for social context ($F = 44.80, p < .001$). Grande et al (1982) reports internal consistency measures of .86 to .95. Gordon, Minnes, and Holden (1990) confirmed internal consistency to be .72 to .91. For the factor structure of the DSR, they found a 9 factor structure through principle component analysis. Their inter scale correlations were reported to be high with .33 to .80 representing poor discrimination between the purported subscales of the DSR. This leaves its ability to be replicated as questionable.

It may be the difficulties are due to separating out the contexts and the disability type. The authors note that it is not effective to analyze the concept of attitudes toward a general label of disability because both context and disability type influence the attitude (Grande, et., al., 1982). However, as noted above, there have not been any consistent findings across attitude studies for disability types (Yuker, 1994). Furthermore, within a multicultural perspective, discrimination has been seen toward the people with disabilities as a minority group therefore a measure of global attitudes toward people with disabilities fits better within the multicultural context.
Issues in Disability Scale (IDS) (Makas, Finnerty-Fried, Sigafoos, & Reiss 1988). This scale was developed to identify attitudes toward people with disabilities in affective and cognitive areas. It was developed through review of the current measures, a pretest for adjectives on a semantic differential scale and by interviewing people with disabilities. This multidimensional attitude scale addresses both a global attitudes toward people with disabilities and attitudes toward specific disabilities. They found six subscales that identify attitudes on multiple dimensions. The subscales are education, legal, intimate-social, non-intimate social, physiological abilities, and psychological characteristics. The authors report adequate reliability and validity. However they report surprise about the high inter item subscale correlation which ranged from .26 to .59, and correlations between the IDS total score and subscale scores ranged between .65 to .80. Criterion validity was determined by identifying a sample of persons who people with disabilities believed had “good attitudes” toward people with disabilities and those respondents scored significantly more positive than the average sample (Makas, et al., 1988). The IDS had low correlation with the ATDPS, but the ATDPS also had its own problems with high inter item correlations. So despite the improvement over the ATDPS, the high inter-item correlations may not make it an effective measure.

Interaction with Disabled Persons Scale (IDP) (Gething & Wheeler, 1992). Gething and Wheeler (1992) developed this scale to identify attitudes toward people with disabilities based on discomfort with people with disabilities through unfamiliarity or difference. The items were chosen from an open ended question pilot study with 633 respondents. They were asked to describe how they felt when they met a person with a disability. From factor analysis, the authors noted 6 subscales of discomfort, sympathy,
uncertainty, fear, coping, and vulnerability. Results showed that positive attitudes on the IDP scale were related to prior interaction with people with disabilities (Gething & Wheeler, 1992).

This is a 20 item self report measure ranging from 1 to 6 strongly disagree to strongly agree with larger scores indicating more negative attitudes. In a later version of the IDP (Gething, 1994), the scale was dropped to 5 points allowing a midpoint of not sure. Wallymahmed, McKay-Moffat, Cunningham (2007) found a five factor structure with 57.1% of the variance accounted for in a sample of midwives. Their factors included discomfort in social interaction, knowledge and sensitivity, disability as misfortune, rising to the occasion, and vulnerability/coping. In a sample of teachers, confirmatory factor analysis produced a goodness of fit index of .931 for a six factor structure (Campbell, Gilmore, Cuskelly, 2003). However, Loo (2001), with a sample of Canadians, determined through confirmatory factor analysis that a six factor structure was a poor fit. Also the measure was not tested with a social desirability rating and may be open to faking. Therefore, the structure of attitudes toward people with disabilities is not fully determined in the IDP and would make a poor fit for the current study.

**The Multidimensional Attitudes Scale (MAS) (Findler, Vilchinsky, & Werner, 2007).** Findler, Vilchinsky, and Werner (2007) recently attempted to connect disability attitude measures to attitude components and developed the Multidimensional Attitude Scale. They followed the suggestions of Antonak and Livenh (2000) and attempted to develop a more psychometrically sound measure. In doing so, they hoped to identify attitudes toward people with disabilities using the three dimensions of affect, cognition, and behavior. The affective scale is based on the circumplex model of affect
(Russell, 1980). In this model, affect was based on emotion words from two dimensions: arousal to sleepiness and misery to pleasure (Barnette & Russell, 1999; Russell, 1980). The authors used emotions words from the Circumplex Model and additional affect words from the literature describing emotions toward people with disabilities. The cognitive scale came from items of the College Interaction Self Statement Test (Fitchen & Amsel, 1988). The behavioral subscale was developed rationally from the authors representing both approach and avoidance behaviors toward people with disabilities. For example an approach behavior is to “start a conversation” and avoidance behavior is to “move to another table” (Findler et al., 2007, p. 169).

In order to identify attitudes in a real life setting, the authors also modified Fitchen’s and Amsel’s (1988) vignette of a social situation with a person in a wheelchair. Participants were asked to react to the situation of another person being left alone with a person in a wheelchair. They identify affect, cognitions, and behaviors from 1 (not at all) to 5 (very much), with the higher scores as more negative. Total scores on the subscales were determined by averaging the responses for each of the subscales. Principle component factor analysis demonstrated a 3 factor structure with the total variance accounted for as 47.5%.

Based on paired t-tests with the individual components, the cognitive component was found to account for the most negative attitudes of the participants. Affective information was the next most predictive component followed by behavioral. Concurrent validity was examined by correlating the MAS with the ATDPS. However, the measure did not correlate with the cognitive subscale. It did correlate with the affective level at \( r = .21, p < .05 \). It also correlated significantly with the behavioral subscale \( r = .29, \).
However, the measure has been attempting to improve on the history of disability measurements. If the measure correlates with the ATDPS, the behavioral and affective measure may not be adequately overcoming the problems of the ATDPS. Furthermore, a review of the ATDPS shows that most of the items fit within the cognitive component. If the items are not correlating with the cognitive component, and the measures correlate with affective and behavioral, albeit at a weak to moderate level, then it is possible that the affective and behavioral scales are really measuring part of the cognitive component.

**Disability Social Distance Scale (Tringo, 1970).** One of the most common types of scales developed out of social distance rating is the Disability Social Distance Scale (Tringo, 1970). Tringo developed a measurement scale based on the hierarchy of identifying social distance that someone would have toward a person with varying conditions. This scale ranges from “would marry” to “would put to death.” The participants (N=455) were asked to rank 21 conditions. He found that an ulcer, asthma and arthritis ranked the most preferred. Thomas (2000) found the structure stayed 30 years later except that attitudes toward cancer changed. Although the Disability Social Distance Scale (Tringo) was reported to be developed with appropriate methods, Antonak and Livneh (1988) warn that often social distance scales have not been made using the specific development method and therefore may be psychometrically doubtful. Regardless, of the development, this scale does not add to the understanding of content, structure, and function of attitudes toward people with disabilities.

**Other individual scales.** Other researchers have maintained the problems of disability attitude instruments by developing individualized attitude measures. Antonak
and Linveh (2000) noted that over 40 normed and validated instruments were available in 2000. The problem, they report, with this many measures is that very little can be understood from the whole history of disability attitudes studies because the measures are so different. Unfortunately the trend has continued. In the last 10 years, many studies have continued to utilize new, individually-developed attitude measures toward individual groups of disabilities such as learning disabilities (Campbell, 2006; Murray, Lombardi, Wren, & Keys, 2009; Wong, 2008) and brain injury (Linden, Rauch, & Crothers, 2005). These measures have also focused on attitudes of individual groups such as teachers (Baker-Erizen, Mueggenborg, & Shea, 2009), principals (Bailey, 2004), occupational therapist trainees (Mu, Frank, Konz, 2007), and Mexican Americans (Graf, Blankenship, Sanchez, & Carlson, 2007) attitudes toward people with disabilities. As Antonak and Linveh (2000) note, little is added to the disability literature by these studies.

**Implicit Attitude Measures**

As opposed to those explicit attitude measures discussed above, a newer interest in the attitude research area within social psychology is to identify implicit attitudes. These attitudes are based on non-reported measures such as physiological responses or reaction time measures (Eagly & Chaiken, 2005). These measures are also from observed behaviors such as physical distance (Kleck, 1969). These responses and observations are often measures of attitudes through anxiety in a variety of forms. For example, Zych and Bolton (1972) attempted to determine if there are negative attitudes toward people with disabilities by measuring a physical reaction using Galvanic Skin Response (GSR). These authors screened their group with the ATDPS and of that sample
took the top 11 positive attitude persons and bottom 11 negative attitude persons to measure their GSR in response to pictures of people with disabilities. The authors reported that those participants with more negative attitudes toward persons with disabilities also had a significantly higher GSR compared to those with a more positive attitude. Marinelli and Kelz (1973) also focused on anxiety as a factor underlying attitudes towards people with disabilities. They measured heart rate and subjective identification of anxiety levels toward a confederate with a cosmetic disability. People who scored high on the Disability Factors Scale-Cosmetic (Siller, 1969) showed higher heart rate (measured anxiety levels) than those who scored lower on the scale.

In another series of studies determining an able-bodied person’s physical and verbal distance around people with disabilities, Kleck (1969) used a confederate with a disability. He found that people kept a larger distance from the confederate in a wheelchair than they did an able-bodied person, but they reported that they had more positive impression of the confederate in the wheelchair. He also found that, verbally, people terminated their interactions with the disabled confederate faster than they did with a non-disabled confederate and reported that they were less truthful regarding opinions with the disabled confederate (Kleck, Ono, & Hastorf, 1966). Furthermore the authors found that those who reported more discomfort around disabled persons exhibited a stronger reaction. Participants also showed less bodily movement when the person with a disability was speaking and expressed similar opinions as the person with a disability. The participant then expressed a different opinion in private to a non-disabled person. Participants were also inconsistent in their reported feelings, and they expressed more
positive impression of the person with a disability than they did with an able-bodied person (Kleck, 1968).

More recent studies using implicit measures as a way to evaluate attitudes also have demonstrated a more negative attitude from participants despite positive reports on the ATDPS (Pruett & Chan, 2006). Using Greenwald and colleagues’ (Greenwald, McGhee, and Schwartz, 1998) Implicit Association Test (IAT), Pruett and Chan developed a version accessing disability attitudes. Similar to the IAT, the DA-IAT is a procedure that requires the participant to categorize congruent and incongruent disability and non-disability related words and images into positive and negative categories. The authors note that this test measures the ease of evaluative association. In other words, if someone has negative attitudes towards people with disabilities, then there should be fewer errors during the congruent (disability, bad) trials than the incongruent (disability, good) trials. The authors found fewer errors during the congruent trials and concluded that there are more negative attitudes toward people with disabilities as compared to able-bodied persons. Using the ATDPS, the researchers found positively based explicit attitudes, but there was not a significant relationship between the explicit attitude measure and the implicit DA-IAT measures. This lack of a relationship between explicit and implicit attitude measures is similar to the Kleck and colleagues (Kleck, 1968; Kleck et al., 1966) finding in their implicit attitudes study using physical and verbal distance.

Pruett and Chan (2006) report that this lack of a relationship is not a problem due to few implicit studies correlating with explicit attitude reports. The Kleck and colleagues’ (Kleck, 1968; Kleck et al., 1966) studies also found differences between explicit and implicit measures which are likely the same reasons for the Pruett and Chan
(2006) conclusion. Conversely, Zych and Bolton (1972) and Marinelli and Kelz (1973) found explicit measures and implicit measures corresponding to negative attitudes. However, these studies are heart rate measure studies versus the Pruett and Chan (2006) error congruence study. Therefore, this difference between explicit and implicit measures seen in the Pruett and Chan (2006) and Kleck and colleagues (Kleck, 1968; Kleck et al., 1966) may be people actually having negative attitudes and reporting positive, or it could be the positive bias of the ADTPS and impression management self report.

**Evaluation of Implicit Attitude Measures.** These IAT measures are supposed to be a way to reduce positive biases and social desirability in attitude measurement because the participant is unable to control his or her reaction to the object (Greenwald et al., 1998). However, there have been some arguments against this assertion and suggestions that the measures are not really tapping attitudes (Schwarz, 2007). Arkes and Tetlock (2004) dispute the interpretation of the DA-IAT congruence/incongruence measures as a true measure of attitudes. They assert that measuring reactions to objects does not necessarily identify that a person has a positive or negative attitude. They offer several alternative reasons for failing implicit tests which may not be connected to negative beliefs or feelings about racial groups. For example, the IAT results may indicate that a person has negative attitudes due to slower reaction time for an incongruent response; however, it may be from heightened arousal resulting from feelings of shame from the participant’s awareness of the history of mistreatment between majority persons and minority persons. The person may also be distracted by being aware of what the test is looking for and not wanting to look prejudice. A person
may experience these distracting emotions regarding memories of mistreatment or thoughts about not wanting to look prejudice, but it does not mean that the person holds the negative belief, or behaves in a negative way toward minority individuals. Therefore, does the person really have a negative attitude and then have a negative evaluation of a minority person that results from it? This type of outcome question may be difficult to answer from this type of measurement with the current available literature.

Another problem is that context can change the positive or negative outcome of the measured attitudes (Schwarz, 2007). For example, Wittenbrick, Judd, and Park (2001) demonstrated for racial attitudes that by varying the context of a prime where they showed African American persons in a negative stereotypic situation of a gang versus a positive family picnic situation, the implicit attitude measure also changed. Therefore there is potential for very little stability in the attitude measured by an implicit attitude test. If the attitude is mutable in these tests, this procedure could introduce more measurement error than the developers initially believed.

Other contextual problems exist when participants, responding to the prompts, have a goal in mind. When a respondent has a goal in mind, the evaluation is more positive than those participants without a goal (Ferguson & Bargh, 2004). So, if respondents have a goal of expressing positive thoughts toward people with disabilities, it may change the outcome of the DA-IAT to be more positive, or it may slow them down so much that they are identified as having negative attitudes. Also Duckworth, Bargh, Garcia, and Chaiken (2002) demonstrated that even novel stimuli can elicit negative responses on the implicit attitudes evaluations. Even when the participants are asked to evaluate nonsense items, the researchers found a similar outcome pattern as seen in
priming studies. Therefore without evaluating anything, some of the participants were identified as having negative attitudes on the IAT. Hence, the product of implicit attitude tests may be attitudes with an unknown amount of error.

Consequently it may be too early to report that these measures are tapping attitudes without social desirability influence. There is a question if error congruence/incongruent responses, galvanic skin response, or heart rate activity, all of which may be under the influence of strong emotion, measure how someone really feels about, behaves around, or thinks about a minority group member (Arkes & Tetlock, 2004). Lastly, what the IAT measures are identifying as negative or positive attitudes may contain a large amount of artifact error (Duckworth, et al., 2002). Therefore, use of these implicit measures to understand more about affect, cognition, and behavior of people toward people with disabilities may not be appropriate at this time.

