ATTITUDES OF GRADUATE AND UNDERGRADUATE STUDENTS TOWARD PEOPLE WITH DISABILITIES

by

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Heidi Paul entitled Attitudes of Graduate and Undergraduate Students Toward People with Disabilities and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy Date: 04/07/06 Les McAllan Date: 04/07/06 Amos Sales Date: 04/07/06 Susan Moore Date: 04/07/06 Jane Erin Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College. I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement. Date: 04/07/06

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DEDICATION

Dedicated to my family

To my precious mother who taught me to approach life with calm and love. To my father who believed in me, without him I would never have attended college, let alone receive a Ph.D. To my dearest Aunt Eileen who always kicked Uncle Bob under the table whenever he asked about the dissertation. And to Uncle Bob, who always asked "How is the dissertation coming along?" Finally, to my husband Richard, who always encouraged and never once failed in his support.

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TABLE OF CONTENTS

LIST OF TABLES	7
LIST OF FIGURES	8
ABSTRACT	9
CHAPTER 1	10
Introduction	10
Problem Statement	11
Background	13
Research Question	15
Nature of the Study	15
Definition of Terms	15
Assumptions	16
Scope and Limitations	16
CHAPTER 2	19
Literature Review	19
Introduction	19
History of Attitudes toward People with Disabilities	23
How Attitudes are Formed	44
Contact Theory	50
Conclusion	56
CHAPTER 3	58
Methodology	58
Introduction	58
Procedure	60
Subjects	59
Instruments	60
Variables	62
Data Analysis	63
CHAPTER 4	67
Results	67
CHAPTER 5	76
Summary	76
Discussion	
Recommendations	
APPENDICES	83
REFERENCES	84

LIST OF TABLES

Table	1.1,	Type of contact and attitude score converted to percentages	7
Table	1.2.,	Time spent and attitude score converted to interquartile ranges	73
Table	1.3,	Two-way ANOVA of between subject effects	.74

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	401	()	ГГ	10	TU	ĸı	$ \sim$

Figure 1.1,	Frequency of	f distribution of	f the MIDS	69
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ABSTRACT

This study was done for the purpose of determining if the amount of contact and type of contact someone has with a person with a disability effects attitudes toward people with disabilities. The MIDS (Modified Issues in Disability Scale) was administered to one-hundred and seventy graduate and undergraduate students to determine current attitudes toward people with disabilities. In addition, these students were asked to answer demographic questions along with questions regarding the amount and type of contact they have had with a person with a disability. A two-way ANOVA was administered to determine if there was a relationship between the amount of contact and type of contact and attitude scores. Significance was found for both the time spent and the type of contact. More positive attitudes were found in work relationships and spending a moderate amount of time with a person with a disability. Less positive attitudes were found when no time was spent and there was no relationship with a person with a disability

CHAPTER 1

Introduction

The relationships people with disabilities have with relatives, friends, and government play a crucial role in the self-esteem and independence of the person with a disability (Chubon, 1982; Jenkins, Patterson, & Szymanski, 1992). Attitudes people have about people with disabilities are directly related to the kind of relationships they have with that person (Patterson & Whitten, 1987). Attitudes help us to define how we perceive and think about others, as well as how we behave towards them (Chubon).

Negative attitudes have been related to a lack of knowledge and/or segregation of the person with a disability (Mackelprang & Salsgiver, 1999; Makas, 1991). Altman (1991) described the implications of attitudes toward people with disabilities as affecting the development of self concept and the socialization of the individual into typical community activities. Attitudes are so significant that they represent more of a barrier to people with disabilities than any functional limitation of the disability (Patterson & Witten).

A negative attitude toward a person with a disability affects his or her ability to settle into mainstream society and perform work well suited to skills and interests (Tam, 1998). If independent living and competitive work are adversely affected, there is the potential to teach the person with a disability learned helplessness. Seligman (1975) described learned helplessness as the inability to control the environment which leads to a psychological state of helplessness, which may not be related to the real potential of the individual who has learned to be helpless. The importance of positive attitudes toward

people with disabilities cannot be overstated. Attitudes have the potential to be pervasive in all aspects of an individual's life.

Allport (1954) studied the attitudes of Caucasians toward African-Americans and Jewish Americans. Emerson, Kimbro & Yancey (2002) studied interracial contact and its effect on attitudes. These studies of attitudes focused on attitudes of one group toward another using an instrument that measured attitudes or prejudice. Part of the aim of this research was to investigate the amount of contact, the type of contact and the effects on attitudes toward people with disabilities using an instrument that measured attitudes and knowledge.

Problem Statement

Allport's 1954 Theory of Contact was originally developed to describe how negative attitudes developed toward African-Americans and how such attitudes could be improved with contact. However, simple contact was not enough; it had to be meaningful and include four key conditions: equal group status with the situation, common goals, intergroup cooperation, and the support of the law or custom (Pettigrew 1998). However, Allport never considered the amount of contact needed to create meaningful relationships that would change attitudes.

It seems that the single most important aspect of Contact Theory is the contact itself. Yet, Allport's research did not specify if there would be a change in attitudes toward African-Americans or Jewish-Americans after brief or prolonged contact or how strongly attitudes may change with varied amount of contact. Several studies have considered contact and attitudes, yet the research has not compared varied contact across

samples. For example, Slininger, Sherrill, & Jankowski (2000) compared attitudes of children toward peers with severe mental retardation who used wheelchairs. In the study, a child with severe mental retardation who used a wheelchair was introduced into a mainstream classroom, identified as the contact class. The child with the disability remained in the classroom for 25 minutes for a total of 20 sessions over a four-week period of time. Slininger, et al gathered the data with nonparticipant observations, a behavioral coding system, and interviews. The authors of the study concluded that there was improvement in attitudes of students toward their peers in wheelchairs after they were integrated into the contact class. However, in this study all students received the same amount of contact and therefore, it was impossible to determine if students with varied amounts of contact would have varied in their attitudes toward students with disabilities. Shafer, Rice, Metzler, & Haring (1989) found modest reductions in prejudice toward individuals with mental disabilities among employees who worked with mentally retarded employees compared to employees who did not work with people who had a mental disability. Sellin & Mulchahay (1965) studied the attitudes of high school students toward persons with mental illness before and after a tour of a mental institution, and found attitudes to be slightly improved after the tour. In spite of the brevity of contact, there was a slight improvement in attitude. Again, as in prior research, all participants received the same amount of contact so that comparisons of varied contact and attitudes could not be explored. Some studies have compared attitudes of people with and without relationships with a person with a disability.

A study done by Chen, Brodwin, Cardoso, & Chan (2002) compared the differences in attitudes of people who had a family member or friend with a disability with those who did not. The authors concluded that there was a more positive attitude toward people with disabilities among those who had a family member or friend with a disability. However, this study did not explore differences in attitudes among participants who had a friend with a disability and those who had a relative with a disability. In conclusion, it appears that both contact and relationships have an effect on attitudes. However, it is not clear how varied relationships and varied amounts of time spent with a person with a disability affects attitude.

The purpose of this research was to evaluate both the amount of contact and the type of contact students had with a person with a disability and attitudes toward people with disabilities. Prior studies have focused on the measurement of attitudes of one group towards another group using scales of attitude or prejudice measurement (Allport, 1954; Chen, et al., 2002; Kowalski, 2003; Shafer, et al., 1989; Slininger, et al., 2000). Dixon, Durrheim, & Tredoux (2005) noted that this type of measurement prevented the evaluation of attitudes across a full range of experiences which the qualitative aspect of the current project sought to explore. The current project will explore not only the individual relationships people have with people with disabilities but also the amount of time spent with a person with a disability and the effect both of these variables have on attitude.

Background

It is no exaggeration to state that the most critical barrier people with disabilities face is the invisible barrier of attitudes (Pfeiffer, et al., 2003). This conclusion is reflected in a City of Chicago Ordinance from 1911, "It is hereby prohibited for any person who is diseased, maimed, mutilated or deformed in any way so as to be an unsightly or disgusting object to expose himself to public view" (cited in Fries, 1997, p. 1). Invisible barriers are created unconsciously when people associate themselves with the familiar and disassociate themselves with the unfamiliar (Brennan, 2003). Invisible barriers can become a part of everyday life and may divide populations into groups such as people with and people without disabilities. Allport (1954) opined that when people are segregated they are prevented from experiencing meaningful contact which leads to the subsequent development of negative or prejudicial attitudes toward the unfamiliar.

Livneh (1982) described prejudice as a negative attitude formed toward a person or group without sufficient knowledge and based on non-personal characteristics such as a disability. It is prejudicial to arrive at conclusions about a person or group of people without experiencing meaningful contact with the individual or group of people.