In summary, multiple measures have been developed to measure disability attitudes. The ATDPS (Yuker et al., 1960) is the oldest and most widely used. The ATDPS (Yuker), SADP (Antonak, 1982), DSR (Grande, et al., 1982), and IDS (Makas, et al., 1988) were all developed based on literature review or responses from disability experts. The IDP (Gething & Wheeler, 1992) and the DSDS (Tringo, 1970) developed their items experimentally from survey responses and social distance procedures respectively. Both the DAT-G (Siller, et al., 1968) and the MAS (Findler, et al., 2007) were developed out of theory. Implicit measures use observation (Kleck, 1969), GSR (Zych & Bolton, 1972), anxiety (Marinelli & Kelz, 1973), or reaction time DA-IAT (Pruett & Chan, 2006) to identify attitudes.
These differing approaches to disabilities measures typically do not allow for the comparison of attitudes across the decades and it leaves researchers unaware if attitudes have changed over the decades, stayed the same, or even a consistent understanding as to what the affect, cognition, and behavioral components of attitudes are as recommended by Antonak and Livneh (2000). With the exception of the MAS and the IDS, the disability scales have been unable to identify affect, cognition, and behavioral correlates of attitudes. This type of focus appears to be one of the most promising ways to help psychology trainees to understand their attitudes as they relate to the multicultural competencies. Furthermore, identifying what components are involved in the attitude development and maintenance is important because both Esses and Beaufoy (1994) and the MAS study (Findler, et al., 2007) found that cognition and affect predicted attitudes toward people with disabilities differently.

**Alternative Way to Measure Attitudes Toward People with Disabilities: The multicomponent model of intergroup attitudes and the open ended listing responses.**

This alternative measure for attitudes toward people with disabilities was used by Esses and Beaufoy (1994) when studying attitudes toward people with disabilities. They assessed the overall evaluation of people with disabilities on an evaluative thermometer and used a listing procedure (which will be explained below) for components of stereotypes, symbolic beliefs, and affect. This listing procedure was similar to an adjective checklist where participants respond to adjectives describing thoughts and feelings they had towards a group. However, the participant was not given a pre-determined list of items and was allowed to list adjectives that are available in their minds, based on their own experience, which describes their thoughts and feelings.
Cavazza and Butera (2008) modified the open-ended listing procedure by presenting participants with a list of ten items that the participant evaluated. From this study one can see how an enhancement of the adjective checklist can be utilized to evaluate attitudes towards people with disabilities.

Esses and Beaufoy (1994) additionally assessed the perception of control over disabling conditions as they predict attitudes. As applied to attitudes toward people with disabilities, affect and stereotypes were the strongest predictors of attitudes towards a person with a physical disability, but attitudes were more favorable toward a person with a physical disability that developed beyond the person's control (physical disabilities such as MS, muscular dystrophy) than ones that were perceived to be within the person’s control (HIV, depression) (Esses & Beaufoy, 1994). The authors indicated that the four predictors accounted for 30% to 40% of variance in the attitude measure (Esses & Beaufoy, 1994; Esses, et al., 1993). Because this measure was (a) based on attitudinal theory (which will be explained below), (b) allowed the participant to identify his or her cognition and affect rather than fitting into predetermined responses, and (c) allowed for comparison of components in the literature base overtime, it appeared to be an ideal measure to help identify the current state of attitudes toward people with disabilities by psychologist trainees.

This study used the theoretical approach of the multicomponent model of intergroup attitudes (Esses, et al., 1993) to explore attitudes of psychology trainees toward persons with disabilities. In the next section, this open ended listing measure of attitudes will be explained and compared against available measures. The background of the Esses et al. (1993) model which stemmed from the multicomponent model of
attitudes proposed by Zanna and Rempel (1988) will be discussed. Lastly the multicomponent model of intergroup attitudes (Esses et al., 1993) will be explained and the use of this model for identifying the contributions of each component.

**Free response open ended listing procedure.** To begin, the approach used in the multicomponent model definition of an attitude has two areas which are mostly accepted, including that attitudes are an evaluative factor, and that attitudes are located in memory (Eagly, 1992; Eagly & Chaiken, 2005; MaGuire, 1989; Olson & Zanna, 1993; Zanna & Rempel, 1988). The summary attitude for each of the groups is measured with an evaluation thermometer which Esses and colleagues report is based on Campbell’s (1971) feeling thermometer. This evaluative thermometer includes 0 degrees marked (extremely unfavorable) to 100 degrees marked (extremely favorable) and delineations every 10 degrees. The items are anchored at 0 with extremely unfavorable to 100 extremely favorable and then each 10 degree increment is denoted appropriately with very, quite, fairly, and slightly unfavorable or favorable with 50 degrees marked as neither favorable nor unfavorable. Participants are then asked to mark how favorable or unfavorable they rate each group (see figure 1).
Figure 1: Sample of responses to Attitude Thermometer and one item of the open ended listing procedure to be used (Bell, Esses, & Maio, 1996). Favorability rating is -3 to +3 versus the -2 to +2 in Esses and colleagues (1993) to increase specificity.

To assess individual attitude components, Esses, et al., (1993) utilized a procedure where participants were asked to describe the targeted social group members by listing adjectives or short phrases. Then, participants were asked to read through their responses and apply a valence of -2 through +2 as --, -, 0, +, or ++. Finally, participants were asked to assign a percentage to the response to indicate the amount of the group members they believed the affect, value, past behavior, or stereotype applied. The model behind this measure is similar to the expectancy-value models where a value is multiplied by the likelihood that it applies to the object (Esses & Maio, 2002). Like the expectancy–value
models (e.g. Fishbein & Asjen, 1979), the attitude score is then calculated by summing the decimal equivalent of percentage which is multiplied by the value applied to the stereotypes and is divided by the number of stereotype statements given. However Esses and Maio (2002) adapted the measure to use only the value assigned. The percentage of the group was not included because too often the subjective probabilities were uniformly high across their participants and hence not useful.

This procedure was utilized in multiple experiments yielding significant prediction of attitudes from the components (Haddock, Zanna & Esses, 1993). In the experiment they described the application of the model toward minority groups including four different racial groups (English Canadians, French Canadians, Pakistanis and Native Indians) and one social minority group (homosexuals). The components were found to predict 40.1% of the variance of attitudes toward homosexuals (Haddock, Zanna, & Esses 1993). When behavior was added an additional 7% of the variance was predicted by past behavior. For persons with various disabilities the components predicted 30%-40% of the variance in the summary attitude (Esses & Beaufoy, 1994).

**Multicomponent model of intergroup attitudes: Components differentially predicting attitudes.** This model, by Esses et al, (1993), allows for the evaluation of attitudes toward multicultural groups by evaluating how a person’s stereotypes, general beliefs, affect, and past behavior inform the attitude toward persons from minority groups. This model was developed out of the Zanna and Rempel (1988) multicomponent model. Although Zanna and Rempel (1988) utilize the components of the tripartite approach to attitudes, the individual components are not summed together and not every component needs to be represented. For the model, the person’s experience with the
object, from the different information streams of the components, is synthesized into a single point based on an evaluation and stored cognitively as the overall attitude. In addition, the components, which inform the attitude, are also stored separately and can be reported. Therefore, the overall attitude is one single item synthesized out of affect, cognition, and behavior, and then stored separately from those components.

In the open ended listing procedure (see figure 1), the overall attitude is captured by the evaluative thermometer and the information that informs that overall attitude is captured by the individual components. From the Zanna and Rempel (1988) model, the components include affect, behavior, and cognition. In the Esses and colleagues (1993) model, the components are affect, stereotypes, symbolic beliefs, and behavior. The changes in components are because of the focus on intergroup attitudes as opposed to any attitude object. The cognition component is better focused onto minority groups because it is asking participants to identify the stereotypes and symbolic beliefs used to describe those groups. As a result, there is one overall attitude measure and four component measures captured.

Using this model and the open ended procedure, researchers were able to determine that overall attitudes can be differentially predicted by the components. Haddock, Zanna, and Esses (1993) through hierarchical regression analysis found that all three components predicted 40.1% of the variance. Affect ($\beta=.379, p<.001$) and symbolic beliefs ($\beta=.303, p<.001$) accounted for an additional 19.4% variance and were predictive of attitudes, but stereotypes ($\beta=.102, \text{ns}$) did not uniquely add to prediction of attitudes toward homosexuals (the wording used by the authors).
Similarly, for people with disabilities, components predicted the overall attitude differently ($F(4,416)=42.31, p<.001$) using analysis of variance for main group of disability type and components as within subjects factors. Based on component factors, emotions and stereotypes were strongest predictors of attitudes toward people with amputations ($R^2=.35; R^2=.37$ respectively). Symbolic beliefs and attributions of control were best predictors of attitudes toward people with AIDS ($R^2=.36; R^2=-.28$ respectively), although emotions and stereotypes were still significant (both $R^2=.18$), they were less predictive. Affect and attributions of control ($R^2=.28; R^2=-.41$ respectively) best predicted attitudes toward people with depression. The authors indicated that the three (behavior not included) component predictors accounted for 30%-40% of variance (Esses & Beaufoy, 1994; Esses, et al., 1993).

For ethnic/social groups, Esses and colleagues (Esses, et al., 1993) determined that emotions were the most predictive of attitudes toward French Canadians ($b=11.64, p<.001$) and Native Indians ($b=12.21, p<.01$), whereas symbolic beliefs were most predictive of Pakistanis ($b=17.61, p<.001$) and homosexuals ($b=10.04, p<.001$). Attitudes toward English Canadians were minimally predicted by stereotypes, beliefs, or emotions, and this group was the most consistent, positively evaluated group (Esses et al., 1993).

Eagly, Mladnic, and Otto (1994) demonstrated that beliefs listed about women, men, democrats, and republicans were more positive than affective responses. Using regression analysis, they determined that for women, men, and democrats, beliefs were the most significant predictor. However, beliefs and affect predicted attitudes for women ($r=.31$), men ($r=.39$), democrats ($r=.58$), and republicans ($r=.71$).
This model has shown that components can predict overall attitudes differently based on the group being evaluated. It was also shown to identify attitudes toward people with disabilities (Esses & Beaufoy, 1994) therefore an extension of this study will help to add to the understanding of attitudes toward people with disabilities and the structure of those attitudes.

**Evaluation of Open Ended Listing Procedures.** Esses and Maio (2002) note some very helpful qualities of the open ended listing procedure. First, the measure does not require the participant to fit his or her response into the predetermined attitude measures. This is one common criticism of most attitude measures (Antonak & Linveh, 2000; Eagly et al., 1994; Esses & Maio, 2002; Schwarz, 2007; Schwarz &Bohner, 2001). The measure also provides results which can be analyzed both by content analysis for the idiosyncratic responses the participants provide and quantitatively from the valence rating the participant applies to rate the responses. Bell and colleagues (1996) report that participants find the procedure simple and easy to complete. The measure does not need to be adjusted to evaluate any specific group or in any specific language. Therefore, the measure can be applied to attitudes toward people with disabilities in the United States and then be transferred to measuring attitudes toward people with disabilities in the United Kingdom. It then can be used to measure attitudes toward persons who are from African origins in the different countries without changing any of the components from the disability evaluations. Lastly, the authors note that the measure is not time specific and does not need to be adjusted to the time frame because of changes in societal attitudes.
This measure is also one of the few measures that directly identifies attitude components. Bell and colleagues (1996) emphasize that it is unlikely that participants will need to generate new attitudes and components, but rather will report what they have in memory. However because of the shared method, the authors caution that there is more shared overlap in variance than would be in other methods.

The method has content validity because the content analysis of the responses is different depending upon the component being assessed (Eagly et al., 1994; Esses & Beaufoy, 1994; Esses & Maio, 2002; Esses et al., 1993; Haddock et al., 1993). The researchers reported that participants identify different adjectives for each component. Lastly, the authors noted that they are not arguing a use of only open ended measurements because researchers need to identify attitudes from multiple methods of measurement.

**Social desirability.** Esses et al. (1993) note a potential criticism of the open ended measure is that participants are unwilling to list stereotypes because perceived prejudice. On the contrary they found that participants are willing to readily indicate both positive and negative evaluative factors and include stereotypes which most people would expect a participant not to list if responding in a socially desirable way (Bell, Esses, Maio, 1996; Esses & Maio, 2002). Regardless, Esses and Maio (2002) indicated that their measure is likely to be susceptible to social desirability similar to close ended explicit measures. Therefore, they suggest a need for social desirability scales.

Another important area to consider is the social desirability influence on these self reported measures. According to Marlowe and Crowne (1961), social desirability is a “need for social approval and acceptance and the belief that this can be attained by means
of culturally acceptable and appropriate behaviors (p.110).” They note that a person who needs social approval will endorse statements that represent culturally acceptable ideas and will reject those that are not acceptable. Those who do not endorse a need to respond in a socially acceptable way will be more likely to conform to those behaviors. Based on current attitudes, it is culturally unacceptable to reject minority groups, such as people with disabilities, and those who require social approval would therefore endorse items that identify more positive attitudes.

To avoid committing the same critical problem of the other disability attitudes measures, identifying the level of participants’ connection to socially desirable responses is necessary. The most commonly used measure is the Marlowe-Crowne Social Desirability Scale (MCSDS) (Crowne & Marlowe, 1964). It has 33 true or false items that measure responses for rare, desirable behaviors, and common, undesirable behaviors. Initially, the MCSDS items were developed to reflect average interpersonal and personal behaviors, but the authors stated that the measure tapped into the need for approval (Crowne & Marlowe, 1964).

**Multicultural Social Desirability Scale (MCSD; Sodowsky, 1996).** However the specific social desirability measure sought after for this study is one that identifies the participant’s response to minority groups. Unlike the MCSDS measure which taps into the need for approval (Crowne & Marlowe, 1964), the Multicultural Social Desirability Scale (MCSD) (Sodowsky, 1996; Sodowsky, Kuo-Jackson, Richardson, & Corey, 1998) identifies openness to multiculturalism. It was initially developed by Sodowsky (1996) after she noted that the Marlowe-Crowne Social Desirability Scale did not contribute to the multicultural attitudes as seen in her Multicultural Counseling Inventory (1996).
After identifying that Ponterotto, Rieger, Barrett, Harris, Sparks, Sanchez, and Magids (1996) also did not find significant relationship with their Multicultural Counseling Awareness Scale with the MCSDS, another multicultural competencies scale, she argued that multicultural competency instruments required a face valid multicultural social desirability instrument. The scale measures the amount that a person attempts to make a good impression on others with regard to everyday social interactions with minority persons and belief of institutional policies focusing on diversity.

It is a 26 item true-false response measure. A high score, suggested to be 25-26 points (Sodowsky, et al., 1998) indicates an extreme report of openness to and responsiveness to person from different racial/ethnic backgrounds, yet they note that this is unrealistic in today's racial relations society in the US. Conversely those who score at a low level (about 5-6 points; Sodowsky et.al, 1998) indicates the respondents are not concerned about appearing not as open responsiveness to persons from different racial/ethnic backgrounds. Sodowsky and colleagues (1998) report a score of 16 is balanced. The MCSD is copyrighted and purchase of rights to use the measure did not extend to permission to publication of items. However, prior reported examples of items include: "I have been annoyed when minority people have expressed ideas very different from mine" and "I believe there should be laws against racist or hate speech." Reported Chronbah's alphas are at .75 to .88 in various samples (Sodowsky, et al., 1998; Roysircar, Gard, Hubbell, & Ortega, 2005). Similarly alpha of .73 (Hansen, Randazzo, Schwartz, Marshall, Kalis, Frazier, Burke, Kershner-Rice, & Novig, 2006) was found for private practitioners, .66 for master's level counseling students (Dickson, Jepsen, Barbee,
and .72 for master's and doctoral level counseling psychology program students (Wendler & Nielsson, 2009).

In a review of literature utilizing the MCSD, mostly doctoral dissertation research was available. Few studies outside of the author's group were in the published literature. Of those found, the MCSD has been shown to be effectively utilized to identify social desirability in various multicultural inventories. Most prominently it has been used in the Multicultural Counseling Inventory (Sodowsky, 1996) and others have continued to find the MCSD useful for identifying social desirability with the MCI (Dickson & Jepsen, 2007). However, the MCSD was not correlated with the MCI after training using a triad training model in multicultural course (Seto, Young, Becker, Kiselica, 2006). It was correlated with subscales of the Concerns about Counseling Racial Minority Clients (Wei, Chao, Tsai, Bottello-Zamarron, 2012), but only had an $\alpha=.66$. Wendler and Nilsson (2009) found the MCSD was related to cognitive complexity so that the less cognitively complex the person, the more they are likely to present themselves as favorable toward multicultural groups. They also support the finding that the MCSD is helpful in assessing social desirability for multicultural factors by identifying that diversity of contact was related to the MCSD significantly ($F(118) = 6.10$, $p < .01$).

The MCSD has enough use with counselor and psychologist trainees that it would appear to meet the need in combination with a multicultural group. It has not be used for groups outside of racial minority groups and primarily has been used with the MCI (Sodowsky, 1996). However, the MCSD was related to diversity of contact for the Wendler and Nilsson (2009) study, meaning one underlying concept the measure taps is the awareness and acceptance of differences in people. Furthermore, Sciarra, Chang,
McLean, and Wong (2005) identified that racial identity stages for white persons most associated with racism correlated negatively with attitudes toward people with disabilities on the ATDPS. Sciarra and colleagues suggest that both race and disability maybe relate because of similar patterns of oppressed cultures. Therefore with the connection between the suggested racial and disability oppressed group culture (Sciarra et., al., 2005) and the finding that awareness and acceptance of diverse people is related to the MCSD (Wendler & Nilsson, 2009), the MCSD will likely identify multicultural social desirability concerns for disability studies as well as racial groups.

**Summary**

Ultimately, the open ended measure meets the requirements for identifying attitudes that are not well understood. The benefits of this measure are that it has a theoretical background from the multicomponent model of intergroup attitudes (Esses, et al., 1993) and the measure has an, albeit small, history of predicting attitudes from component measure information. This multicomponent theory is also used to identify attitudes toward minority groups and therefore meets a need in the multicultural movement. The information from the measure can be utilized in future meta analyses and contribute to the movement of the literature base forward in understanding more about attitudes toward persons with disabilities in the current sociopolitical context. Lastly, this measure can help to identify the valence of attitudes, what components are responsible for the overall attitudes toward people with disabilities by psychology trainees, and potentially help identify if and where training is required.

By using the multicomponent model for intergroup attitudes by Esses, and colleagues (1993), this study should be able to determine if psychologists in training are
positive or negative, and what components influence the overall attitude toward people with disabilities. This study will make an important contribution to the field because it will provide a measurement of current attitudes toward people with disabilities by psychologists in training and determine if programs need to provide instruction on this issue.

Persons in the helping professions, and the general public, have been the participants in studies of attitudes toward disabilities for some time, but fewer studies have been completed recently. Of the studies that include mental health providers as their participants, most have found positive attitudes toward people with disabilities (Carney & Cobia, 1994, Hollimon, 2007; Huitt & Elston, 1991; Kemp & Mallinkrot, 1996; Martin, et al., 1982). However, there also continues to be strong suggestions of negative counselor attitudes in the disability community (Reeve, 2000). One explanation could be that counselors have a slightly negative attitude toward clients in general (Vander Kolk, 1977; Wills, 1973). A second possibility could be that, differences exist in the component measures when measuring attitudes and not all of the information has been gathered. For example it may be that only affect is measured to identify attitudes and behavior is observed to be negative compared to a reported positive affect. The third possibility is that poor measurement and design has obscured the negative attitudes reported by Reeve.

As seen from this review on attitudes, a current study on counseling and clinical psychologists’ in training attitudes towards people with disabilities is needed because, with the exception of unpublished dissertations (Hollimon, 2007), the most recent studies of mental health providers are over 10 years old. There are also no other (outside of
Hollimon, 2007) studies about attitudes toward people with disabilities of counseling psychologists or counseling psychologist trainees. In light of the multicultural competencies, one would expect a difference in the training of and available information about counseling psychologists’ attitudes, however the information does not exist and therefore is unknown at this point. Secondly, minimal information may be available because the study designs have been poor and have not utilized an attitudinal theory, so little can be concluded from the past studies. Thirdly, from the pattern of attitudes toward people with disabilities in the general population, and the societal forces which influence psychologists, what components influence the attitude is also unknown. As a result, what is known from the literature does not allow for predictions and highlights the necessity to evaluate attitudes of psychologists in training.
CHAPTER III
METHODS

This study investigated the attitudes of counseling and clinical psychologists in training toward people with disabilities and determine if trainees’ attitudes differ at the component levels. Using Esses, Haddock, and Zanna's (1993) open ended procedure to identify attitudes, respondents expressed attitudes toward a client with physical disability versus an able-bodied client. Past literature documented that attitudes inconsistently differ based on disability types (Janicki, 1970; Semmel & Dickson, 1966; Vander Kolk, 1982; Weinberg, 1976; Wong, et al., 2004), but there have been some trends in categories of disabilities (i.e. mental, physical, and systemic). Therefore the conditions will not specify disability types (i.e. AIDS, Depression, Mental retardation, Multiple Sclerosis), but rather denote physical disability because based on the trends some differentiation between disability categories is needed. The exemplar for identifying attitudes toward the disabled group was a photograph of a person seated in a wheelchair. The control stimulus was the same person standing in the photograph.

The use of the attitudinal object of a person in a wheelchair was because a wheelchair is used as a symbol of disability as part of our culture and other studies used a wheelchair. In the ranking studies, Weinberg (1976) found that those in a wheelchair were less attractive than other disability conditions, a confederate in a wheelchair was used in multiple studies to identify behavior of a person interacting with a disabled
person (Kleck, 1968;1969; Kleck, Ono, & Hastorf, 1966) and Wong et al (2004) found a trend toward motor disabilities being perceived as more negative. Also the wheelchair symbol can be seen across our culture on parking permits, ramps, and adaptive devices society uses to provide accommodations. It was also one of the symbols for the DA-IAT responses (Pruett & Chan, 2006). Therefore the attitudinal object of person who was in a wheelchair should be able to elicit attitudes toward people with disabilities.

Participants

Participants consisted of 99 doctoral-level counseling and clinical psychology trainees currently enrolled in APA-accredited training programs. The most current list of the Council of Counseling Psychology Training Programs’ (CCPTP) sites was obtained from the CCPTP web page (http://www.ccptp.org) and the APA accreditation page (http://www.apa.org/ed/accreditation/counspsy.html). Each program’s training director was emailed a link to an online survey host site containing the survey to disseminate to their students. Demographic information indicated that 43.9% of the participants were from eastern schools, 37.6% from central schools, 6.9% from mountain schools, and 10.9% from western schools. The participants were primarily female (86.1% female, 13.9% male). There were more counseling psychology trainees (66.3%) than clinical psychology trainees (33.7%) who responded to the survey. Most participants were in the 4th year or less (69.3%) and 15.8% were in their 1st year. The majority of the participants were between the ages of 21 to 29 (70.3%) and 21.7% of the participants were in their 30s.
Measures

**Demographic information.** Because demographic matters such as age (Wong, Chan, Cardoso, Lam, Miller, 2004; Martain, Scalia, Gay, Wolfe, 1982), education (Wong et al., 2004; English, 1971), and contact (Chessler, 1965; Donaldson, 1980) with people with disabilities have been indicated as factors influencing attitudes toward people with disabilities these data were collected and examined to determine if they had an effect on the analysis. Participants identified the number of courses that focused on disabilities and 56.7% of participants reported they had at least one course that focused on disabilities. Few participants also identified that their coursework focused 0% of the time on disabilities (9.9%), 45.5% of the participants reported between 1-10% of the time their coursework focused on disabilities, and 23.8% of the participants noted 11-20% of the time in the coursework focused on disabilities. Additional questions requesting race, sexual orientation, and ability status were proposed but due to a computer upload error were left off the survey. The items were uploaded to the website, but were deleted after an internet stoppage in the creation process. The items did not save and I did not observe that the items were missing as part of the survey review. Therefore results for these demographic variables were not collected. Please refer to Appendix A for test items.

**Multicultural Social Desirability Scale (MCSD).** Based on current attitudes, it is culturally unacceptable to reject minority groups, such as people with disabilities, and those who require social approval would therefore endorse items that identify more positive attitudes. However, it is also unlikely for someone to have entirely positive attitudes toward minority groups in the current sociopolitical environment of the US culture. Therefore, a measure that helps to identify the socially desirable responses that
are either too positive or too negative would be helpful. The MCSD is a 26 item true-
false response measure. A high score, 25-26 points based on author's research
(Sodowsky, et al., 1998), indicates an extreme report of openness to and responsiveness
to a person from different racial/ethnic backgrounds, which would be unrealistic.
Conversely scores at a low level (about 5-6 points; Sodowsky et al., 1998) indicate the
respondents are not concerned about appearing nonresponsive to persons from different
racial/ethnic backgrounds. Sodowsky and colleagues (1998) report a score of 16 is
balanced and represents someone who is neither under nor over reporting.

The MCSD is copyrighted and purchase of rights to use the instrument did not
extend to permission to republish items. However, prior reported examples of items
include: "I have been annoyed when minority people have expressed ideas very different
from mine" and "I believe there should be laws against racist or hate speech." Reported
Cronbach's alphas are at .75 to .88 in various samples (Sodowsky, et al., 1998;
Roysircar, Gard, Hubbell, & Ortega, 2005). These reliability scores were replicated in
various mental health practitioners and trainees ranging from .66-.72 (Hansen,
Randazzo, Schwartz, Marshall, Kalis, Frazier, Burke, Kershner-Rice, & Novig, 2006;
Dickson, Jepsen, Barbee, 2008; Wendler & Nielsson, 2009). See Appendix B for
information, test items unable to be published.

**Attitude and component measures.** First, the attitude thermometer used by Bell
and colleagues (Bell et al., 1997) was used to identify the overall attitude toward people
with disabilities. The measure is described below in detail. Regarding measurement of
components, Esses and Maio (2002) noted that despite the benefits of their open ended
measures, close ended measures are also useful to include in studies. Because multiple
methods help to improve reliability of the construct measurements, use of multiple methods is advisable. Therefore both the open ended measures used by Esses and Beaufoy (1994) and the Attitudes Toward People with Disabilities Scale, a close ended measure, were used.

**Attitude thermometer (OAM).** The overall attitude was assessed by the attitudes thermometer used by Esses and colleagues (1993). It will be henceforth referred to in this study, to clarify the concept represented by the measure, as the overall attitude measure (OAM). It is similar to a single semantic differential scale in that the overall attitude toward the group is based on whatever the participant determines; it could be emotions, beliefs, stereotypes or any other information. For this technique, utilized by Esses and colleagues (Bell et al., 1996; Esses et al., 1993; Esses & Beaufoy, 1994; Haddock et al., 1993), the participant indicates his or her evaluation of a typical member of the group from 0-100. The items are anchored at 0 with the label extremely unfavorable to 100 with the label extremely favorable and then each 10 degree increment will be denoted appropriately with very, quite, fairly, and slightly unfavorable or favorable with 50 degrees marked as neither favorable nor unfavorable. This type of attitude measure was determined to be reliable and valid. Reliability, using parallel forms with the semantic differential scale, was strong for the evaluative thermometer (Cronbach’s $\alpha=.92$). Additionally, test-retest reliability equaled .77. Validity was determined by comparing the semantic differential scale with the thermometer where it correlated with the thermometer .70 (Haddock, et al., 1993). Please refer to Appendix C for test items.
Open ended listing procedure. This study used an open ended approach to explore the components of attitudes toward people with disabilities. As reviewed in the previous chapter, the measure developed by Bell, Esses, and Maio (1996) is an open ended measure that allows the participant to list phrases or adjectives that describe the particular group with an assigned value to how strongly the word or phrase describes that group. Again, this item is similar to a semantic differential scale, but it contains self generated stimuli that the person rates. This self generation procedure allows for the researcher to know specifically what cognition/behavior/affect the person is reacting to and the value they apply to it. Consequently, participants do not have to fit their ideas into a predetermined scale. Statistically, it allows for a quantitative evaluation of a person’s value applied to his or her adjectives listed. This measure also allows for content analysis of the adjectives the participant listed to describe the group (Esses & Maio, 2002).

The procedure utilizes the three components as follows. For the cognitive component, participants are asked to list two separate items: stereotypes and general(symbolic beliefs about the group. The affective component is comprised of the emotions and feelings a participant has toward the group. The behavioral component is how people have acted toward or interacted with the group in the past. Finally participants rate how strongly the item applies to their evaluation of the group by adding a valence (-3 to +3) to the listed items and those are used to calculate the attitude scores (Bell et al., 1996). The responses are summed and averaged based on the number of responses given. Affect, behavior, cognition-beliefs, and cognition-stereotypes each have their own individual score and final scores for each component range from -3 to +3.
Minimal reliability and validity estimates have been completed for this measure. However, Eagly, et al (1994) demonstrated that the open-ended, listing procedure, with strength valences added, is reliable for obtaining beliefs and affects as compared to the semantic differential procedure addressing beliefs and affects. “Coefficient alphas, calculated by treating subjects’ evaluations of their beliefs and affects as a set of items, were the following for measures based on means: for beliefs .62 for women, .77 for men, .88 for Democrats, .and 86 for Republicans; for affects, .61 for women, .81 for men, .91 for Democrats and .94 for Republicans.” (Eagly, et al., 1994, pp. 121-122).

**Reliability.**  Eagly et al., (1994) also demonstrated high internal consistency for using the procedure with social policy judgments. While evaluating beliefs, the researchers found high coefficients α of .92 for abortion, .93 for affirmative action, and .88 for welfare. For affective evaluations, coefficients α were .93 for abortion, .93 for affirmative action, and .91 for welfare. Again these were utilizing the listing procedure compared with a semantic differential procedure to assess reliability of response to the particular category. These scores were similar to the initial study which compared the open ended listing procedure, including valences, with a semantic differential scale (the evaluation items were gathered from a list of adjectives half negative and half positive that the participant endorsed and then rated on the semantic differential scale) for both beliefs and affects. Again reliability measures ranged from α= .81-.92 (Eagly, Mladinic, & Otto, 1991).