Meaningful contact was the basis of Allport's 1954 Theory of Contact and it is meaningful contact has the potential to reduce prejudice (Pettigrew, 1998).

Allport published his Theory of Contact in 1954, and it subsequently received much research attention; however, many research problems and questions remain unanswered. One such problem is related to length of the contact people or groups have with each other. Most or all past work focused on short-term intergroup contact (Pettigrew, 1998). The majority of research about attitudes toward people with disabilities

focused on an individual's attitude without considering the individual experience of contact (Pettigrew). For example, we do not know the degree to which length of contact with a person with a disability affects attitudes. In the current study, the author attempted to explore the relationship between attitude and the amount of contact a person has with a person with a disability in addition to the type of contact. The results may be useful for practitioners in their awareness of how types of contact and the amount of time spent influences attitudes toward people with disabilities. In addition the results may be used by educators for professional preparation of students who will be working with people with disabilities.

Research Question

Is there a relationship between the amount and type of contact a student has with a person with a disability, and attitudes toward people with disabilities as measured by the Modified Issues in Disabilities Scale (MIDS)?

Nature of the Study

The researcher used a quasi-experimental design utilizing both quantitative and qualitative data. A sample of convenience was surveyed using the MIDS to ascertain attitudes toward people with disabilities. The sample included graduate and undergraduate students from California State University, Los Angeles. The survey population was a sample of students in the College of Education, which included counseling students. It was expected that this sample would have varied experiences and contact with people with disabilities. Some of the counseling majors were required to work extensively with people with disabilities as a condition of their degree, such as

rehabilitation counseling. Other counseling majors, such as school based counseling had no requirement of working with a person with a disability.

Definition of Terms

Disability

Defined using Section 504 of the 1973 Rehabilitation Act "(a) a physical or mental impairment that substantially limits one or more major life activities; (b) a record of such an impairment; or (c) being regarded as having such an impairment" (Rehabilitation Act of 1973).

Attitude

Associations between attitude objects (virtually any aspect of the social world) and evaluations of those objects (Fishbein & Ajzen, 1975).

Assumptions

- The amount and type of contact an individual has with a person with a disability
 can be treated as an independent variable in order to evaluate their influence on
 the dependent variable.
- 2. The subjects will not feel that they have been chosen because they are special and will answer the questions honestly.

Scope and Limitations

The sample used was a sample of convenience and included university graduate and undergraduate students which limit generalization of the findings.

The statements in the MIDS instrument were statements to which the students responded utilizing a Likert Scale. Students were not given the opportunity to elaborate

on their thoughts or explain reasons for their responses. However, at the end of the survey, students were given three open-ended questions which gave them an opportunity to describe the amount of time and the relationships they have had with people with disabilities.

The final limitation was the inability to derive a strong cause and effect. It cannot be directly inferred that any differences in attitudes among students was directly related to the amount of contact someone had with a person with a disability. For example, attitudes may also be related to the personality of the person. Personality assessment of individual participants was not a part of this research study; subsequently, personality was not a variable that could be controlled in this research.

Qualitative and quantitative research designs were adopted to provide both descriptive and empirical data. This dissertation followed a descriptive design which utilized a questionnaire that asked questions about the amount and type of contact respondents had with friends (social or school), fellow workers, neighbors, acquaintances, relatives, and/or friends of relatives with disabilities. Quantitative data was gathered from the MIDS a standardized survey of attitudes toward people with disabilities. The structure of the study is described in five chapters, including this introductory chapter. Chapter two begins with an historical description of attitudes toward people with disabilities, how attitudes emerged, how laws were developed in response to attitudes, and conversely how laws impacted attitudes. The third chapter is concerned with the methodology used in this study. The forth chapter presents the findings of the research, focusing on the two themes identified in this analysis: type and amount of contact and their effect on attitudes

toward people with disabilities. The fifth chapter included a discussion of the findings and recommendations for future research.

CHAPTER 2

Literature Review

Introduction

One of the most significant current discussions in the field of rehabilitation counseling is the inclusion of people with disabilities in all aspects of mainstream American life. People with disabilities are the largest, poorest, least educated, and least employed of any minority in the United States (West, 1991). It is becoming increasingly difficult to ignore those attitudes toward people with disabilities that may directly effect equal access and equal participation in the fabric of society.

Many definitions exist which attempt to determine exactly what an attitude is. These definitions often include the component of "enduring evaluations" of people, objects, or issues (Malle, 1996, p. 457). Yuker (1988) described attitudes beyond a simple evaluative component to include positive or negative reactions toward an object or person that will affect behavior in a particular way. Attitudes do not exist in a single stratum. The issue of attitudes and specifically the issue of attitudes toward people with disabilities have received considerable critical attention in the past fifteen years after the passage of the American with Disabilities Act (ADA) (Chen, et al., 2002; Cook, 2001; Dixon & Rosenbaum, 2004; Pettigrew, 1998).

Altman (1991) explained that attitudes toward people with disabilities have the potential to affect both the development of a positive self-concept and the socialization of the individual into typical community activities. When people with disabilities do not socialize with others, they report more feelings of loneliness, sadness and rejection

(Sommer, Williams, Ciarocco, & Baumeister, 2001). In addition to social isolation, a poor attitude toward people with disabilities may cause a lowered self-esteem that increases the risk for suicide, depression, and victimization by others (Link, Elmer, & Neese-Todd, 2002). Conversely, a good attitude toward a person with a disability is related to an increased sense of control and subsequent decrease in anxiety for the person with a disability (Sommer, et al., 2001).

A counselor with a positive attitude toward a person with a disability is directly related to increased success of a client's program (Garske & Thomas, 1992). Pinkerton and McClair (1976) found that counselors with positive attitudes were more willing to provide services for their clients. Herbert (2000) noted that a good attitude communicates acceptance that is a critical component for successful intervention outcomes. What we know about attitudes toward people with disabilities is based upon studies that investigated how attitudes may be formed or a simple analysis of attitudes toward people with disabilities. There are very few studies that evaluated the type and amount of contact and its effect on attitudes toward people with disabilities. Allport (1954) was a pioneer in the study of contact, attitudes, and prejudice.

Allport (1954), in describing contact between any two groups of people, elaborated on two types of person-to-person contact: casual and acquaintance. Casual contact was defined as contact without meaningful interaction. Casual contact occurred when groups (minority and majority) were separated from each other and the only interaction would be to see each other on the street or in a store. If an individual has a stereotypic notion of members of a particular group, he/she will view the individual in a

way that supports his/her defined impression because without direct and meaningful interaction there is nothing to dispute his/her stereotypic ideation (Allport; Pettigrew, 1998). Conversely, acquaintance contacts were described as purposeful contact that lessens prejudice. Consequently, positive attitudes are related to meaningful residential contact, occupational contact, goodwill contact, and the pursuit of common objectives. Negative attitudes were related to casual contact and/or segregation (Allport). A considerable amount of literature has been published on understanding attitudes and their components.

Antonak & Livneh (1988) conceptualized the multiple dimensions of attitudes when they developed the tri-component model of attitudes. The tri-component model identified three aspects of attitude, (a) cognition (a thought), (b) behavior (an action), and (c) affect (a feeling). However, a major problem with this type of classification of attitude is that it omits a contact element that may be a significant component in a discussion of attitudes (Allport, 1954). In recent years there has been an increased interest in group preferences and attitudes. Group membership has the implication of significant contact among members of any particular group in spite of differences in ethnicity or other factors. Several studies have produced discussions on group preferences (Kowalski, 2003; Nesdale, Maass, Griffiths, & Durkin, 2003; Rustemli, Mertan, & Ciftci, 2000). However, little attention has been given to individual contact, both type and amount, and its impact on attitude. Historically, people with disabilities have been dependent on varied relationships for their survival.

History of Attitudes Toward People with Disabilities

What is it like to be a person with a disability? The answer to that question may depend on the time period in which a person with disability lived. Attitudes towards people with disabilities have changed and continue to change across time. Covey (1998) put forth the theory that a "disability is not the reason for a handicap; rather a handicap is a social consequence of a disability" (p. 3). Attitudes toward people with disabilities are based on a cultural belief system prevalent at a particular time in history with resultant social consequences which have been recorded throughout history beginning with antiquity (Braddock & Parish, 2002). There has never been a period of time in recorded history in which people with disabilities have not experienced discrimination, rejection, and isolation from mainstream society to greater or lesser extents (Mackelprang & Salsgiver, 1999).

Recorded historical accounts of the treatment of people with disabilities began with the Greeks and Romans. The Greeks placed great value on the perfection of the human body. A perfect body was linked with a good mind; conversely a deformed body was related to a poor mind and personality (Covey, 1998). Plato viewed people with disabilities as standing in the way of perfection and encouraged others to put people with disabilities away in some unknown place (Mackelprang & Salsgiver, 1999). The Romans adopted the Greek philosophy of honoring human perfection and putting away people with disabilities. Deformities were perceived as angering the gods and therefore in order to appease the gods people with disabilities were killed (Braddock & Parish, 2002).

widespread as once believed (Braddock & Parish). The killing of people with disabilities was done more for economic reasons than for religious reasons. People who could not afford to care for a child with a disability would sacrifice the child. However, the Romans were harsher in their treatment of people with disabilities (Stiker, 1997).

Spartan Law commanded that all children with deformities were to be killed in spite of the family's means (Braddock & Parish, 2002). The Romans exposed and killed so many children with disabilities that legislation was finally implemented that protected children with disabilities (Covey, 1998). Unfortunately, the legislation was rather weak because it simply stated that children could not be exploited or killed unless five people looked at the child and signed consent forms that the child had a monstrous disability (Stiker, 1997). If five people agreed that the child had a monstrous disability, then the child could be exploited or killed. The actual point of the legislation was to protect people without disabilities from being accused of having a disability (Covey). Additional legislation left the fate of the child completely in the hands of the child's father who could decide if the child should be abandoned to die (Mackelprang & Salsgiver, 1999). In spite of their harsh treatment of people with disabilities, the Romans were also the first recorded civilization that gave assistance to people with disabilities. However, this assistance was given with strings attached. If the government provided assistance to people with disabilities, they would promise not to riot. People with disabilities were not only subject to and victims of the laws of their historical niches, but they were also handicapped by structured religion (Covey).

At the outset of Western Civilization people with disabilities were viewed in religious contexts (Covey, 1998). People with disabilities were identified as sinners by the ancient Hebrews (Mackelprang & Salsgiver, 1999) and the Catholic Church identified children born with disabilities as products of sin (Covey). The Old Testament forbade people with disabilities from entering the House of God (Wright, 1960) and in the New Testament people with disabilities were treated with spiritual cleansing (Albrecht, 1992). The Judeo-Christian religion viewed people with disabilities as signs of God's displeasure and, although they did not advocate killing people with disabilities, they were ostracized from the Church (Mackelprang & Salsgiver, 1999).

Although the Church may have viewed people with disabilities as sinners they also used and exploited people with disabilities. The Church reacted to people with disabilities as potential income or public relations for the Church (Covey, 1998) For example, people with disabilities (or a person pretending to have a disability) were used as subjects of miracle cures to bolster coffers ("Leap of Faith," 1992) and families of people with disabilities would make donations with the hope that their lives would improve (Covey). Although people with disabilities may have directly or indirectly contributed to Church funds, people with disabilities were forbidden to become priests and many times forbidden inside the Church (Mackelprang & Salsgiver, 1999). However, the Church was not without heart and in order to assist people with disabilities with employment, the Church sanctioned begging by allowing people with disabilities to beg outside of the Churches (Braddock & Parish, 2002).

During the Middle Ages, a means of support for a person with a disability was begging. Poor people were classified into the categories of deserving and non-deserving poor (Covey, 1998). The deserving poor were identified as people who were orphaned, blind, or physically disabled. Begging was tolerated for the deserving poor who received the charity with less hostility from the benefactor (Covey; Mackelprang & Salsgiver, 1999). Begging as a means of support by the deserving poor became so rampant in Italy that a guild was established in order to regulate it (Covey). The guild was so well organized that there was a pension for elderly beggars. Although begging provided people with disabilities some means of support and retirement, the Middle Ages was also an age of contradictory beliefs about disability and this period of time also proved to be devastating for many people with disabilities and in particular people with mental disabilities.

In 1484, Pope Innocent VIII declared a war against witches. For the next 300 years thousands of people with disabilities that were believed to be possessed by a demon, were tortured, hung, or burned at the stake (Braddock & Parish, 2002). For other people with disabilities, the Church clearly sought to help them by shaving a cross onto their heads or tying the mentally disabled up in Church to cure them. Some people with mental illness were placed in idiot cages in order to keep them out of trouble but the cages may have also served as entertainment for the community ("Parallels in time" n.d.). Although during the Middle Ages there was some positive advancement for people with disabilities, it was during the age of enlightenment in which people with disabilities experienced significant improvement in their quality of life.

During the Renaissance government power moved from monarchist to republican models. This resulted in a greater recognition of individual rights (Starner, 1999). In addition, the scientific model was applied to medicine and an explanation for the cause of disease and disability was explored (Braddock & Parrish, 2002). For the first time, deaf first-born sons, if they could afford it, were taught to read and write in order for them to inherit the family estate. Prior to this, people with disabilities were forbidden to own property (Braddock & Parrish). The Renaissance was also the period of time in which institutions designed to cure mental retardation flourished. Unfortunately, the institutions quickly became overwhelmed and instead of curing mental retardation, they became custodial care centers (Neugebauer, 1987).

With the advancement of scientific research scientists continued to believe that disability was viewed as something that could be cured and humans with disabilities could be perfected (Mackelprang & Salsgiver, 1999). In the United States, institutions were established with the goal of curing disabilities. If the disability could not be cured then the person with a disability could at least be trained or molded into something more acceptable to mainstream society (Rothman, 1971). Institutions to care for or cure people with disabilities grew at a dramatic rate as the 20th century progressed. Although, institutions to care for or cure people with disabilities may have had the best of intentions, the repercussion was an increased isolation and segregation of people with disabilities from mainstream society (Mackelprang & Salsgiver, 1999). The institutionalization of people with disabilities was also done for personal and financial reasons.

During the Great Depression, there was pervasive poverty and unemployment in the United States. In order to relieve financial strain, families of people with disabilities sought institutionalized care for their family members with intellectual disabilities in expanding numbers (Noll, 1996). Between 1931 and 1940, the total number of mental hospitals in the United States increased 70%. The number of mental institutions continued to expand until 1955 when it reached its peak, followed by a continued decline of mental institutions in the United States (Bureau of the Census, 1998) The continued expansion of mental institutions up to 1955 may in part be explained by Social Darwinism which was the catalyst for the euthanasia of people with disabilities by Nazi Germany (Noll). Nazi Germany adopted euthanasia for people with disabilities (Noll). In the United States twenty-nine states adopted sterilization statutes for people with disabilities (Tyor and Bell, 1984).

Social Darwinism was the complete misapplication of Darwin's theory in the *Origin of Species* (Noll, 1996). Darwin (1859) proposed that evolution was transmission with adaptation. Animals and organisms better suited to their environment had survival advantages which they passed on to their offspring. However, Spencer (as cited in Lichtenstein, Strasser, & Rosenzweig, 2000), took Darwin's theory one step further and believed that difficult times would expunge the unfit and inferring on behalf of the weak would doom America. Intellectual disability was something that would degrade the human species (Barr, 1904). This piece of ideology incorporated itself into American life and assumed considerable importance.

Social Darwinists preached good breeding and good family lines (Covey, 1998). This created a desire for families to hide their children with a disability because a weakness of one family member advertised a family genetic deficiency (Covey). Professionals and physicians would advise parents to institutionalize their children with disabilities (Mackelprang & Salsgiver, 1999). It was not uncommon for institutions to forcibly sterilize people with mental disabilities and epilepsy, especially the sterilization of those who would be returning to society (Braddock & Parish, 2002). Proponents of eugenics believed that this would strengthen the species by not allowing weak genes to be propagated into the larger society (Covey). So strong was the eugenics movement that Franklin D. Roosevelt would not allow the American public to see his disability for fear that they would not vote for a person with a disability. Eugenics was a social philosophy that encouraged the social intervention of human genetics via euthanasia, birth control, or selective breeding. The goal of eugenics was to create more intelligent and healthy people, save societal resources, and reduce human suffering (Malacrida, 2005).

Franklin D. Roosevelt (FDR) went to great lengths to paint his leg braces black and orchestrated a way that made it appear as if he was walking up the Capitol steps without help (Longmore, 1987). In addition, he adopted particular physical actions to hide his condition such as giving his chin a confident tilt when he rode in convertible cars. In addition, he covered the lower half of podiums to prevent the public from viewing his legs, toured by train during election season, and was seated when he met with public officials (Longmore).