Additionally, split half reliabilities have been calculated by comparing every other response for affective, cognitive, and behavioral components individually (Franc, 2000; R.Franc, personal communication, September 28, 2009; Haddock & Zanna, 1998). Using
this approach, Haddock (1994), in his doctoral dissertation, found both means for cognitive and affective items to be equal to .75. This reliability calculation was able to be completed because 2-6 items were generated by participants for each component (Haddock & Zanna, 1998). This approach can be potentially difficult if the participants only generate one item for the component, but Haddock and Zanna (1998) note that for their research only 3-5% of a college sample fails to generate at least one response.

**Validity.** Haddock also used the multitrait-multimethod approach with the open end listing procedure to demonstrate convergent and discriminant validity for the affective and cognitive components. He used the semantic differential technique correlated with the listing procedure to demonstrate convergent validity. These two techniques correlated at .86 for cognitive component measures and .82 for affective component measures. Because the semantic differential scale is a valid and reliable measurement of attitudes compared to direct measures (Kaplan, 1972), the cognitive measures appear to be measuring the same construct. Likewise, open ended listing and semantic differential affective measures appear to be measuring the same constructs. Whereas discriminate validity was demonstrated by correlating affective components and cognitive components from the listing procedure which generated a correlation coefficient of .52; with similar procedures the correlation for the affect and cognition components of the semantic differential scale was .73. The author, using a t-test on the reliability corrected scores, noted that the two scores are significant from each other (Haddock & Zanna, 1998). Although the correlation with the semantic differential is high, the open ended measure is an improvement on the measurement of attitude constructs for people with disabilities.
Although, the multitrait-multimethod approach was not used to determine validity, Eagly’s and colleagues’ (1994) study, cited above, also found affect and beliefs to be correlated somewhat, but to a low amount of $r=.22$ for women, $r=.35$ for men, $r=.48$ for democrats and $r=.62$ for republicans. Furthermore, Esses et al (1993) provided similar validity information by testing the components of the multicomponent model of intergroup attitudes through use of stereotypes, symbolic beliefs and affective listing to assess validity of predicting attitudes. The measures of affective components and cognitive components: beliefs and stereotypes were correlated to determine if the components provide discriminative validity.

For four racial groups, stereotypes with symbolic beliefs, and symbolic beliefs with emotions were not correlated, and hence not tapping the same information, for Eagly and colleagues’ (1994) evaluation of English Canadians and Pakistanis. Correlations of stereotypes with symbolic beliefs, and symbolic beliefs with emotions were at low levels of $r=.25$ for both measures of Native Indians and .44 and .40 respectively for French Canadians. Stereotypes and emotions were correlated moderately for all groups ranging from $r=.54$ to .72, which is demonstrating some overlap, but some unique variance available for the item (Esses, et al., 1993). Haddock et al. (1993) also demonstrated discriminant validity with beliefs and affect correlated from $r=.36$ to .61 in their first study. However they also added past behavior as part of the components in a second study. When these past experiences were added, it improved the discriminant validity because the components were correlated much lower at $r=.28$ to .36.

The criterion validity, for the components, measured by predictive value for stereotypes, symbolic beliefs, and emotions with attitudes varied according to the group.
Emotions had the most predictive power ranging from .25-.59. Stereotypes predicted attitudes toward the groups .24-.49 with the exception of English Canadians. Symbolic beliefs only predicted 2 groups r=.49 for French Canadians and r=.58 for Pakistanis. Overall these components appear to have moderate predictive validity, but are still correlated somewhat with each other. This same pattern of adequate prediction with some overlap also appears in the affective and belief components in Haddock et al., (1993). Criterion validity was demonstrated with their predictive power for attitudes ranging from .63 to .74.

This method has proven to be reliable and valid. Although there are some potential problems with the overlap in variance for component measures, there is also evidence of improvement in reliability and validity with inclusion of additional components, like behavior (Haddock, et al., 1993). It may also be more reliable and valid than the semantic differential technique as claimed by Haddock and Zanna (1998). However, what has been demonstrated is that through using both internal consistency reliability measures and split half measures, the procedure is reliable (Eagly, et al., 1991; Eagly, et al., 1994; Franc, 2000; R.Franc, personal communication, September 28, 2009; Haddock & Zanna, 1998) and despite the component overlap, the measure is showing moderate discriminant validity (Eagly, et al., 1994; Esses et al., 1993; Haddock et al., 1993; Haddock & Zanna, 1998).

Variance in the overall attitude is predicted by both affect and belief measures demonstrating criterion validity (Esses, et al., 1993; Haddock et al., 1993). Therefore, the open ended listing procedure has some reliability and validity data to show that it will be a valid and reliable measure to determine moderate prediction of attitudes. Despite the
moderate correlations, this approach is a better beginning step, than just semantic
differential scales and a much better step than past disability attitude measures to explore
attitudes toward people with disabilities. This improvement is because it allows
participants to identify attitudes without conforming to what is assumed to be known
about attitudes toward people with disabilities. Please refer to Appendix D for test items.

*Attitudes Toward Disabled Persons Scale (ATDPS) (Yuker, Block, & Campbell, 1960).* The ATDPS, is the most widely used attitude scale for studying attitudes toward
persons with disabilities (Pruett & Chan, 2006; McCaughey & Strohmer, 2005). It is a 30
item scale designed to measure general attitudes toward people with disabilities where
participants evaluate statements from +3 to -3 with no 0 point (Yuker, Block, & Younng,
1966). The participants identify how much they agree or disagree with statements.
Examples of statements include, "Most disabled people expect special treatment", and
"Most physically disabled persons have different personalities than normal." There are
both positive and negative evaluative statements, but primarily negative statements.

The ATDPS attitude score is a two dimensional score including strength and
dimensionality: positive or negative. A high score means a person has a strong positive
attitude; a low score attitude score means a person has a strong negative attitude. The
ATDPS-B is considered a reliable measure with a test-retest reliability ranging from .71 -
.83 and .72 - .87 split half reliability (Antonak & Livneh, 2000; 1988; Yuker, et al.,
1966; Yuker, et al., 1970). The scale was developed from a review of the literature and
then items were rationally created to reflect attitudes toward disabled persons. See
Appendix E for test items.
Procedures

Training directors in counseling and clinical psychology programs received an email requesting they distribute the email to counseling or clinical psychologists in training with a link to the electronic version of the survey on Survey Monkey. This system allows the researcher to create a web-based survey for participants to complete on the internet and then the responses are collected and stored by Survey Monkey, but are only made available to the researcher. All information collected was kept confidential and secure and was not shared with any third parties. Potential respondents read an introduction to the study and the informed consent statement (Appendix F). Students were made aware of all human participants’ rights, were informed this study will have the approval of the Institutional Review Board (IRB) at The University of Akron, and then given informed assent at both the beginning and the end of the survey. The participants were randomly shown a photograph based on one of two condition types: physically disabled counseling client or able-bodied counseling client.

The participants were asked to complete the attitude thermometer by identifying a number, on the overall attitude measure, representing their attitudes toward the client or the client with a disability ranging from 0 (extremely unfavorable) to 100 (extremely favorable). They also were asked to complete the open ended component measures which require them to identify as many words or phrases to adequately convey their impression of the group and describe the group. An example of a woman with descriptor for each component was provided for the participants. Component items were presented first to list descriptors. After the participant responded to all the component categories, the items he or she listed were presented again and the participant was asked to rate each
listed item from -3 to +3. The MCSD and ATDPS were randomly given to the participants after the listing procedure. Counselors in training lastly are given the demographic information which will assess the level of education and exposure to people with disabilities. This was presented consistently last to avoid overtly identifying the purpose of the study. Data was stored in coded format without identifiable individual information.

**Data Analysis**

A preliminary analysis was done to determine if demographic information of social desirability, age, gender, or region correlated with the attitude measures and if significant was controlled for in the analyses of interest. Demographic variables and all key variables of interest underwent descriptive analyses, including amount of training with people with disabilities to determine if there are any differences which affect the primary analyses. Likewise, analysis was completed to determine if social desirability correlates with attitude measures. Reliability estimates will be calculated with Cronbach $\alpha$ similar to the procedure used by Eagly and colleagues (1994) by treating each of the participants’ evaluations of affect, behavior, and beliefs (values and stereotypes) as a set of items.

**Hypothesis 1. Psychologists in training will have more negative attitudes toward clients with physical disabilities than an able-bodied client.** Using the responses from the attitude thermometer and the component measures, the summary attitudes toward the client with a physical disability were compared to the able-bodied client. A multivariate analysis of covariance (MANCOVA) was performed to identify if the sets of covariates for the physically disabled client were significant ($p<.05$) as compared to the
able-bodied client. Follow up analyses were performed to identify specific items responsible for the variance accounted for.

Hypothesis 2. Psychologists in training will have significant differences between the component measures of the attitude. Using the component items from the listing procedure and the overall attitude measure, a stepwise regression analysis was performed to determine if individual components are responsible for predicting the summary attitude. A follow up F-to-remove procedure was used to identify which component items were responsible for the variance.

Content analysis of open ended questions. Content analysis was performed, to identify trends across groups with listed adjectives. Items were recoded to fit comparable items together into categories and change similar words, such as sad and sadness, into categories. Agreement for category coding was identified by two evaluators both in training for doctorates; where there was disagreement, coding was discussed and eventually agreed upon. Basic frequencies were identified according to procedures by Esses and Beaufoy (1994).
CHAPTER IV
RESULTS

Data Cleaning

Treatment of data. According to Cohen (1992), for an analysis of covariance with two groups at a .05 level of significance and a medium effect size, a sample of 64 participants will allow for a power of .80, and a sample of 95 participants will allow for a same level of power at a .01 level of significance. Due to the limited research available with the open ended procedure, a small effect size was suggested; however, 393 participants would be needed for that effect size. After sending the requests for participants to training directors five times, only 50 participants completed the items. The survey was then opened up to Clinical Psychology trainees. After six months of data collection, the computer survey recorded 365 participants began the survey. There were 126 participants who provided data for some of the instruments used (OAM, open ended responses, rating open ended responses, MCSDS, ATDPS, demographics).

Then the data were first pass screened to identify patterns of missing data. Those participants missing responses to an entire instrument were eliminated from the calculations. Participants were also removed if they responded in a way that demonstrated lack of effort. For example, those participants that responded to each open ended response with phrases like "disabled person" or "I don't know" were eliminated in the initial screening. Normality and outlier potentials were evaluated based on suggested
procedures of Tabachnick and Fidell (1996). Multivariate normality was revealed to be generally linear relationships by inspecting scatterplots for bivariate relationships among the variables, and plots for residuals of each variable. Box's test of equality of covariance matrices was not significant and Levene's test of equality in error variances was also not significant for any of the measures. As a result, based on checks of the assumptions for multivariate analysis of variance or covariance, there were no strong threats to normality, homogeneity of variance and covariance, independence of observation.

Mahalonobis distance statistic and Cook’s D were used to screen the data for potential outliers. SPSS discriminant function analysis on a case by case basis was used to identify multivariate outliers. One case was removed from the able-bodied group due to calculated outlier influence. After reviewing the adjective listings for that case, it was noted that the person reported he or she did not know what to list. Additional concerns were noted from missing data points. Of the respondents, 12 were missing data in the MCSD due to a computer upload error, representing 11% of the sample. Of those respondents with missing data, data points were calculated from the available data and added into the final instrument value. These data points were estimated through averaging and adding that number to the initial response values. There were no significant differences in the MCSD scores between those with data points calculated and those without missing data ($F=.90, p=.34$). Therefore, the total number of participants was reduced to 99 with the participants responding to the able-bodied attitudes equaling 49 and the participants responding to the disability attitudes equaling 50.
Reliability and Validity Checks

The data from the open ended listing procedure were checked for internal reliability through calculation of Cronbach $\alpha$, similar to the procedure used by Eagly and colleagues (1994), by treating each of the participants’ evaluations of affect, behavior, and beliefs (combined as values and stereotypes) as a set of items. Since the average response for each component measure was three adjectives, internal reliability set of items were checked on the first three responses. The Cronbach's alphas were at an acceptable to good level of internal reliability for each of the component measures (see table 1 on the diagonals).

As a validity check for the photographic stimuli, a question was asked to identify from what cultural group the client was from. Of the respondents, for the able-bodied person stimulus group 93% identified that the person was from a Caucasian or male culture; from the disability stimulus group, 81.6% identified that the person was from a disability cultural perspective. There was little convergent validity with the ATDPS and the client favorability rating of the disability group. For those responding to the client with the disability stimuli, the ATDPS was only correlated with the stereotype component ($r = .32, p = .05$). For the people responding to the able-bodied person stimulus, only the client favorability rating correlated significantly ($r = .31, p = .05$) with the ATDPS. The ATDPS should not correlate with the overall attitude measure for the able-bodied group. The ATDPS was set up to tap attitudes that indicate that people with disabilities are separate from the mainstream group (Yuker et al., 1970). Therefore, it is a positive validity indicator that the ATDPS correlates with the stereotype ratings from the client with a disability group because the stereotype component measure is the one
that identifies the cultural stereotypes of the disability community. Participants identified stereotypes that set people with disabilities apart from the mainstream group and hence some convergent validity of the open ended listing procedure was identified.

Using multivariate analysis of variance with each demographic variable, there were no significant identified effects on data from any of the measured demographic variables. The only variable that provided a significant effect on the outcome was from the Multicultural Social Desirability Scale. Therefore, the only covariant would be the social desirability scale rating. No significant differences were identified between counseling or clinical psychology program, gender, geographic region, years in the program, having a friend or family member with a disability, previous training in disability topics, or number of practicum clients with a disability. Unfortunately, no information was obtained for race or sexual orientation due to a transferring error to the survey website.

Tests of Hypotheses

**Hypothesis 1. Psychologists in training will have more negative attitudes toward clients with physical disabilities than an able-bodied client.** A one way between subjects multivariate analysis of covariance (MANCOVA) was performed on six dependent variables: OAM, total value of rated stereotypes, symbolic beliefs, emotion, and behavior, plus the ATDPS total rating. Independent variables were client presentation of able-bodied person or a client presentation of a person with a disability. Due to the correlation of the MCSDS with all attitude and component measures, the MCSDS was used as the covariate. With the use of Wilks' criterion, and controlling for social desirability, the combined dependent variables (DVs) for the responses toward the
able-bodied client were significantly different than the combined covariates ($\lambda=.829$, $F(5, 92) = 3.80, p < .004$) toward the client with a disability. It resulted in a strength of association of the DVs with a partial $\eta^2 = .17$.