The wife of a former Roosevelt advisor was quoted as saying "We never thought of the President as handicapped, we never thought of it at all" (Gallagher, 1987, p. 210). Longmore (1987) opined that the people who surrounded FDR were not oblivious to his disability but rather they exempted FDR from the socially dependent role assigned to people with disabilities. It was during the Roosevelt presidency that governmental attitudes began to view people with disabilities as part of the work society and that people with disabilities could make productive contributions to society (Mandeville & Brabham, 1992). In 1935 the *Social Security Act* (P.L. 74-271) established the State-Federal Vocational Rehabilitation Program. In addition, after the Great Depression and both World Wars the cutbacks in institutional budgets stimulated the special classroom which was seen as a cheaper way to train higher functioning people with disabilities (Longmore).

Attitudes and Legislation for People with Disabilities in the United States

The first Federal Vocational Education Act in the United States was the *Smith-Hughes Act* signed into law in 1917 (Jenkins, et al., 1992). The *Smith-Hughes Act of 1917* was a law which provided federal funding for the salaries of teachers who taught agriculture, trades, industry, and home economics in secondary schools. The *Smith-Hughes Act* stipulated in detail the vocational character of the courses to be taught. In addition, the *Smith-Hughes Act* established the Federal Board of Vocational Education which was responsible for the training or retraining of industrial workers (Jenkins, et al.). It was the beginning of federal funding for vocational education in the United States. At the time, the bill was not considered controversial and most members of Congress were

pre-occupied with the impending war. The Bill passed after a one hour discussion with no dissenting votes. Shortly after the bill passed, President Wilson declared war (Covey, 1998).

After the declaration of war 122,000 American men were immediately drafted (eventually 3,623,000 would be drafted) leaving a deficit in the American labor pool (Lichtenstein, et al., 2000). The declaration of war occurred during a time of expanding industrial production which made the lost labor force even more apparent. The deficiency in manpower was worsened within six months by massive strikes in ship building, coal mining, and the metal trades (Haydu, 1991). The war, strikes, and increased demand in industrial production contributed to a huge labor shortage which stimulated job opportunities making work available for workers who had previously been unable to secure work, specifically women, minorities, and people with disabilities (Lichtenstein, et al., 2000). One year later, as soldiers with permanent disabilities returned home, cities and towns began to fill with veterans who became displaced from their prior work because of their acquired disability (Haydu). In Europe, disabled veterans and their families were institutionalized. However, the United States refused to consider this approach and instead opted to assist veterans to return to gainful employment (University of Missouri, 2000). Subsequently the Soldiers' Rehabilitation Act of 1918 was passed making it the first piece of legislation intended specifically for people with disabilities. The vocational program was so popular that two years later Congress expanded the legislation to include civilians and states began to create agencies to run the vocational service program (Jenkins, et al., 1992). The 1918 Soldiers' Rehabilitation Act like the

1917 Smith Hughes Act was passed into law during the Humanitarianism period in the United States (Coombs, 1990).

The Humanitarian period in the United States occurred between the First and Second World Wars. It was during this period that society accepted social responsibility for the needy which included people with disabilities (Coombs, 1990). During this time there was a limited number of assistive devices to help people with disabilities, and therefore the impetus of the Humanitarian period was to help people with disabilities adjust to their handicaps as much as possible (Coombs). Assisting individuals in their adjustment to a disability was the catalyst for the advancement of a network of social and rehabilitation agencies devoted to people with disabilities. Specifically, the 1920 Smith-Fess Act and the 1921 Veteran's Bureau Act set aside public state and federal funds for rehabilitation programs for civilians and veterans, respectively (Jenkins, et al., 1992). These legislative acts were the first acts in which public funds were spent to specifically help people with disabilities. The 1921 Veteran's Bureau Act established the Veteran's Bureau, later changed to the Veteran's Administration (Bryon, 2002; Jenkins, et al.). The 1920 Smith-Fess Act authorized established civilian vocational rehabilitation programs under the Federal Board for Vocational Education to be funded on a 50-50 matching basis with the States (Coombs). The 1920 Smith-Fess Act and the 1921 Veteran's Bureau Act were the last rehabilitative legislation to pass Congress until 1936, when under the presidency of Franklin D. Roosevelt, the *Randolph-Sheppard Act* was signed into law (Jenkins, et al.; Lichtenstein, et al., 2000).

When Franklin D. Roosevelt became President of the United States in 1932, the country was in the midst of the Great Depression. Industrial stocks had lost 80 percent of their value, 10,000 banks had failed, and 13 million Americans had lost their jobs (Lichtenstein et al, 2000). The growing joblessness created a rise in racial and ethnic discrimination which included people with disabilities. One of Roosevelt's first tasks as President was to restore the country's confidence in the financial system, accordingly he launched the New Deal national relief programs such as FERA (Federal Emergency Relief Administration,), CCC (Civilian Conservation Corps), and CWA (Civil Works Administration) (Spartacus, 2004). Minorities and people with disabilities were in large part excluded from the New Deal programs. The primary objective of the national relief programs was to restore white male dignity and livelihood (Lichtenstein, et al., 2000). In addition, FDR banned child labor in manufacturing, established a minimum wage, and created the 40-hour work week. Although these programs may have rescued white male dignity and improved the quality of the work environment, they did little for people with disabilities who were also experiencing the effects of the Great Depression. Fortunately, for people with disabilities, and specifically for people with visual impairments, the President and Mrs. Roosevelt had a close friend named Helen Keller (Braille Institute, 2004).

The President and Mrs. Roosevelt befriended Helen Keller and, at the request of FDR, Helen Keller gave comfort to soldiers who had been blinded as the result of war injuries (Braille Institute, 2004). It is probably no coincidence that the first piece of legislation Congress passed for people with disabilities was the *1936 Randolph-Sheppard*

Act which allowed individuals who were legally blind to operate vending machines on federal property. In 1938 Congresspassed the Wagner-O'Day Act which improved sheltered workshops and required goods produced by people with visual impairments be purchased by the federal government (Bryon, 2002; Braille Institute). Roosevelt's friendship with Helen Keller may have affected his involvement with and subsequent passage of legislation concerned with assisting people with visual impairments. However, Roosevelt had another interest which was more personal and that interest was mental illness.

During his presidency, Roosevelt was diagnosed with bipolar disorder (Clayton, 1999). It is therefore not surprising that the final piece of legislation passed under the Roosevelt administration was the *1943 Bardon-LaFollette Act* (P.L. 78-113). This act extended rehabilitation services to people with mental illness as well as those who were developmentally delayed. In addition, the act provided the first state-federal support designed to serve people with visual impairments (Jenkins, et al., 1992).

From the end of World War II up until the early 1970's, America came of age after experiencing prodigious and sustained economic growth (Lichtenstein et al, 2000). For vocational rehabilitation and people with disabilities, this period of time was heralded by Eisenhower who was responsible for numerous social and welfare reforms, including the establishment of a new Cabinet Office, the Health, Education, and Welfare Office. The office of Vocational Rehabilitation was moved into this new cabinet in 1953 (Jenkins, et al, 1992). Eisenhower also made changes to the Social Security benefits program which provided benefits to disabled workers of any age as well as their dependents (Social

Security Administration, 2004). The 1950's and 1960's were also periods of civil unrest and protest.

Rosa Parks, an African American, was arrested in 1954 for refusing to give up her seat on a bus to a white person. Ms. Parks' arrest led to a protest that lasted 382 days and resulted in the abolishment of the bus law (Bryon, 2002). In 1964, the United States Supreme court issued a decision in *Brown v Board of Education* which made segregation illegal in the public school system. *Brown v Board of Education* was considered the event which brought about the birth of the civil rights movement (World Book, 2004).

Furthermore, in 1964, the Civil Rights Act passed, ending segregation in all public accommodations (P.L. 88-352). One of the positive outcomes of the African American civil unrest was that people with disabilities used the African American success as a guide for the disability rights movement in the 1970's (Bryon). A forerunner of the disabilities rights movement, but indirectly related to the 1964 Civil Rights Act, was the return of individuals diagnosed with mental retardation to mainstream society from institutions (MSNBC, 2005).

Prior to the 1960's, education professionals and psychologists believed that people with mental retardation could be educated but their education required specialized facilities separate and apart from the regular educational facilities. The special schools became residential centers that housed rather than educated people diagnosed with mental retardation. It was the customary treatment model for people considered developmentally delayed until the early 1960's when John F. Kennedy began his presidency in 1961 (MSNBC, 2005).