To investigate the impact of the multivariate main effect on the individual DVs, a discriminant function analysis F-to-remove analysis was performed on the DVs. All DVs were judged to be sufficiently reliable to warrant stepdown analysis. It resulted in both OAM rating ($F(1,95)=9.01, p=.003$) and symbolic beliefs ($F(1,93)=5.72, p=.019$) accounting for the variance. In comparing univariate tests of attitude and component measures, significant differences between the groups were found for client favorability ($F(1,96) = 10.45, p<.002$) and symbolic belief rating ($F(1,96) = 7.91, p<.006$). The results were more positive toward people with disabilities ($M=66, SD=20.2; M=1.7, SD=1.3$ respectively) than toward the able-bodied client stimulus for both variables ($M=54.9, SD=16.20; M=1.02, SD=1.4$ respectively). Therefore, hypothesis 1 was not upheld. There was a significant difference between the groups, but not in the direction hypothesized.

**Hypothesis 2. Psychologists in training will have significant differences between the component measures of the attitude.** An initial correlation analysis was performed to identify if the predictor variables are redundant. Significant correlations ranged from $r=.37$ to $r=.65$ (see Table 1). These correlations, which are at similar levels of previous studies using this method (Eagly et al., 1994; Esses, & Beaufoy, 1994; Esses, et al., 1993; Haddock et al., 1993), are not high enough to signify the components are pulling from overlapping information.
Table 1

Correlations, Cronbach alphas, and Number of Responses for Open Ended Listing

Procedure

<table>
<thead>
<tr>
<th>Disabled correlations</th>
<th>Measure</th>
<th>ST</th>
<th>SB</th>
<th>A</th>
<th>BH</th>
<th>ATDPS</th>
<th>OAM</th>
<th>MCSDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ST</td>
<td>(.78)</td>
<td>.39**</td>
<td>.61**</td>
<td>.35*</td>
<td>.32*</td>
<td>.45**</td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>(.78)</td>
<td>0.20</td>
<td>0.14</td>
<td>0.01</td>
<td>0.18</td>
<td>0.17</td>
<td></td>
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<tr>
<td></td>
<td>A</td>
<td>(.86)</td>
<td>.35*</td>
<td>0.28</td>
<td>.54**</td>
<td>.49**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BH</td>
<td>(.85)</td>
<td>0.24</td>
<td>.44**</td>
<td>.30*</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>ATDPS</td>
<td>(.87)</td>
<td>0.25</td>
<td>.50**</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OAM</td>
<td></td>
<td></td>
<td></td>
<td>.48**</td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>MCSDS</td>
<td>(.72)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
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<td>50.00</td>
<td>50.00</td>
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</tr>
<tr>
<td></td>
<td>Mean</td>
<td>0.37</td>
<td>1.70</td>
<td>0.44</td>
<td>1.45</td>
<td>127.72</td>
<td>66.00</td>
<td>17.68</td>
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<tr>
<td></td>
<td>SD</td>
<td>1.69</td>
<td>1.30</td>
<td>1.62</td>
<td>1.50</td>
<td>17.60</td>
<td>20.20</td>
<td>3.96</td>
</tr>
</tbody>
</table>

Able Bodied correlations

<table>
<thead>
<tr>
<th>Measure</th>
<th>ST</th>
<th>SB</th>
<th>A</th>
<th>BH</th>
<th>ATDPS</th>
<th>OAM</th>
<th>MCSDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>(.80)</td>
<td>0.20</td>
<td>.56**</td>
<td>.38**</td>
<td>-1.54</td>
<td>.61**</td>
<td>0.17</td>
</tr>
<tr>
<td>SB</td>
<td>(.75)</td>
<td>0.23</td>
<td>0.14</td>
<td>-0.11</td>
<td>0.15</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>(.84)</td>
<td>.66**</td>
<td>-0.12</td>
<td>0.46**</td>
<td>.32*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>(.76)</td>
<td>-0.01</td>
<td>.43**</td>
<td></td>
<td>.38**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATDPS</td>
<td>(.81)</td>
<td>.31*</td>
<td></td>
<td></td>
<td>-0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCSDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.66)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>51.0</td>
<td>51.00</td>
<td>51.00</td>
<td>51.00</td>
<td>51.00</td>
<td>51.00</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0.22</td>
<td>1.02</td>
<td>0.26</td>
<td>1.09</td>
<td>125.21</td>
<td>54.90</td>
<td>18.29</td>
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<tr>
<td>SD</td>
<td>1.44</td>
<td>1.40</td>
<td>1.41</td>
<td>1.57</td>
<td>16.93</td>
<td>16.20</td>
<td>3.99</td>
</tr>
</tbody>
</table>

Note. ST=Stereotypes. SB=Symbolic Beliefs. A=Affect. BH=Behavior. ATDPS=Attitudes Toward Disabled Persons Scale. OAM=Overall Attitude Measure. MCSDS=Multicultural Social Desirability Scale. *p<.05. **p<.001.
Based on stepwise regression analysis, with the component measures acting as predictors of the client favorability rating, different components were identified as accounting for the variance in the attitude client favorability measure for each stimulus group. Regarding the client favorability rating toward the able-bodied client \( (F(1,95)=28.18, p<.001) \), it was best predicted by the stereotype component measure \( (t=5.01, p<.001) \) accounting for 34.9% of the variance. For the attitude measures of the client with a disability, there was again an ability of the components to predict the client favorability rating \( (F(1,95)=20.69, p<.001) \). The component that accounted for about 30.1% of the variance in the client favorability rating was the emotion rating \( (t=4.54, p=.001) \). The second component of behavior added 5.8% to the overall variance \( (t=2.07, p<.04) \).

These results indicate that counseling or clinical psychology trainee's attitudes towards clients with disabilities or able-bodied clients are determined by different components of the attitude. For the able-bodied client, trainees determined their evaluation of the person based on stereotypes, i.e. characteristics that describe a person from this cultural group. For the disabled client, trainees determined their evaluation of the person based on affect, i.e. the trainees' emotions felt when observing, encountering, or thinking about members of this group and to a lesser amount, symbolic beliefs, i.e. values, customs, and traditions held by members of the group. Each component grouping accounted for around 30% of the overall attitude evaluation (similar to Esses & Beaufoy, 1994), as measured by the client favorability rating, so there are other factors that are contributing to the person's evaluation over and above the self reported component evaluations.
Table 2

*Forward Selection Multiple Regression Analysis for Prediction of OAM for the Client with a Disability and Able-bodied Client*

<table>
<thead>
<tr>
<th>Client with a disability</th>
<th>Enter order</th>
<th>Predictor(s)</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>p</th>
<th>Significant Unique Predictors</th>
<th>Model</th>
<th>R² Δ</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Stereotype</td>
<td>0.58</td>
<td>0.32</td>
<td>23.81</td>
<td>&lt;.001</td>
<td>Affective</td>
<td>Accounting for Affective</td>
<td>0.33</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symbolic beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affective</td>
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<tr>
<td></td>
<td>Behavioral</td>
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<td></td>
</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Able-bodied client</th>
<th>Enter order</th>
<th>Predictor(s)</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>p</th>
<th>Significant Unique Predictors</th>
<th>Model</th>
<th>R² Δ</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Stereotype</td>
<td>0.62</td>
<td>0.37</td>
<td>28.18</td>
<td>&lt;.001</td>
<td>Stereotype</td>
<td>Accounting for stereotypes</td>
<td>0.39</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symbolic beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATDPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Step 2                   | Stereotype  | 0.66         | 0.42 | 17.36 | <.001 | Stereotype                     | Accounting for stereotypes and ATDPS | 0.06 | 0.042 |
|                          | Symbolic beliefs |            |      |       |      |                               |                   |      |      |
|                          | Affective    |              |      |       |      |                               |                   |      |      |
|                          | Behavioral   |              |      |       |      |                               |                   |      |      |
|                          | ATDPS        |              |      |       |      |                               |                   |      |      |

*Content analysis of open ended responses research question.* What adjectives are most commonly identified for affective based adjectives, stereotype based adjectives, symbolic belief based adjectives, and behaviorally based adjectives? Based on the
procedures of Esses et. al (1993), the open-ended measures were content-analyzed to
determine the most frequently elicited affective, behavioral, stereotype and symbolic
belief responses about both an able-bodied white male control stimulus and the same
male as a disabled stimulus. Responses were re-coded to fit into categories if the items
were similar. This means that the words are synonyms or fit into a similar response
pattern. For example, "sad" and "sadness" would be recoded into "sad". Additionally
behavioral responses such as "stared" or "Avoid gazing at wheelchair or overly noticing it
in session" or "Being kind in an attempt to "make up" for all those who are not" were re-
coded to identify it was an exaggerated response. Two raters (inter-rater agreement =
93%) simply counted the frequency of the identified responses. In cases of initial
disagreement between the raters, consensus was reached. Phrases that were provided by
at least 4% of respondents are provided in Tables 4-7.

Through the use of simple frequencies as utilized in previous studies (Eagly et al.,
1994; Esses, & Beaufoy, 1994; Esses, et al., 1993; Haddock et al., 1993), the adjectives
listed by the participants were analyzed. Participants gave approximately three responses
toward each component stimulus (See Table 1) and ranged from one-seven or eight for
most of the respondents. Favorability ratings ranged from -3 to +3 on all of the item
responses.
Table 3

Means and Standard Deviations of Component Measures

<table>
<thead>
<tr>
<th>Component</th>
<th>Number of responses for disability stimulus</th>
<th>Number of responses for able bodied stimulus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorability</td>
<td>Number of elicited responses</td>
</tr>
<tr>
<td>Overall</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Attitude</td>
<td>66.51</td>
<td>3.77</td>
</tr>
<tr>
<td>Stereotype</td>
<td>0.39</td>
<td>1.7</td>
</tr>
<tr>
<td>Affective</td>
<td>0.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Symbolic Belief</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Behavioral</td>
<td>1.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

A number of emotions were provided by at least 4% of the sample (see table 4). Feelings toward a disabled client of empathy, sadness, curiosity, and happy were the most commonly elicited items. As compared to the disabled client, the emotional reactions toward the able-bodied male were angry, disconnected, calm, and empathic. Of interest, the response of "normal" to the affective component for the disabled client is not seen in the able-bodied client. This could indicate a socially desirable response where the participants are aware that they need respond as if the person is not different. It could be difficult for a trainee to manage that type of reaction (to respond in a "normal" way) in a session rather than identifying that there may be emotional reactions toward a person with a disability.
Table 4

*Content Analysis of Component Descriptors for Affect*

<table>
<thead>
<tr>
<th>Descriptors of the Person with a Disability</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>34</td>
<td>21.7</td>
<td>0.73</td>
</tr>
<tr>
<td>Sad</td>
<td>16</td>
<td>10.2</td>
<td>-1.25</td>
</tr>
<tr>
<td>Curious</td>
<td>10</td>
<td>6.4</td>
<td>1</td>
</tr>
<tr>
<td>Happy</td>
<td>10</td>
<td>6.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Interested</td>
<td>9</td>
<td>5.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Normal</td>
<td>9</td>
<td>5.7</td>
<td>1.11</td>
</tr>
<tr>
<td>Anxious</td>
<td>9</td>
<td>5.1</td>
<td>-1.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Descriptors of the Able Bodied Person</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angry</td>
<td>11</td>
<td>11.8</td>
<td>-0.91</td>
</tr>
<tr>
<td>Disconnected</td>
<td>10</td>
<td>10.8</td>
<td>-0.8</td>
</tr>
<tr>
<td>Calm</td>
<td>9</td>
<td>9.7</td>
<td>0.67</td>
</tr>
<tr>
<td>Empathy</td>
<td>9</td>
<td>9.7</td>
<td>2.33</td>
</tr>
<tr>
<td>Anxious</td>
<td>8</td>
<td>8.6</td>
<td>-0.87</td>
</tr>
<tr>
<td>Happy</td>
<td>6</td>
<td>6.5</td>
<td>2.33</td>
</tr>
<tr>
<td>Cautious</td>
<td>5</td>
<td>5.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Sad</td>
<td>4</td>
<td>4.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Note.* Number of responses are the number of participants that identified the descriptor. Percentage of responses are the percentage of the sample who identified this descriptor. If a descriptor was identified more than one time by a single participant, then the item was only counted as one for the percentage of responses count.

Difference are also see in the cognitive components of stereotypes and symbolic beliefs, a pattern appears where the participants identify people with disabilities having to do with the collective disability community, advocacy, equality, and discrimination. Whereas the able-bodied person was described with words that show values of academics, autonomy, and achievement. Since people with disabilities come from
multiple cultures and not everyone is born into the disability culture, the collective culture versus individualistic culture may also be an area of disconnect between a potential therapist and client.

Table 5

*Content Analysis of Component Descriptors for Stereotypes*

<table>
<thead>
<tr>
<th>Descriptors of the Person with a Disability</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disabled</td>
<td>22</td>
<td>11.5</td>
<td>-0.68</td>
</tr>
<tr>
<td>Depressed</td>
<td>10</td>
<td>5.5</td>
<td>-1.69</td>
</tr>
<tr>
<td>Discrimination</td>
<td>9</td>
<td>4.7</td>
<td>-1.00</td>
</tr>
<tr>
<td>Strong</td>
<td>9</td>
<td>4.7</td>
<td>2.57</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>4.2</td>
<td>-0.33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Descriptors of the Able Bodied Person</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet/reserved</td>
<td>16</td>
<td>12.9</td>
<td>-0.09</td>
</tr>
<tr>
<td>Friendly</td>
<td>8</td>
<td>6.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Intelligent/smart</td>
<td>8</td>
<td>6.5</td>
<td>2.25</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>6.5</td>
<td>0.25</td>
</tr>
<tr>
<td>Resistant</td>
<td>8</td>
<td>6.5</td>
<td>-0.75</td>
</tr>
<tr>
<td>Privilege</td>
<td>6</td>
<td>4.8</td>
<td>-1.0</td>
</tr>
<tr>
<td>White</td>
<td>6</td>
<td>4.8</td>
<td>-0.43</td>
</tr>
<tr>
<td>Apathetic</td>
<td>5</td>
<td>4.0</td>
<td>-1.5</td>
</tr>
<tr>
<td>Competitive</td>
<td>5</td>
<td>4.0</td>
<td>1.83</td>
</tr>
<tr>
<td>Strong</td>
<td>5</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>5</td>
<td>4.0</td>
<td>0.6</td>
</tr>
</tbody>
</table>

*Note.* Number of responses are the number of participants that identified the descriptor. Percentage of responses are the percentage of the sample who identified this descriptor. If a descriptor was identified more than one time by a single participant, then the item was only counted as one for the percentage of responses count.
Table 6

Content Analysis of Component Descriptors for Symbolic Beliefs

<table>
<thead>
<tr>
<th>Descriptors of the Person with a Disability</th>
<th>Number</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>14</td>
<td>9.9</td>
<td>2.43</td>
</tr>
<tr>
<td>Equality</td>
<td>12</td>
<td>8.5</td>
<td>2.33</td>
</tr>
<tr>
<td>Independence</td>
<td>12</td>
<td>8.5</td>
<td>2.27</td>
</tr>
<tr>
<td>Power</td>
<td>10</td>
<td>7.0</td>
<td>1.10</td>
</tr>
<tr>
<td>Family</td>
<td>9</td>
<td>6.3</td>
<td>2.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Descriptors of the Able Bodied Person</th>
<th>Number of responses</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>15</td>
<td>12.4</td>
<td>0.93</td>
</tr>
<tr>
<td>Autonomy</td>
<td>17</td>
<td>14.5</td>
<td>0.94</td>
</tr>
<tr>
<td>Family</td>
<td>12</td>
<td>9.9</td>
<td>2.25</td>
</tr>
<tr>
<td>Career</td>
<td>9</td>
<td>7.4</td>
<td>2.33</td>
</tr>
<tr>
<td>Computer/videogames</td>
<td>9</td>
<td>7.4</td>
<td>1.00</td>
</tr>
<tr>
<td>Money</td>
<td>9</td>
<td>7.4</td>
<td>1.22</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>6</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

Note. Number of responses are the number of participants that identified the descriptor. Percentage of responses are the percentage of the sample who identified this descriptor. If a descriptor was identified more than one time by a single participant, then the item was only counted as one for the percentage of responses count.