John F. Kennedy's older sister, Rosemary Kennedy, was born mentally retarded. At the age of 23, she was one of the first people in the United States with mental retardation to undergo a lobotomy (MSNBC, 2005). She remained institutionalized her entire life. Shortly after assuming his Presidency, President Kennedy established The President's Committee on Mental Retardation (PCMR). The PCMR reviewed cases for the purposes of determining if a person with a mental disability could return to a community after institutionalization (Public Papers of John F. Kennedy, 1961-1963).

In establishing the PCMR, President Kennedy noted the need to "correct society's failure in caring for people with disabilities" (Bryon, 2002 p. 132). John F. Kennedy's interest in people with mental disabilities may have been personal or it may have been imbedded in the civil rights movement of the time (Lichenstein, et al., 2000). Most certainly, President Kennedy recognized the need and right of people with disabilities to the same freedoms that people without disabilities enjoyed with equal protection under the law (Public Papers of John F. Kennedy, 1961-1963).

The goal of the PCMR was to deinstitutionalize people with mental disabilities as much as possible. Deinstitutionalization became easier in the early 1960's with the introduction of anti-psychotic drugs which allowed for better control of mental illness and permitted people with mental disabilities to function more effectively in mainstream society (Public Broadcasting System, n.d.). In addition, there was a public commitment to a community treatment approach for people with mental disabilities (Braddock & Parish, 2002). The institutionalization of people with mental illness reached its peak in the United States in 1960 with 560,000 people with mental illness in institutions (Bureau of

the Census, 1998). The number of people with mental disabilities in institutions began to decline after the PCMR was established and continued to diminish until 1980 when only 130,000 people with mental disabilities lived in institutions in the United States (Bureau of the Census, 1998). Kennedy continued to campaign for people with mental disabilities throughout his short career as President of the United States with proposals for a national program for mental health and a national program to combat mental retardation (Public Papers of John F. Kennedy, 1961-1963).

One of Kennedy's last acts for people with mental disabilities was to sign the Maternal and Child Health and Mental Retardation Planning Bill (Public Papers of President John F. Kennedy, 1961-1963). This act doubled the funding for maternal and child health and sanctioned a new grant program for mental retardation (Braddock & Parish, 2002). In addition, it allowed people with mental retardation to be included in a vocational rehabilitation program giving rehabilitation services for up to 18 months for the purposes of determining if an individual had the sufficient potential to be vocationally rehabilitated (Public Papers of John F. Kennedy, 1961-1963).

The decade of the sixties was the backdrop for the Civil Rights movement with civil rights leaders fighting for the aspirations of racially disadvantaged groups. Civil rights leaders included Martin Luther King, Jr. & Malcolm X for African-Americans, Cesar Chavez for Hispanics, and Gloria Steinem for women (Goodwin, 2004). It was in this environment that President Johnson declared his War on Poverty (Lichtenstein, et al., 2000). President Johnson used the Rehabilitation Act of 1968 to envelop all disadvantaged people, which included drug abusers, alcoholics, people with repeated

criminal convictions and people without an education (University of Missouri, 2000). Subsequently, the number of Vocational Rehabilitation (VR) offices doubled in addition to the establishment of VR offices in prisons and welfare offices (University of Missouri). The 1968 Vocational Rehabilitation Amendments increased federal responsibility for the federal-state program to 80% (P.L. 90-391) with continued expansion of the VR program (Jenkins, et al, 1992). The National Commission on Architectural Barriers (NCAB) was established during the Johnson presidency (Jenkins, et al.). Prior to the establishment of NCAB, federal officials formed an advisory group called the American National Standards Institute (ANSI) that advised federal agencies about making public buildings accessible to people with physical disabilities (Jenkins, et al.). ANSI established a voluntary policy for accessible buildings which was not successful. A survey was conducted of approximately 3,000 architects, and of those who responded, only 35% were aware of ANSI. In addition, none of the major building codes made reference to barriers, and manufacturers and suppliers were not aware of the existence of standards (Welch, 1995). In a report delivered by the ANSI it was noted that, "the greatest single obstacle to employment for the handicapped was the physical design of buildings and facilities they must use" (Welch, 2004, p.1). In response to this, the National Commission on Architectural Barriers was established (Welch, 1995).

The 1970's were considered the decade of the disability rights movement (Jenkins, et al., 1992). The *Rehabilitation Act of 1973*, Title 504 was passed and it mirrored Title VII of the 1964 Civil Rights Act which prohibited employment discrimination based on

race, color, religion, sex, and national origin (P.L. 88-352). Title 504 mandated non-discrimination in employment. In addition, this was the first act not to include the word vocational in it (P.L. 93-112). The *Rehabilitation Act of 1973* shifted the perception of people with disabilities from "a group in need of social services" to a political and civil rights context (Welch, 2004, p. 1). The intention of the Rehabilitation Act of 1973 was to insure that people with disabilities were not dependent on society to care for them, but if given equal opportunities and access they could be independent and productive citizens of the United States (Jenkins, et al., 1992).

The 1970's began a period of time in the United States for people with disabilities called "the period of advocacy, consumerism, and cultural competency" (Bryon, 2002, p. 164). The Vietnam Act for returning soldiers assured non-discrimination and affirmative action in employment with federal contractors (Bryon). The late 1970's saw the beginning of the New Right which used social issues such as family, education, church, state, and abortion as the basis for political alliances and conflicts (Danky & Cherney, 2003). In this political environment of social issues, the 1978 Rehabilitation

Comprehensive Services and Development Disabilities Amendments (P.L. 95-602) were signed into law. The 1978 Amendments provided funding for comprehensive services and centers for independent living (Colorado State University, n.d.). Title VII provided people with disabilities the right to be consulted on the management of independent living centers and involvement in policies regarding people with disabilities (P.L. 95-602).

Civil rights protests continued into the 1970's and people with disabilities were actively protesting for recognition and equal rights (Colorado State University, n.d.). In

1977 and 1978, groups of people with disabilities took over federal buildings across the country to protest Section 504 of the Rehabilitation Act which had not yet been signed by the Secretary of Health, Education, and Welfare. In San Francisco, the occupation of the federal buildings lasted 29 days and did not end until Section 504 was signed (Colorado State University, n.d.).

The Eighties began with the Reagan Boom and the United States saw dramatic increases in the cost of real estate, finance, retail trade, and high tech manufacturing (Lichtenstein, et al., 2000). It was Reagan's goal to increase entrepreneurial activity by cutting business and income taxes by 25 percent and cutting social programs by 25 billion dollars, this was fondly (or not fondly) referred to as Reaganomics (Niskanen, 1988). Social programs such as Food Stamps, child-nutrition, and job training received the largest cuts (Lichtenstein, et al.). The biggest funding cuts were seen in programs such as education, Construction Education & Training Authority (CETA), Aid to Families with Dependent Children (AFDC) and mass transit. However programs that were considered a right rather than a handout were spared (Lichtenstein, et al.). Three major pieces of legislation for people with disabilities were signed into law by the Reagan Administration, the *Rehabilitation Act Amendments of 1984*, the *Rehabilitation Act Amendments of 1986*, and the *Technology-Related Assistance for Individuals with Disabilities Act of 1988*.

The *Rehabilitation Act Amendments of 1984* transformed the National Council on Disability from an Advisory Board in the Department of Education into an independent Federal agency. In addition, the *1984 Amendments* required that each state operate a

Client Assistance Program (CAP) as a formula grant program. In addition, it required the word qualified to be placed before person" for the training programs (P.L. 98-221). The *Rehabilitation Act Amendments of 1986* clarified that supported employment was a viable outcome of vocational rehabilitation. The *1986 Amendments* called for states to have plans for individuals with disabilities making a transition from school to work (99-506). Finally, the amendments highlighted assistive technology for people with disabilities who were in or entering employment (P.L. 99-506). Finally, the *Technology-Related Assistance for Individuals with Disabilities Act of 1988* provided grants to states for the purpose of promoting technology-related assistance to individuals with disabilities (P.L. 100-407). In spite of this progressive legislation, people with disabilities continued to experience employment discrimination.

During the 1980's, the Equal Employment Opportunity Commission received more than 100,000 employment-related discrimination complaints from people with disabilities (Lichtenstein, et al., 2000). Subsequently, in 1986, the National Council on Disability called for expansive legislation that would guarantee equal opportunity for people with disabilities (ADA & IT Technical Assistance Centers, n.d.). Finally, on July 26, 1990, the Americans with Disabilities Act (ADA) was signed by President George Bush in the largest signing ceremony in history (ADA & IT Technical Assistance Centers, n.d.). The ADA prohibited employment discrimination and promoted equal opportunity, made state and local government services available and accessible, made commercial facilities and public transportation accessible and required the establishment of TDD/telephone relay services (Jenkins, et al. 1992). The ADA was significant legislation

for people with disabilities and also significant for politicians interested in the decentralization of government.

After the passage of the ADA, state and local governments protested the ADA, noting that it was legislation signed into law with fiscal consequences for non compliance but with no federal funding to assist with implementation and adherence (Walker, 2000). The protest began a decentralization of government funding which began a shift of federal aid from state and local governments to programs which directly help individuals (Walker). In 1994, Republicans won a majority in Congress for the first time in 40 years and saw this as an opportunity to crush big government (Danky & Cherney, 2003). The goal of the Reagan Congress was to decentralize Federal authority and give states and local government more control over their social programs. At about the same time the goal of rehabilitation began to shift from counselor driven to consumer driven (Jenkins, et al., 1992).

The 1992 Rehabilitation Act Amendments directed that there should be an increase in control by individuals with disabilities over their rehabilitation services (P.L. 102-569). The individual written rehabilitation plan (IWRP) must include a statement from the client regarding his/her involvement with the plan. The client statement included information such as how consumers were informed about services available to them and how they chose their goals, and the objectives and services used to meet their goals (P.L. 102-569). Section 105 of the 1992 Rehabilitation Act Amendments mandated that individuals with disabilities select their rehabilitation services and service providers directly when it is consistent with the IWRP (P.L. 102-569). Concurrent with the

promotion of consumer choice and autonomy a vast social change occurred in the 1990's with the arrival of the internet and World Wide Web.

Technology, emails, purchasing on line, and the World Wide Web were born in 1992. By 1994, 3 million people were on-line. By 1998, this figure increased to 100 million people (Kautzman, 1998). Computers became common place in both the home and workplace. Unfortunately, for many people with disabilities the web pages were inaccessible. Disk Operating System (DOS) was the commonly used text-based software (Kautzman). However, when Window's was introduced, the screen was filled with tiny pictures or icons, making it difficult for people with visual impairments because the images were not supported by a descriptive text (Kautzman). In response to the technology evolution, President Clinton signed the 1998 Rehabilitation Act Amendments which required access to electronic and information technology for people with disabilities be provided by the federal government. Federal agencies were required to make technology available to people with disabilities to the extent that it did not pose an undue burden on the federal agencies (P.L. 105-220). Unfortunately, technology advanced at a much faster pace than laws designed to give equal access to people with disabilities (Kautzman).

At the time of this writing, Southwest Airlines was maintaining a web site that is allegedly inaccessible to people with visual impairments (*Access Now v. Southwest Airlines*, 2002). In 2002, a lawsuit was filed by Access Now, Inc. and Robert Gumson who had claimed that Southwest Airlines is a public accommodation and is therefore subject to ADA regulations. However, the court believed differently and dismissed the

lawsuit on the basis that a web site is not a place of public accommodation. The dismissal specifically identified all places of public accommodation listed in the ADA and a web site was not among them (*Access Now v. Southwest Airlines*). At the time the ADA was drafted and signed into law, all the technological advances of the 1990's had not yet occurred and could not have been anticipated. Therefore, because technology is not specifically identified in the ADA, people with disabilities are not being adequately served in the area of technology. The independence of people with disabilities in the United States appears to be dependent on current laws and legislation. Legislation is used to change social attitudes and social attitudes are used to change legislation (Convery, Graham, Payson, Phillips, & Pomeroy, 2004).

Throughout history, people with disabilities have been dependent on relationships with people or institutions for survival. In the early days of the Greek and Romans people with disabilities were dependent on families for protection otherwise they were killed or abandon (Braddock & Parish, 2002; Stiker, 1997). During the Middle Ages, people with disabilities were protected by the Catholic Church (Mackelprang & Salsgiver, 1999) and during the Renaissance people with disabilities were dependent on the government who developed institutions to take care or to cure them of their disability (Neugebauer, 1987). The relationship Roosevelt had with Helen Keller was a catalyst for legislation that assisted the blind in securing work on Federal Property and in sheltered workshops (Braille Institute, 2004). Finally, the relationship John F. Kennedy had with his sister gave way to great advancement in the care and awareness of people with mental retardation (MSNBC, 2005). People with disabilities are dependent on legislation that

will protect their rights and/or prevent discrimination in employment and provide equal to public and private services. Relationships are important and necessary, yet attitudes toward people with disabilities are still a critical barrier that needs continued examination.

How Attitudes are Formed

Attitudes were described by Yuker (1988) as associations between attitude objects and evaluation of those objects. Attitudes may be negative or positive and may range in intensity from weak to strong. In addition, attitudes contain one or more of the following components (a) affective, (b) behavioral, or (c) cognitive (Allport, 1954). Finally, attitudes may be formed or changed at anytime in a person's lifetime and have the ability to influence social cognition and behavior (Ajzen, 2001).

Attitudes may originate from (a) primary socialization such as the immediate family, (b) secondary socialization such as the immediate school and peers, or (c) some scientists believe that there may be a genetic influence in attitude formation (Fishbein & Ajzen, 1975). Classical and operant conditioning are the conduits for primary and secondary socialization attitude formation (Pavlov, 1941; Skinner, 1990).

Classical conditioning is the creation of a response to a neutral object which previously evoked no response (Sigelman & Shaffer, 1995). For example, the classical conditioning of an attitude in the home occurs with the pairing of a neutral object, such as taxes with a parental emotional response of anguish. Soon the child will associate the

word tax with an emotional response of anguish. The affiliation between a neutral object and the nonverbal behavior will become obvious if repeated often enough (Fishbein & Ajzen, 1972).

Staats and Staats (1958) were early researchers of attitude formation through classical conditioning. They evaluated attitude formation by reading aloud positive or negative words while simultaneously showing the name of a country (i.e. Norway) on a screen in front of survey participants. At the conclusion of the experiment, participants assessed the countries paired with positive words more positively than countries paired with negative words. Staats and Staats concluded that in addition to the ability of the researchers to create attitudes with classical conditioning, there was also evidence that the responses had been conditioned without awareness on the part of the participants.

In a similar study, Arenson, Lannon, Offerman, & Kafton (1982) analyzed attitude formation by presenting a group of participants with four topics. Prior to the experiment, the participants tested neutral on each of the four topics. The researchers then paired positive or negative words with each of the neutral topics thereby conditioning an attitude toward the previously neutral object. Subjects were asked to evaluate a stranger's response to the same experiment and whose conditioned responses were either very similar or dissimilar to the participant's. The researchers concluded that a conditioned attitude influenced judgments toward another person and affected the degree of liking or disliking dependent on how similar the other person's attitudes were on topics. The research of Olson & Fazio (2002) supported classical conditioning as the genesis in attitude formation.

Olson and Fazio (2002) told research subjects that they were measuring attention and observations skills. Participants viewed a series of images which were paired with words, either positive or negative. Using the same experimental participants, the researchers continued with the second part of the experiment. In this part of the experiment researchers wanted to know if participants were aware that their attitudes had been influenced during the first part of the experiment. As in previous research (Arenson, et al., 1982; Staats & Staats, 1958), without conscious awareness participants rated the images paired with positive words more favorably than the images paired with negative words. Classical conditioning is an important component of attitude formation, but it is not the only means by which attitudes are formed. Attitudes may also be formed through operant conditioning.

Operant conditioning is reinforcement of an evoked response with negative or positive consequences. Like classical conditioning, attitude formation may occur without conscious awareness. Spielberger, Levin & Shepard (1962) studied awareness of learning a new attitude with operant conditioning. The researchers either verbally reinforced or did not reinforce certain participant statements. They concluded that there was an awareness of learning with reinforcement of participant statements but this awareness diminished with (a) less structure in the conditioning, (b) a reinforcing stimulus, and (c) a less sophisticated study population. As previously stated, both operant and classical conditioning of attitudes may occur in the home (primary socialization) or in the social community (secondary socialization). Allport (1954) referred to attitudes formed from primary and secondary socialization as in-group attitude formation.

According to Allport (1954), people are born into in-groups (parents, religion, race, and social traditions). In-groups are given to children, although some in-groups must be fought for (i.e. membership in organizations previously unobtainable due to ethnicity, gender, or socioeconomic status). At age five a child is able to understand his/her various group memberships and has a sense of ethnic identification, but does not understand the significance of his/her in-group until he is age nine or ten (Allport & Kramer, 1946). Allport noted that, "In every society a child is regarded as a member of his parents' group" (p. 29). Allport defined an in-group as an assembly of people who use the word we with some significance. In-group suggests an analogous out-group which as Allport elucidated existed because there are in-groups.