Behaviorally, the psychologists in training identified that their behaviors toward both groups were similar in that they would greet the person and smile. Again there was another type of response that may be a reaction to what is socially expected. It may be borne out of a need to avoid treating people with disabilities in a negative way or compensate for the perceived negative treatment of the world. This grouping is identified as exaggerated action, which includes responses such as "proving he is independent,"
"ignore the disability until person mentions it," "Being kind in an attempt to 'make up' for all those who are not", "pay closer attention to them." These responses provide insight into some difficulties that some trainees are having with behavior around a person with a disability despite the overall positive rating of the behaviors.

Table 7

*Content Analysis of Component Descriptors for Behavior*

<table>
<thead>
<tr>
<th>Descriptors of the Person with a Disability</th>
<th>Number</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smile</td>
<td>35</td>
<td>22.2</td>
<td>2.58</td>
</tr>
<tr>
<td>Greet</td>
<td>18</td>
<td>11.4</td>
<td>2.00</td>
</tr>
<tr>
<td>Exaggerated action</td>
<td>13</td>
<td>8.2</td>
<td>-0.77</td>
</tr>
<tr>
<td>Helpful</td>
<td>11</td>
<td>6.9</td>
<td>1.57</td>
</tr>
<tr>
<td>Questioned</td>
<td>11</td>
<td>6.9</td>
<td>1.64</td>
</tr>
<tr>
<td>Respect</td>
<td>8</td>
<td>5.1</td>
<td>2.63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Descriptors of the Able-bodied Person</th>
<th>Number</th>
<th>Percentage of responses</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greet</td>
<td>28</td>
<td>31.8</td>
<td>1.92</td>
</tr>
<tr>
<td>Smile</td>
<td>20</td>
<td>22.7</td>
<td>1.80</td>
</tr>
<tr>
<td>Talk</td>
<td>9</td>
<td>10.2</td>
<td>2.20</td>
</tr>
<tr>
<td>Avoid</td>
<td>7</td>
<td>7.9</td>
<td>-1.57</td>
</tr>
</tbody>
</table>

*Note.* Number of responses are the number of participants that identified the descriptor. Percentage of responses are the percentage of the sample who identified this descriptor. If a descriptor was identified more than one time by a single participant, then the item was only counted as one for the percentage of responses count.

There also are some struggles with the able-bodied client. Interestingly there appeared to be negative reactions due to the client being male. Emotions listed are angry and disconnected; there are also values of apathy and behaviors of avoidance at higher levels than the disabled client. The more negative reaction toward an able-bodied male
client may indicate either participants were reacting toward the people with a disability and supplanting their reactions to be a more positive reaction, or attitudes toward white males may be relatively poor for psychology trainees.

**Comparison of the ATDPS versus content of open listed research question.**

In regard to the ATDPS items versus the open listing procedure, there are few overlaps. In the analysis, stereotypes and symbolic beliefs correlate with the ATDPS significantly and upon visual inspection, the majority of the ATDPS items would fit into the stereotype category. There are little to no other components represented in this instrument outside of an affective question.

This one question identifies how people feel toward people with disabilities -- "Most people feel uncomfortable when they associate with disabled people." It is unfortunate that there is only one question because, from the listing procedure the affective attitudes toward people with disabilities accounted for most of the variance toward the overall evaluation of the person. The modal response on the above ATDPS question was 1 indicating "agree a little". The strength of the participants' emotions toward the person with a disability, in the listing procedure, was on average .44. This would be between a response of neither positive nor negative and slightly positive, which appears to correspond with the one ATDPS question. However, most adjective responses from the listing procedure show a complex range of emotions from empathy, sadness, and happiness to anxiety.

Overall, the component and attitude responses were positive. Similarly, the ATDPS in this sample was positive. Yuker and colleagues (1970) identify the mean for the ATDPS-B as 113.45 for females and 110.16 for males. The majority of this sample
were females and the average ATDPS score was 127.72 in the disability stimuli condition. This score fits into about a 75th percentile, according to the normative data (Yuker, et al., 1970, p. 30). So the current sample was more positive than the Yuker and colleague's (1970) normative group, as it was in a prior study with counseling psychology trainees (Hollimon, 2007). The results from the ATDPS and the open ended evaluation mostly indicates that the counseling or clinical psychology trainees do not fall into the stereotypes that people with disabilities are different than able-bodied persons.

However, the ATDPS is missing attitude information. From the open ended listing procedure, the symbolic beliefs and emotional responses appear to best account for the variance in the overall attitude rating, but in the ATDPS there is only one question regarding emotional responses toward the person and the rest are mostly stereotype attitudes. Although the attitudes are noted to be positive in both the listing procedure and the ATDPS, the emotions listed are not strongly positive and the symbolic beliefs are also somewhat positive. The content analysis of the words listed may help explain the difference. Emotionally trainees note that their emotions are a mixture of empathy, sad, anxious, curious, interested, and normal. In the content, there are distinct differences within each component that represent struggles between positive and negative evaluations despite the numerically positive evaluations.
CHAPTER V
DISCUSSION

Summary of Study Purpose

Helping professionals and the general public have been the participants in attitudinal studies toward people with disabilities for some time, but fewer studies have been completed recently. Of the studies with counselor participants, most found positive attitudes toward people with disabilities (Carney & Cobia, 1994; Huitt & Elston, 1991; Martin, et al., 1982). Similarly, those studies with psychologists or psychology trainees also identified positive attitudes (Hollimon, 2007; Kemp & Mallinkrot, 1996). However, there also continues to be strong suggestions of negative counselor attitudes by the disability community (Reeve, 2000). One particular challenge to understanding disability attitudes had been the paucity of articles regarding mental health provider's attitudes toward people with disabilities; of those studies that existed, the majority were over 10 years old. There were even fewer studies (outside of Hollimon, 2007) devoted to psychology trainees' attitudes toward people with disabilities or psychologists' attitudes. In light of the emphasis on multicultural competencies among psychologists, one would expect a difference in current attitudes of psychology trainees; however, minimal information exists from the current sociopolitical time. If training programs were to educate, challenge, and assist their students to be aware of their beliefs and attitudes, knowledge, and skills as were identified in the multicultural competencies (Sue et al.,
1992), then programs would need up to date information about attitudes toward people with disabilities from the trainee perspective. However, those programs may have found identifying trends across the disability literature challenging because historically there have been poorly designed studies without connection to an attitudinal theory. These challenges of poor connection to theory and poor study design, may have been the result of the typical attitude measures used. Antonak and Livneh (2000) called for the use of better measures that identified affective, behavioral, and cognitive components of attitudes. As discussed in the earlier chapters, the purpose of this study was to extend prior research of attitudes toward people with disabilities and identify what attitudes were held by psychology students. An adjunctive purpose to the study was to discern if the most typically used attitude measure, the ATDPS, adequately identified the attitudes of psychology trainees, or if the measure identified information from the wrong attitude component areas. By having psychology trainees list adjectives and phrases for each of the three components (with four measures due to splitting the cognitive component), then applying a strength valence, the important areas which inform their overall attitude could be isolated.

Identifying the most salient components to the trainees was particularly important to training in multicultural competencies because those components could carry through to practice. Furthermore, the components could be the focus areas for educating, informing, and challenging trainee attitudes. Therefore, the current study results could help add to the training literature, the multicultural literature, and the disabilities studies literature.
First the hypotheses and results are reviewed below. Then the implications for research will be identified and I will explore how the results add to the Multicomponent model, the MCSD scale, and implications from the study as it applies to disability in multiculturalism. Then the implications for training and practice will be identified as well. Lastly the suggestions for future research will be offered.

**Review of Research Hypotheses and Results**

**Hypothesis 1. Psychologists in training will have more negative attitudes toward clients with physical disabilities than able-bodied clients.** This study's results identified that the counseling and clinical psychology trainees reported positive attitudes toward people with disabilities in the single point overall attitude measure (OAM), component listing procedure, and the ATDPS. These data did not support the first hypothesis due to a finding of positive attitudes. However, there were significant differences between attitudes of trainees toward the person with a disability and the able-bodied person, with the able-bodied client rated as more negative than the client with a disability. The difference in the variance accounted for between the groups was identified as from two measures: the overall attitude measure (OAM) and symbolic beliefs (SB).

**Hypothesis 2. Psychologists in training will have significant differences between the component measures of the attitude.** Based on a forward selection stepwise regression analysis using the overall attitude measure as the constant, controlling for social desirability, and using the component items as the predictors, the OAM was predicted by different component measures for each condition group. For clients with disabilities, the psychologist trainees identified that both emotional reactions and past
behavior toward people with disabilities were informing their overall attitude. For the able-bodied client, the psychologist trainees identified that stereotypes were influencing their overall attitudes.

**Content analysis of open ended responses research questions 3 and 4.**

*Question 3: What adjectives are most commonly identified for affective based adjectives, stereotype based adjectives, symbolic belief based adjectives, and behaviorally based adjectives?* Despite psychology trainees' reported positive attitudes toward a hypothetical client with a disability, many of their content responses suggested negative attitudes existed as well. As noted in the prior discussion of hypotheses two, the component that predicted the most variance in the OAM toward the client with a disability was the affective component. In the content listings, the most common emotions identified for the disabled client group were empathy, sadness, curious, happiness, interested, normal, and anxious. In comparison to the able-bodied client, anger and disconnected were most common affective responses.

Another emotion that may interfere with counseling was listed in stereotypes, the stereotype was that people with disabilities were "depressed," which was identified by 5.5% of the participants who responded to the client with a disability. One emotion, anxious, was listed by both groups in the emotion component open ended responses. The finding of trainees anxiety was similar to Vanderkolk's (1982) GSR study with beginning counselor trainees. With elevated GSR levels across conditions, he concluded that trainees were anxious with all clients. It was likely that the trainees of the current study were expressing the same concern.
Several other unusual responses were identified in the listing procedure. One such response was the identified "normal" emotion that was listed by 5.7% of the respondents, but not listed under the able-bodied client condition. The psychology trainees could be attempting to identify a response that reported the equivalent to the "color blind" attitude, or it could be a substituted response to respond in a socially desirable way. Reasons for this "normal" emotion response were not identified in the data set, so it could be an area for further possible research. There was another unusual emotional response that also suggested the need for more research, but this time toward the able-bodied client. The participants, 10.8% of the sample for each emotion, identified affective responses of angry and disconnected. The able-bodied client was intended to be a control group to compare the attitudes toward the client with a disability, but the attitudes appeared to be directed toward the client being male. This conclusion was reached due to the number of listed "male" responses in the other component measures. The term "male" was identified by 6.5% of the sample for stereotypes and 6.6% of the sample for symbolic beliefs. Furthermore, on the validity check response, many of the respondents identified the client as male or Caucasian male.

Question 4: Do the ATDPS questions address the components of attitudes toward disabled persons that professional psychology trainees report are salient? An additional research question, suggested by the literature, connected the open ended responses to the most commonly used instrument in disability research: the ATDPS (Yuker, et al., 1960). When comparing the ATDPS (Yuker, et al., 1960) with the responses made in the open ended responses, one large difference became clear-the ATDPS lacked emotional content. The ATDPS was primarily composed of cognitively
based items and, only a single emotional response. Since the strongest difference in
disability attitudes observed in this study was in the emotional ratings by participants, it
would be beneficial for future disability measures to include emotionally based
responses, especially when the respondents were psychologically minded persons.

Additional problems identified from the responses on the ATDPS included
attitudes toward people with disabilities rated as highly positive (75% based on the
normative sample) (Yuker, et al., 1970). Yet in this study, the overall attitude was rated
at slightly favorable to fairly favorable. The difference between these two results
supported the criticisms of the measure: a tendency to produce positive attitude ratings
(Soder, 1990; Yuker, 1994), transparency to socially desirable responses (Makas, et al.,
1988; Yuker, 1986), and the use of outdated normative data. As suggested, the ATDPS
appeared to be over estimating the rated positivity of attitudes toward people with
disabilities. Furthermore the component items found responsible for the overall attitude
rating were affective and behavior. The ATDPS only had one affective question and no
behavioral questions.

Implications for Research, Training, and Practice

Research. The importance and implications of the study are multifold. From both
the quantitative and qualitative data obtained, the results from hypothesis 1 demonstrate
that attitudes of trainees on the whole are positive, but not overwhelmingly positive as
other studies have identified. Secondly as evaluated by the third research question,
negative attitudes toward people with disabilities linger beneath the majority positive
attitudes. Similar to other minority groups, negative attitudes are not expressed outright,
but negative attitudes do exist. Within disability research, measures need to be developed
that will identify these negative attitudes and what types of conditions make the attitudes more salient. Or, measures need to adequately break through the socially desirable responding in order to see the underlying negative attitudes.

The Multicomponent Model for Intergroup Attitudes (Esses, et al., 1993) with its open ended responses was able to identify these positive and negative attitudes and components. Similar to Esses and Beaufoy (1994), differences were seen in the way that attitudes toward people with disabilities were identified. The OAM was predicted by affective and behavioral components for the attitudes toward the client with a disability and stereotypes for the able-bodied client. Therefore, I echo the suggestion of Antonak and Livneh (2000) that component measures are needed in disability research measures. This study also confirmed that the Multicomponent Model for Intergroup Attitudes (Esses, et al., 1993), with the open ended responses, was one model/measure that could be used with disability studies. However, of the primary instruments available for research on attitudes toward people with disabilities that I reviewed in Chapter II, the Multidimensional Attitudes Scale (Findler, Vilchinsky, & Werner, 2007) would be the best option. The MAS measures the three components and therefore addresses the components identified by the participants in this current study as most important to predicting the attitude. A second option, although it does not contain all the component measures, would be the Interactions with Disabled Persons Scale (Gething & Wheeler, 1992) because it measures an affective factor. The affective component was the most salient component to trainees in their attitudes toward people with disabilities in the current study.
However the most commonly used measure, the ATDPS, does not have items that identify emotions toward people with disabilities and past behavior toward people with disabilities, the components the current group of psychology trainees identified as important. The ATDPS has been used to identify attitudes toward people with disabilities by both mental health providers and psychology trainees/psychologists. This long history of finding only positive attitudes allows for identification of a very small part of the picture of attitudes toward people with disabilities. The component measures captured a subset of the respondents that possessed both negative and positive attitudes.