Allport (1954) noted that the familiar is preferred, and what is alien is less good and considered an out-group. The significance of in-group/out-group relationships is that loyalty to the in-group created an automatic animosity toward the out-group. In a study done by Allport and Schanck (1936), seven-year old children were asked which children were better, the ones in their town or the children in another town. Almost all responded that the children in their own town were better. When asked why they believed this they responded that they did not know the children in the other town.

Nesdale, et al., (2003) investigated in-group and out-group relationships by examining 159 5, 6, 7 and 9-year-old children. The children were assigned to groups which had higher drawing ability than a competitor team. Each group was composed of children of varied ethnicities in the same proportions. The children were asked to rate their liking and similarity to the in-group and out-group. Children liked in-group

members better than out-group members and liked out-group members less if they were of a different ethnicity. Ethnic composition did not effect their liking for in-group members. Children felt most similar to same-group, same ethnicity group members and least similar to out-group members of a different ethnicity.

Rustemli, et al., (2000) studied in-group preference and (a) in-group partisanship, (b) disparaging the out-group, or (c) both. Four-hundred and fifty participants were asked to determine to what extent pre-selected positive and negative adjectives applied to ingroups and out-groups. Participants applied more positive adjectives to their in-group and more negative attitudes toward the out-group. The investigators concluded that in-group inclination was the result of in-group praise as well as the belittling of the out-group.

Kowalski (2003) evaluated preschool-aged children and their in-group and outgroup preferences. Children's attitudes toward their own in-group and out-groups of different ethnicities were assessed twice using two measurements (forced-choice and independent). Two 20-minute individual interview sessions were conducted approximately 2 weeks apart (M = 12 days). The children in the survey tended to evaluate their own group more favorably compared to the out-group when forced to assign either positive or negative labels to both groups. However, when they were not required to assign positive or negative labels, they tended to rate the out-group more positively. The researchers concluded that own group preference was not equated with out-group rejection. Perceptions of groups of people, such as perceptions of people with disabilities have received significant attention.

McCaughey & Strohmer (2005) used the concept of prototype as an indirect measure of attitudes college students had of people with disabilities. The researchers gave each of the student participants (N=71) a booklet. At the top of the booklet was printed "Person with [specific disability]." The students were given six different disability categories - schizophrenia, mental retardation, attention deficit hyperactivity disorder (ADHD), spinal cord injury, visual impairment, and hearing impairment. Participants were asked to list at least 10 phrases that described the person printed on the top of the booklet. McCaughey & Strohmer described the participants' responses as overgeneralizations and clear misconceptions of people with disabilities. In addition perceptions were largely negative. McCaughey & Strohmer concluded that people with limited contact with a person with a disability view them as members of outgroups because they are different from social norms. Other research has focused on contact and attitudes toward people with disabilities using correlates such as social anxiety.

Budisch (2004) measured both social anxiety and attitudes of 163 undergraduate students toward people with disabilities. Using a one-way ANOVA to analyze the data, the researcher found that the lower the amount of social anxiety, the more positive the attitude toward those with disabilities. People with high social anxiety often analyze a social situation and worry about what they could have said or done that would have improved the social exchange. As Budisch concluded, social anxiety is a personality characteristic that can be changed by increased knowledge about people with disabilities. When people know more about people with disabilities, they have diminished social

anxiety and subsequent positive attitudes. Attitudes, positive or negative may be changed or formed anytime during life (Ajzen, 2001).

Two theories of attitude formation are classical conditioning and operant conditioning (Sigelman & Shaffer, 1995; Spielberger, et al., 1962). Researchers have shown attitude formation in laboratory settings simply by pairing positive words with images or topics (Staats and Staats, 1958; Spielberger, et al., 1962). In real life attitudes are formed via primary and secondary socializations and continue to be reinforced by these associations (Fishbein & Ajzen, 1975). Socializations are formed by the relationships we have with our relatives, friends, work, or cultural identification (Allport, 1954). These relationships have also been termed in-group relationships. Allport used the term in-group to describe the collective we. Allport described these meaningful relationships in his development of Contact Theory.

Contact Theory

Allport (1954) developed his Contact Theory in America at a time when America was a segregated country. Many African Americans were forced to attend the worst inner city schools and live in the worst neighborhoods (Lichtenstein, et al., 2000). Government housing policies actually increased segregation and the Fair Housing Authority (FHA) endorsed restrictive covenants which prevented Black Americans from purchasing homes in certain neighborhoods (Dixon & Rosenbaum, 2004). In addition to housing discrimination, competitive employment was racially divided. African Americans were employable in large mail-order houses and post offices, but not in white collar work such

as insurance companies or banks (Lichtenstein, et al.). It was in this social and political environment that Allport wrote his book, *The Nature of Prejudice* in which he developed his Theory of Contact.

Allport (1954) advanced his Contact Theory in response to his studies of understanding anti-Black prejudice. Allport believed that prejudice developed from of a lack of meaningful and positive interaction between African-Americans and European-Americans which led to irrational beliefs. Prejudice has its basis in ignorance (Jackman & Crane, 1986). Conversely, prejudice could be lessened or eliminated with increased and meaningful contact between these two groups. Allport described specific conditions under which meaningful contact occurred, that being equal status contact between majority and minority individuals who are in pursuit of common goals, which is enhanced by institutional supports (i.e. laws). Allport believed that simply knowing someone of a different ethnicity was not enough to eliminate prejudice; there must be contact and the contact must be meaningful and positive. Numerous studies have been done which have empirically tested Contact Theory.

Allport and Kramer (1946) first experimented with Contact Theory by measuring the number of equal status contacts of Caucasians with Jewish-Americans and African-Americans. Equal status was defined as association with considerable numbers of members of various minorities in school, at work, in recreation, as neighbors, and as friends. The results of the study showed that with 0-1 contacts, 90 percent of the research participants were more prejudiced and 10 percent were less prejudiced. With 4 and 5 contacts 50 percent were less prejudiced and 50 percent were more prejudiced. Allport &

Kramer concluded, that increased contact between Caucasians and Jewish and African-Americans, lessened prejudiced attitudes. It should be noted that the attitudes of Jewish and African-Americans toward Caucasians was not measured.

Emerson, et al., (2002) studied people who had prior interracial contact in schools and neighborhoods and found that as adults they were more likely to have a diverse set of friends. The authors suggested that even limited contact in schools and neighborhoods led to better relationships between different ethnic groups. This finding was a departure from Allport's (1954) suggestion that casual contact did not dispel prejudice but actually increased it. Emerson et al., did not measure the quality of contact between different groups, such as pursuit of common goals between racially different groups. However, it was noted that public policies which promote contact between different ethnic groups is a positive way to improve race relationships.

Dixon & Rosenbaum (2004), in their study of white stereotypes toward blacks and Hispanics, concluded that contact, in and of itself, does reduce stereotypic beliefs and that even relatively superficial contact has an effect on stereotypes. Dixon & Rosenbaum suggested that when Whites interacted with Blacks and Hispanics they were exposed to new information about the minority groups which led to a positive proportional change in attitude. Dixon and Rosenbaum concluded that favorable relationships will develop with the creation of meaningful contact between majority group and minority group members. Meaningful contact increased knowledge regarding majority and minority group members and increased level of knowledge about minority groups was commensurate with level of positive attitudes (Festinger & Kelly, as cited in Roper, 1990).

Research by Roper (1990) explored knowledge about people with disabilities and its effect on attitude. Roper conducted a study on contact between volunteers at the Special Olympics and participants with mental retardation. Roper found that attitude scores for friends and family of a person with mental retardation were higher than scores for people who had briefly met a person with mental retardation. In addition, overall perceptions of mental retardation by volunteers for the Special Olympics were more positive compared with those people who had never volunteered at a Special Olympic event. What is unique about Roper's study is that he found that participants with no contact experience gave more favorable responses than those individuals with some contact experience. Like Allport (1954,) Roper found that superficial contact did not improve relationships but actually reinforced prejudice. Relationships between minority and majority groups were also studied by Moody (2001).

Moody (2001) was specifically interested in interracial friendships and the conditions under which they were formed. He concluded that simply increasing school heterogeneity did not increase interracial friendships. However, when there was interracial mixing in the school system, such as team sports or team projects, there was a promotion of integrative friendship. Prejudice was lessened and interracial relationships improved when students experienced equal status relationships and pursued common goals, such as those found in team sports (Allport, 1954). Intergroup relationships may also improve with increased knowledge and experience among members of different groups, such as a people with and without disabilities.