The ATDPS also showed highly positive attitudes based on the interpretation suggested by Yuker and colleagues (1970) versus the open ended responses and OAM's slightly to fairly positive attitudes. Furthermore, the OAM and the ATDPS were not correlated, so they are not accounting for the same information. In this study, the only measure correlated with the ATDPS was the stereotypes component, which was not a significant predictor in the disabilities study condition. Based on the identified differences, I would not recommend using this measure in future research with psychologists or psychologists in training.

**Multicultural Social Desirability Scale implications.** Disability measures, however, can only identify attitudes as much as socially desirable responding is controlled. Concerns have been raised about socially desirable responding in most of the disability attitude measures (Antonak & Livneh, 2000; Makas, et al., 1988; Yuker, 1986), and few studies have utilized a social desirability scale when measuring attitudes by mental health providers (Carney & Cobia, 1994, Huitt & Elston, 1991; Kemp & Mallinkrot, 1996; Martin, et al., 1982) and psychology trainees (Hollimon, 2007).
Therefore the addition of a social desirability scale is helpful to identify if participants are responding in a socially desirable way. And for the first time, to my knowledge, this study demonstrated that the MCSD (Sodowsky, et al., 1998) could be used to identify socially desirable responses in disability attitude evaluations.

To control for social desirability in disability attitudes the MCSD was used with the Multicomponent Model of Intergroup Attitudes. The MCSD was reportedly related to the awareness and acceptance of differences in people (Wendler & Nilsson, 2009), so it stands to argue that the measure was applicable to disability as a multicultural group. For this study, the social desirability measure appeared to work well for disability. A positive correlation between the MCSD and the OAM, all components except SB, and the ATDPS was identified in the client with a disability group. For the able-bodied group, only the affective and behavior components correlated with the MCSD. Since the able-bodied group was not identified as a minority group in any way, there should not be an awareness and acceptance of other groups as it relates to this condition in the study. Therefore, these patterns lend credence for use of the MCSD for social desirability measures of the multicultural aspects of disability.

But both behavior and affective components correlated with the MCSD in both groups. The MCSD was also correlated with the ATDPS (Yuker, et al., 1960), but only in the disability condition. The lack of correlation of the MCSD and the symbolic beliefs as well as only identifying a positive correlation in the disability condition for the ATDPS and the MCSD, is confusing. Symbolic beliefs were developed out of symbolic racism in the Multicomponent model (Esses, et. al., 1993), so the awareness of differences of the MCSD and the symbolic racism components should be correlated.
However, the symbolic beliefs were not correlated with any other item except the stereotype component in the disability condition. It could be that symbolic beliefs are too transparent to be caught by the MCSD for socially desirable responding; or symbolic beliefs are not affected by social desirability. This last suggestion is unlikely, therefore symbolic beliefs are an area of future study to identify if socially desirable responding can be identified in the symbolic beliefs by other social desirability scales or additions to the MCSD.

The correlation of the ATDPS and the MCSD in only the disability condition may be because the presence of disability stimuli, shown as the picture of a client in a wheelchair at the beginning, as opposed to the able-bodied client stimuli caused participants to respond to the ATDPS and the MCSD in a way that brought out a positive relationship between the two measures. This interpretation of the pattern of responses is bolstered by the finding that in the able-bodied client condition, all the ATDPS correlations were trending in a negative direction, although nonsignificant.

So, the ongoing responses to the disabled client stimuli continued to increase the identification of positive attitudes toward a person with a disability and possibly the socially desirable responding. This assertion can be made due to the pattern of responses by the participants and the reasoning behind the particular measures. The ATDPS was developed to identify differences between able-bodied and disabled persons (Yuker, et al., 1970), and the MCSD was identified as people being aware of and accepting of the differences (Wendler & Nilsson, 2009). These two measures are at opposite approaches. If someone scores positively on the ATDPS, it means that the person does not see a difference between people with disabilities and able-bodied persons. A positive score for
the MCSD means that someone identifies that there is a difference and is accepting of it. So the pattern of responses by the participants in the disability condition can be interpreted as the participants don't see a difference in people with disabilities, and they recognize the differences and accept them. Again, this is a logical contradiction. More than likely the participants identified the socially responsible way of responding in the disability condition and it was more pronounced due to the initial picture stimuli.

An additional concern is the lack of identified social desirability in any particular participant. Respondents' total scores on the MCSD corresponded closely to the reported balanced score of 16 (Sodowsky, et al., 1998); therefore the interpretation would be that the majority of the group was not attempting to present their answers in an excessively positive way. However, as noted prior, there is also evidence that the MCSD may not identify enough of the social desirability because no score in either group was at the particular suggested cut off from the MCSD literature for responding in a socially desirable way. It was unlikely that the group was devoid of socially desirable responses. The measure correlated appropriately with most measures in the disability condition, was used as a covariate in the analysis, and there are some content responses that suggest a more socially desirable response style. Additionally comments at the end of the survey provided approximately four responses that were critical of the MCSD. These responses were "I feel like a True/False questionnaire part was biased"; "I am sometimes not willing to admit my mistake to any person, it's not about whether or not they are a minority, but by putting True, it makes it sound like I specifically don't admit my mistake to minorities, which is not what I am trying to say." "I had a hard time answering the first set of True/False questions since they involved always and never type items. Most things are
not so discrete." "Some questions would be true or false regardless of whether it was asked about a minority, for example the voting question." Furthermore, one person emailed me to let me know that the questions are "double barreled questions" so he exited the survey. I suspect that these responses are related to the discomfort that people had with wanting to be so socially desirable that they did not want to answer the questions incorrectly. Therefore, research to identify if the cut offs, recommended by the authors for the MCSD, apply for those who are psychologically minded would be suggested.

**Training and Practice.** Regarding the multicultural competencies, the presence of qualitatively-identified negative attitudes in trainees can influence the training of future psychologists and psychological practice. For training directors, this study identified that there are more efforts being made to help train future psychologists on disability topics. Over 20 years ago little disability education was given while training psychologists (Olkin et al., 1993), but 71.3% of the respondents in this study identified training with disability concerns in their multicultural counseling coursework. Plus 53.7% reported at least some disability educational experiences in coursework. The training programs are beginning to address disability as part of multiculturalism, but as noted previously, what specifically are they addressing if there is not a cohesive attitudes literature base and will the inclusion of disability in training matter?

The long history of research in disability attitudes has identified mostly positive attitudes toward people with disabilities, including those by mental health counseling professions (Dufree, 1971; Huit & Elston, 1991; Kemp & Mallinckrodt, 1996). Similar to the one previous study (Hollimon, 2007), with counseling psychology trainees, the attitudes toward people with disabilities were again, in this study, positive. Therefore the
question begs an answer: Are interventions to change the attitudes of psychology trainees toward people with disabilities necessary? True the overall attitude measure and component measures were identified as positive toward people with disabilities. In spite of those positive ratings, the content analysis from research question three still identified problem areas indicating the presence of negative and disruptive attitudes. The overall group of psychology trainees did not quantitatively identify negative attitudes, but qualitatively problems are seen in each of the component areas. Moreover, these occasionally-identified negative attitudes of the trainees can interfere with the therapeutic process in not only training students, but their relationship building with clients (Akerman & Hilsenroth, 2001) in practicum. The identification of these attitudes through the qualitative analysis, linked to question three, highlights what has been missing from the disability attitudes literature. If just the positive attitudes were identified, as they have been by using the ATDPS, then the conclusion would be that no additional training is needed regarding disability attitudes. However, the potential damage to future psychological practice with clients with disabilities underscores the need to challenge these emotional reactions, behaviors, and beliefs that the trainees reported.

Practice. The primary concern, as noted above, is that the relationship would be damaged by the resulting attitudes expressed by the psychologist. As a potential consequence of the relationship damage, clients would not return to treatment. The multicultural competencies were developed to help train psychologists to be culturally sensitive. Specifically, a "culturally skilled counseling psychologist is one who has
moved from being culturally aware to being aware and sensitive to his/her own cultural heritage and valuing and respecting differences (Sue, et al., 1982, p. 49)."

Based on the results from the third research question, several attitude components listed would appear to interfere with the relationship between the client and the psychology trainee. Most disturbing is that those attitudes do not demonstrate the trainees' respect for differences in their clients. In a review of characteristics of and therapeutic interventions by therapists, those who were perceived as belittling, blaming, watching, managing, aloof, and distant were identified as having more difficulty engaging in therapy and had lower alliance ratings by their clients (Akerman & Hilsenroth, 2001). In the current study, trainees expressed sadness, sympathy and pity toward a person with a disability. Some also reported being curious about the client with a disability and feeling anxious. Those particular emotions connote that being disabled requires others to look on them as different in a way that does not celebrate disability as part of the diversity of humanity. These responses suggest that participants continue to apply the loss and medical models of disability. These models emphasize that disability is in the person rather than society. More modern approaches to disability theory is that the disability is located in society due to lack of accessibility and the person has an impairment (Olkin, 2002; Olkin & Pledger, 2003; Reeve, 2004; Wright 1983). These responses of pity or curiosity would likely lead the client with a disability to feel uncomfortable, not experience appropriate feelings of empathy from the therapist, and harm the therapeutic relationship development leading to premature termination of therapy.
How many of these trainees would identify directly to their client that they pity them, or feel sad for their condition? Possibly the clients can already perceive these feelings from their therapists. The unconscious expression of these emotions towards people with disabilities could further explain some of the reasons that clients with disabilities historically have reported negative attitudes from therapists as noted by Reeves (2000) despite the positive attitudes found in disability studies (Carney & Cobia, 1994; Hollimon, 2007; Huit & Elston, 1991; Kemp & Mallinkrot, 1996; Martin, et al., 1982). Ironically on list of items, identified by the APA membership, needed to obtain competency in treating people with disabilities (Leigh, et. al., 2004), none of the participants noted the need for training in relationship factors. Is it because trainees/psychologists believe that they are good at developing these relationships? Reeve (2000) made this argument in her plea for specialized training in disability factors in the UK. She proposed that many counselors may believe they unconditionally accept all people they help and don't need specialized training. From the responses of the current study, it is apparent that these emotional reactions, as applied to relationship factors, are areas that warrant discussion in training psychologists so they can improve therapy provided to clients with disabilities.

However, the relationship can easily be damaged not only by the emotions expressed toward the clients, but also by behaviors that demonstrate discomfort with the client. Leigh and colleagues (2004) also asked the APA member psychologists to identify moments of insensitivity observed toward people with disabilities in counseling settings. Their participants cited poignant examples of clients with disabilities not having adequate eye contact from their psychologists. It is unlikely that psychologists would
report their own negative behaviors or may not even be aware of their reactions. Nevertheless these behaviors can show a person with disabilities that he or she is different than other clients. One behavior explicitly identified by the trainee participants in this study was avoiding people with disabilities. Avoiding a client with a disability in counseling would be unrealistic. But the underlying desire to avoid a person with a disability could be read in reluctant body language. These behaviors could reduce the relationship bond or reduce the client's belief in the psychologist as an expert who could provide a healing experience.

Moreover, the other behavioral extreme could damage the relationship as well. The participants identified one group of behaviors which I termed "exaggerated action." This category includes responses that are overt and obvious. Trainees reported they "stared," "Avoid gazing at wheelchair or overly noticing it in session," or "Being kind in an attempt to 'make up' for all those who are not." Again these attitudes set aside the client as different than other clients in a negative way which would damage the therapeutic relationship. Some of the trainees were attempting to demonstrate understanding of the problems that people with disabilities have gone through by being overly accommodating. However, these reactions again set the client aside from the average client. Ponterotto and Benesch (1988) identify that, in multicultural counseling training, often students get overwhelmed by the amount of cultures and interventions needed to be learned. As a result, the students may unwittingly learn to just identify the cultures as different. This type of reaction may account for the participants in this study who reported that they are trying to "make up" for others. Regardless, it still connotes that people with disabilities are different in a negative way.
Lastly, the trainees identified stereotypes of disabled, depressed, and discrimination all of which were rated negatively. If the world view of a psychologist is that people with disabilities are depressed, then the psychologist is likely to identify depression in most people with disabilities in evaluations. But, the person may not be depressed. Often depression can be seen in people struggling with physical challenges because many symptoms of depression can be physical. Therefore, the client may not believe he or she is depressed, but the psychologist as an expert, may try to insist their world view on the client. Again this speaks to the role of the psychologist as expert and gatekeeper (both aspects of the medical and loss models) that may tend to pathologize much of the client's experience (Reeve, 2000; Wright, 1983). Consequently, these mismatched world views, negatively affect therapy.

Another area that may cause therapeutic relationship problems from mismatched world views is the symbolic beliefs component. The symbolic beliefs component contributed to the variance accounted for in the main group differences tested by hypothesis one. This component was also rated as positive toward the client with a disability. But in content analysis, the trainees identified values and beliefs that people with disabilities were community oriented, with beliefs about equality, independence, and power. Additional research would be interesting to distinguish if these listed beliefs are really the symbolic beliefs held by people with disabilities, or if the future psychologists had applied cultural values to the disability community that do not exist. Could the trainees' responses be a generalization of other multicultural groups' values and beliefs applied to people with disabilities? What implications would exist to wrongly identifying these values and beliefs to clients who do not hold them? Both Crisp (2000) and Grant
(1996) recognized different stages of adjustment to disability identity where persons with disabilities are rejecting the disability culture. Furthermore, Crisp (2000) discovered that for persons who were not as comfortable with their disability identity, also reported their providers as ineffective. Plus, those persons not comfortable with a disability status, did not connect with the overall disability culture.

Crisp's (2000) study was a beginning to understand people with disabilities' attitudes toward their health care providers. Tichenor, Thomas, and Kravetz (1975) also reported areas of incongruence between rehabilitation counseling professionals and their clients with disabilities. There were specific disconnects between the client and counselor's rating of the client's intelligence, physical difficulties, and emotional difficulties; but the problems were greater when counselors judged the client was not motivated. This judgment about motivation allowed the counselors to placed the difficulties of the client's change on the severity of the problems with intelligence, physical difficulties, and emotional difficulties. These counselors ignored that their negative beliefs may have interfered with the client's connection to the therapeutic process.

Therefore the answer to the question: do attitudes still need to be challenged despite finding positive attitudes is yes, but more information is needed. These trainees may not directly state that they are uncomfortable with clients with a disability. The discomfort is there nonetheless and may come out explicitly (such as reported avoidance of people with disabilities) or unconsciously (such as the reported emotions). Furthermore, these negative affect, behaviors, stereotypes, and beliefs can seep into the relationship and break it apart or keep it from forming. Consequences appear primarily
in the therapeutic relationship rating of the therapist by the client (Akerman & Hilsenroth, 2001), and therefore, the client may take longer to address their problem or terminate prematurely so the problem is not resolved. If psychologists are to do better work with people with disabilities, the attitudes must be identified and challenged.

Future Research

Many different research projects could come from the current study. As identified above, the study results found both positive and negative attitudes of psychology trainees toward people with disabilities. However replication and extension are needed not only to mitigate limitations but also to identify if the results hold reliably for this group. By using the Multicomponent Model of Intergroup Attitudes with the open ended measures, comparisons across time can occur, because the model used allows for more flexibility across cultures and sociopolitical changes.

Additional research would be helpful to identify how understanding the attitudes of psychologists affects the therapeutic relationship with people with disabilities and how clients are perceiving the attitudes of their psychologists. Because of the flexibility of the particular measure used in this study, additional research can allow people with disabilities to identify their (a) attitudes toward other people with disabilities, (b) attitudes toward their mental health providers, and (c) the attitudes toward people with disabilities by both psychology trainees and psychologists. From this program of study, a comparison of areas where disconnections between attitudes and judgments of clients and their providers could be identified.

Regarding component measures, another interesting area of research may be to tease out if the symbolic beliefs reported by the participants match those beliefs of people
with disabilities. As well symbolic beliefs could be a fruitful area of study in disability because symbolic beliefs were part of the main group differences and additional research with that component in the model may be warranted. Furthermore, the impetus for the symbolic beliefs in the model was reportedly symbolic racism (Esses, et al., 1993), and a comparison of disability with measures of symbolic racism could clarify reasons for the component's significance in the main group differences of this study.

**Limitations**

Several problems appear to have contributed to the sample obtained. As noted previously, 365 people began the survey and only 126 participants provided some data for all instruments. The open ended question at the end of the survey provided some indication that respondents were confused with the open ended listing procedure. Many were likely expecting Likert-type scales with statements. Some (approximately three) participants argued the validity of the open ended response listing procedure. The open ended procedure tended to be criticized as vague. As with any new paradigm, such as the procedure used, people were likely uncomfortable. The online format also allowed for many of the participants to prematurely discontinue the survey. If the procedure was given in person, more of the participants may have decided to finish the procedure and more responses may have been obtained. Furthermore more negative responses may have been obtained. The discomfort and ease of withdrawal may have lead to a low number of respondents willing to participate in the procedure. As a result, those who were willing to tolerate ambiguity enough to complete the survey may be the ones represented in the data. Also those who had more positive attitudes toward people with disabilities or a specific interest in disability studies may be overly represented.
In the future, the study and procedure should be replicated with potentially more information about the client and more detailed instructions to allow participants to feel more at ease when responding. Hopefully that change would remove some of the selection bias resulting from frustration with vague instructions. Plus administration in person may reduce some of the sampling bias toward positive attitudes.

Additional concerns included computer errors that resulted in lost data for the MCSD for 11% of the sample. Also several demographic variables were lost due to computer error: sexual orientation, racial, and ability status. These were unfortunate variables to lose due to potential confounds from race membership and the MCSD, and the lack of including ability status as it was a particular variable lacking in other studies.

There also could be limitations from socially desirable responding to the identified positive attitudes. The OAM measure showed a difference in the client ratings. However there was also a tendency to respond in a social desirable way. This became apparent with the initial rating because that rating was obtained when participants only saw a picture of the client in a wheelchair or not. Yet knowing nothing else about the study, they identified the client in a wheelchair as more favorable than the able-bodied client. Even with utilizing the MCSD as a covariate in the analysis, the measure is unlikely to have identified all the socially desirable responding. The MCSD measure was significantly correlated with the other component measures, but none of the respondents obtained a score high or low enough that indicated a socially desirable response at the exclusion levels identified by Sodowsky and colleagues (1998).

The last problem extended to the validity of the interpretation of group difference results. After reviewing the content of open ended responses, it was possible that the
differences between the groups could be the result of several negative responses toward men. Which leads to the question: did the sample have participants with positive attitudes towards people with disabilities, or were there several participants with extremely negative attitudes toward men? The question is based on the emotional responses where 10.6% of the sample identified angry and disconnected feelings toward the client. In the future, a replication-extension could include male and female able-bodied and disabled client photos to identify if there was a gender bias toward the client.

**Summary**

This study provided measure of attitudes toward people with disabilities by psychology trainees in this current sociopolitical time. Furthermore, it connected to attitude theory by utilizing a framework that identified component measures of affect, behavior, and cognition. It replicated and extended prior work using this open ended procedure and identified similarities of positive attitudes toward a physically disabled person with affective components predicting the overall attitude. The results fit well with the Multicomponent Model for Intergroup Attitudes (Esses, et al., 1993) and using the model with disability not only extends the disability literature, it provides a needed connection to theory.

The study also provided content based information that strays from the overly positive ratings of the participants. Trainees are reporting anxiety, sadness and "normal" emotions felt toward people with disabilities. All of these negative components underlying the overtly positive evaluations may still interfere with the therapeutic relationship, hence client change. Participants are also reporting angry and detached feelings toward the able-bodied male client which may have an effect on the
interpretation of the results. Lastly the symbolic beliefs reported suggested the disability culture has community based values, and beliefs about equality, independence, and power. There is some question if these are actually values of the majority of people with disabilities.

Also, by using the content and component information, a comparison was able to be made between the ATDPS and the responses from a group of psychologically minded respondents. The ATDPS was only correlated with stereotypes and a review of the questions identified that the majority of the items fit into a cognitively based component category. Nonetheless, there was one question that was affective based. Considering affect and behavior were predictors of the overall attitude there are too few affectively based questions in the ATDPS. The ATDPS was also overly positive when compared to the rating of the OAM in the study. The interpretation of the ATDPS was strongly positive versus a slightly favorable to fairly favorable interpretation of the OAM.

Based on the information from this study, it is recommended that the ATDPS not be used with psychologically minded persons. Training directors can also infer that attitudes are not as positive as reported historically on the ATDPS. Also training directors can utilize affective and behavioral information to help their trainees challenge and explore their attitudes toward people with disabilities. Furthermore, symbolic beliefs are a fruitful area to discuss when comparing clients with disabilities to able-bodied clients. However, more information about beliefs held by people with disabilities are needed in order to challenge trainee attitudes on that component. Ultimately, the ability to identify these negative components can assist in improving the relationship, maintaining clients with disabilities in therapy, and avoiding early termination.
REFERENCES


APPIC Guidelines and Principles for Accreditation of Programs in Professional Psychology (APPIC, 2005)


"Ethical Principles of Psychologists and code of Conduct" (APA, 2002)


APPENDICES
APPENDIX A

DEMOGRAPHICS

Please respond to the following items:

1. What is your age? (blank provided)
2. Please check if you are Male or Female. (check boxes provided)
3. Please indicate your race (blank provided) - left off of survey due to computer error
4. Please indicate your sexual orientation (blank provided) - left off of survey due to computer error
5. Please indicate your ability status: person without disabilities, person with disabilities, person with a medical condition who does not identify as disabled. (check boxes provided) - left off of survey due to computer error
6. Please check the area of the country you live in: Eastern, Central, Mountain, Western (check boxes provided)
7. How many years have you been in your training program? (blank provided)
8. Identify the number of courses focusing on disability issues in your graduate program. (blank provided)
9. Please identify the percent of time spent addressing issues of disability in the courses you have taken. 0% 1-10% 11-20% 21-30% 31-40% 41-50% 51-60% 61-70% 71-80% 81-90% 91-100% (check boxes provided)

10. Please note the number of clients with a disability you have had in your practicum experiences. (blank provided)

11. Please note the number of clients with a disability you have worked with in other experiences. (blank provided)

12. Please note the number of formal training seminars outside of the university setting focusing on disability issues. (blank provided)

13. Have you had a multicultural counseling course? Yes No (check box provided)

12 a. Did it address disability issues? Yes No (check box provided)

14. Do you have friends or family members with a disability? Yes No (check box provided)
APPENDIX B

MULTICULTURAL SOCIAL DESIRABILITY SCALE

Scale copyrighted, unable to publish items.
APPENDIX C

OVERALL ATTITUDE MEASURE

Please imagine yourself in your counseling room about to see this client:

(Given either the person in a wheelchair or the person standing)

Please respond to the following requests:

Thinking about all aspects of working with clients, evaluate the client (who has a physical disability and uses a wheelchair). Please pick any response between 0-100 keeping in mind the following markers.

<table>
<thead>
<tr>
<th>0 extremely unfavorable</th>
<th>50 Neither favorable nor unfavorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 very unfavorable</td>
<td>60 slightly favorable</td>
</tr>
<tr>
<td>20 quite unfavorable</td>
<td>70 fairly favorable</td>
</tr>
<tr>
<td>30 fairly unfavorable</td>
<td>80 quite favorable</td>
</tr>
<tr>
<td>40 slightly unfavorable</td>
<td>90 very favorable</td>
</tr>
<tr>
<td></td>
<td>100 extremely favorable</td>
</tr>
</tbody>
</table>
APPENDIX D

OPEN ENDED LISTING PROCEDURE

Please list characteristics of the following group using adjectives or short phrases describing typical group members of this client. Please use as many words or phrases as needed to adequately convey your impression of the group or describe the group. For example a characteristic of a woman may be kindness.

Please list values, customs, and traditions held by typical group members of this clients. Please use as many words or phrases as needed to adequately convey your impression of the group or describe the group. For example a value of a woman may be family.

Please list your emotions when you see, meet, or think about clients (who have a physical disability and use a wheelchair). Please use as many words or phrases as needed to adequately convey your impression of the group or describe the group. For example the emotions you feel when you see a woman may be happy.

Please list adjectives or short phrases that describe how you have behaved when you have seen, met, or thought about clients (who have a physical disability and use a wheelchair) outside of counseling. Please use as many words or phrases as needed to adequately
convey your impression of the group or describe the group. For example when you saw a woman, a behavior may be that you smiled.

(Items which the participant listed will be presented to the person again.) Please go back and add a favorability rating of -3, -2, -1, 0, +1, +2, +3, to each adjective or phrase where -3=extremely negative and +3=extremely positive.
APPENDIX E

ATDPS

Attitudes Toward Disabled Persons Scale

1. Disabled persons are usually friendly.

2. People who are disabled should not have to pay income taxes.

3. Disabled people are no more emotional than other people.

4. Disabled persons can have a normal social life.

5. Most physically disabled persons have a chip on their shoulders.

6. Disabled workers can be as successful as other workers.

7. Very few disabled persons are ashamed of their disabilities.

8. Most people feel uncomfortable when they associate with disabled people.

9. Disabled people show less enthusiasm than non-disabled people.

10. Disabled people do not become upset any more easily than non-disabled people.

11. Disabled people are often less aggressive than normal people.

12. Most disabled persons get married and have children.

13. Most disabled persons do not worry any more than anyone else.

14. Employers should not be allowed to fire disabled employees.

15. Disabled people are not as happy as non-disabled ones.

16. Severely disabled people are harder to get along with than are those with minor disabilities.
17. Most disabled people expect special treatment.
18. Disabled persons should not expect to lead normal lives.
19. Most disabled people tend to get discouraged easily.
20. The worst thing that could happen to a person would be for him/her to be very severely injured.
21. Disabled children should not have to compete with non-disabled children.
22. Most disabled people do not feel sorry for themselves.
23. Most disabled people prefer to work with other disabled people.
24. Most severely disabled persons are not as ambitious as other people.
25. Disabled persons are not as self-confident as physically normal persons.
26. Most disabled persons don’t want more affection and praise than other people.
27. It would be best if a disabled person would marry another disabled person.
28. Most disabled people do not need special attention.
29. Disabled persons want sympathy more than other people.
30. Most physically disabled persons have different personalities than normal.
APPENDIX F

IRB APPROVAL LETTER AND INFORMED CONSENT

January 5, 2012

Dannville Fields
721 Wall Street
Akron, Ohio 44310

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20120102 “Counseling Psychology Trainee Attitudes toward People with Disabilities”

Thank you for submitting your Exemption Request for the referenced study. Your request was approved on January 6, 2012. The protocol represents minimal risk to subjects and matches the following federal category for exemption:

☐ Exemption 1 - Research conducted in established or commonly accepted educational settings, involving normal educational practices.
☐ Exemption 2 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior.
☐ Exemption 3 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior not exempt under category 2, but subjects are elected or appointed public officials or candidates for public office.
☐ Exemption 4 - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.
☐ Exemption 5 - Research and demonstration projects conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine public programs or benefits.
☐ Exemption 6 - Taste and food quality evaluation and consumer acceptance studies.

Annual continuation applications are not required for exempt projects. If you make changes to the study’s design or procedures that increase the risk to subjects or include activities that do not fall within the approved exemption category, please contact me to discuss whether or not a new application must be submitted. Any such changes or modifications must be reviewed and approved by the IRB prior to implementation.

Please retain this letter for your files. This Office will hold your exemption application for a period of three years from the approval date. If you wish to continue this protocol beyond this period, you will need to submit another Exemption Request. If the research is being conducted for a master’s thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

Cc: John Queener - Advisor
Cc: Stephanie Woods - IRB Chair

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
330-972-7660 • 330-972-6281 Fax

The University of Akron is an Equal Education and Employment Institution

☐ Approved consent form/s enclosed
Title of Study: Counseling Psychology Trainee Attitudes

Introduction: You are invited to participate in a research project being conducted by Danelle Fields, a Counseling Psychology doctoral student in the Department of Counseling, at The University of Akron.

Purpose: The purpose of this study is a replication and extension of previous studies focusing on attitudes toward clients from different cultural groups. It serves to clarify what types of attitudes counseling psychology trainees have toward the clients they encounter. Only Counseling Psychology students have been asked to participate in this research project therefore, all students enrolled in counseling psychology programs are being asked to participate. It is hoped that at least 90 students will respond.

Procedures: Participants will be asked to respond to demographic information including information about your training with and exposure to people from different cultural groups. You will then be asked to identify your attitudes toward a client representative of a particular cultural group. Finally you will be asked to identify overall attitudes towards the group, generate adjectives or words to three categories and then apply a rating for how strongly you identify with those particular responses. This should take you 30 minutes or less to complete the process.

Exclusion: As this study is focused on Counseling Psychology trainees, students enrolled in other types of Professional Psychology or Counseling programs will be excluded from this study.

Risks and Discomforts: No risks or discomforts are expected from this study. You will be responding to items which identify your attitudes toward different cultural groups. This will be similar to what you would talk about in your multicultural counseling coursework.

Benefits: The benefits to you for participating in this study may be a better understanding about your thoughts, feelings, and behavior toward your clients. However, you may receive no benefit from participating in this study.

Right to refuse or withdraw: Your participation is voluntary and you may refuse to participate or withdraw at any time.

No identifying information will be collected, and your anonymity is further protected by not asking you to sign and return the informed consent form.

If you have any questions about this study, you may call Danelle Fields at 330-972-7777 or Dr. John Queener at 330-972-6149. This project has been reviewed and approved by The University of Akron Institutional Review Board. If you have any questions about your rights as a research participant, you may call the IRB at (330) 972-7666.
I have read the information provided and all of my questions have been answered. I voluntarily agree to participate in this study. My electronic completion and submission of these questionnaires will serve as my consent. I may print a copy of this consent statement for future reference.