Slininger, et al., (2000) studied grade four students' attitudes toward students with

severe mental retardation in wheelchairs. The research was a pretest/post-test study in which students were given a pretest of an adjective checklist in which they matched adjectives to pictures of children with disabilities. The children then had meaningful contact with a child with a disability. Meaningful contact is a "situation in which expectations about out-group members are altered (or confirmed)" (Roper, 1990 p. 243). After the contact, the researchers found that the boys' attitudes had greater improvement. The girls' attitudes did not improve as much but their overall attitudes were more positive at the outset of the experiment and therefore there was less room for improvement. Meaningful contact such as this had the intended effect of changing altitudes. Although much research has supported Allport's Contact Theory, there have been criticisms.

One criticism of Allport's Contact Theory is its inability to generalize positive attitudes toward individuals who are members of a minority group to other members of the same minority group (Hewston & Brown, as cited in Miller, 2002). Miller found that positive generalizations to other minority group members would occur only if a minority group individual (with whom a majority group member has had a positive relationship), is seen as typical of that group. Prejudiced people will categorize a group of people based on their ethnicity. When individuals are presented with evidence that conflicts with their categorization of a group of people, they will become resistant to the new information or dismiss it as being an exception (Allport, 1954). Exclusion of new information allows majority members to maintain their negative perceptions toward all members of the minority group. Excluding information or seeing a member of a minority group as an exception prevents the generalization of positive attitudes to all members of the minority

group.

Pettigrew (1998) questioned the ability of Allport's Contact Theory to generalize to the out-group at large. Pettigrew stated that although the original Contact Theory was able to predict when positive change occurred, it could not stipulate how and why it occurred. Nor did it explain how contact effects generalization across a variety of situations (i.e. work, school, friendships) from individuals toward the out-group as a whole, or even to uninvolved out-groups. Pettigrew identified three levels of generalization that lead to positive change (a) generalization with the same minority group in a different situation, (b) generalization to other people of the same minority group, and (c) generalization to other minority groups. Pettigrew criticized past studies on Contact Theory for their focus on short-term inter-group contact and believed that prior studies were limited in their ability to generalize to real life. Pettigrew believed that Allport's theory needed to include a fifth condition of contact, that being an allowance for the opportunity of friendships to develop. Dixon & Rosenbaum (2004) suggested that friends and acquaintances advanced more favorable attitudes. Pettigrew suggested the fifth condition, friendship should be researched longitudinally.

Eller & Abrams (2004) performed a longitudinal comparison of Pettigrew's reformulated inter-group contact model and the common in-group identity model in Anglo-French and Mexican-American contexts and found that inter-group friendships were central in reducing inter-group bias. Eller & Abrams concluded that with both models the quality of the contact was pivotal and that quantity of contact lacking certain conditions had detrimental effects on inter-group relationships. Learning about out-group

and behavior modification were important in the early stages of inter-group contact but that affective gains were important over time.

Livert (2004) examined the relationship between inter-group contact, friendship formation, and prejudice reduction using a longitudinal design and multilevel analyses to capture both the dynamic and contextual influences involved in contact effects. Participants consisted of 236 chef students at a chef training school in the northeastern United States. The school's curriculum provided the setting for a natural experiment. Students were randomly assigned to 14 groups in which they took kitchen skills classes taught by a chef instructor. Questionnaires were given to the participants over a four month period of study. The out-groups examined were (a) female chef students, (b) baking students, and (c) career changer students. The results of the survey found that inter-group contact decreased male students' prejudice toward female chef students. However contact also resulted in an increase in first career students' prejudice toward career changers chef students. The formation of inter-group friendships did not affect either of these relationships, as predicted by the researcher's theoretical model. Consistent with the researcher's predictions, participants in kitchen groups with high task cohesion and cooperation were more likely to form inter-group friendships. Contact which is meaningful, such as equal status relationships and common goals lessened prejudice and increased positive attitudes. Although Allport developed his contact theory in response to racial tension it has application in any area in which minority group members experience prejudice or negative attitudes, such as people with disabilities.

Conclusion

Several researchers have studied Allport's Theory of Contact applying it across various contexts and between various groups, finding that contact, even brief contact, improved attitudes (Emerson, et al., 2002; Moody, 2001; Roper, 1990; Slininger et al., 2000). However, what emerged from Allport and subsequent research is that limited contact increased prejudice and supported stereotypes people may have of individuals with disabilities. Allport (1954) in his research on prejudice found that the way to change attitudes was to have meaningful contact with people. Research on in-groups and outgroups has repeatedly shown that participants have better attitudes toward their own ingroups than our-groups (Kowalski, 2003; Nesdale, et al., 2003; Rustemli, et al., 2000). In addition, contact studies have shown the positive effect of contact on attitudes (Allport, 1954; Allport & Kramer, 1946; Dixon & Rosenbaum, 2004; Emerson, et al., 2002; Roper, 1990; Slininger, et al., 2000).

There has never been a time in history where the isolation and separation of people with disabilities has had a positive effect on attitudes toward people with disabilities. The current research studied the effect of contact and attitudes and specifically, the amount of contact individuals have in order to see if there is a difference in attitudes

CHAPTER 3

Methodology

Introduction

The purpose of this research was to investigate the amount of time spent and type of contact students have with people with disabilities and their effect on attitudes toward people with disabilities. This is important in assisting practitioners in identifying how time spent and relationships may relate to attitudes. For this research, 170 students were surveyed, some of whom had significant contact and others of whom had no contact with people with disabilities. Attitudes were measured using the Modified Issues in Disability Scale (MIDS). In addition, students were asked to identify the type of relationship and amount of contact they have had with a person with a disability.

Procedure

Human Subject Research approval was given by the University of Arizona and California State University, Los Angeles. After receiving research approval from both Universities, the researcher identified potential survey classes from a list of classes provided by the university. Of particular interest were classes in counseling which would include students in rehabilitation counseling. It was assumed that rehabilitation counseling students, especially those who had completed two-thirds of their degree would usually have some experience working with people with disabilities. Ten classes were identified as counseling classes and each of the instructors were contacted by telephone. Eight instructors gave permission to survey their respective classes and a date for the survey was confirmed.

Data collection occurred during the 8th week of a 10 week quarter. This was done in order to ensure that those students with internships had sufficient time and interaction working with people with disabilities. On the day of the survey, this researcher went to the classroom and identified herself as a researcher measuring attitudes toward people with disabilities. Students were read the consent form by the researcher (see Appendix). In addition, the consent form was attached to the front of each survey. Students were told their participation was voluntary and anonymous. There was no need to sign a consent form, as that would be the only identifier in an otherwise anonymous survey. Onehundred and seventy one students were given the opportunity to participate in the survey, one student declined to participate. A large envelope was placed at the front of the classroom and students were instructed to place completed surveys in the envelope. This was done to ensure anonymity. Students were asked to complete all of the questions in the MIDS survey, the demographic information, and the three open-ended questions regarding their relationships with people with disabilities. After all the surveys were completed, the researcher collected the envelope.

Subjects (sources of data)

The sample for the study included graduate and undergraduate students with majors in rehabilitation services, rehabilitation counseling, psychology, counseling, school leadership, applied behavioral analysis, behavioral intervention case management and education. The subjects were current students at California State University, Los Angeles. The University is considered a minority serving university with a student population made up of 51% Hispanic, <1% American Indian, 8% African American, 25%

Asian and 16% European-American. Sixty-three percent of the population was female, with males making up 37% of the population (California State University, Los Angeles, 2005).

Instrumentation

In order to evaluate attitudes toward people with disabilities, the MIDS was used. The MIDS, developed by Dr. Elaine Makas, is a 49 statement instrument which asks participants the extent of their agreement/disagreement with each of the statements regarding disability. The MIDS uses a Likert-type scale which has an internal consistency of .79 and a reliability of .78. Participants were required to rate each of the 49 statements on the Likert Scale by selecting 1 of 7 possible choices (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) don't know/no opinion, (5) somewhat agree, (6) agree, or (7) strongly agree. Approximately half of the statements are positively worded, which was done in order not to sensitize participants' attitudes either positively or negatively. These items were reverse coded because a response of "strongly disagree" was considered the more positive response. A response of 1 was converted to a 7; 2 to 6; 3 to 5; etc.

Potential scores could range from 49 to 343; the higher the score, the more positive the attitude.

The MIDS sets itself apart from other measurements of attitude because it tests both knowledge and attitude (Makas, 1991). The importance of testing both knowledge and attitude is to eliminate at least one threat to internal validity, the Hawthorne Effect. If a person knows he/she is part of a research study, this knowledge may affect his/her responses (Hadley & Mitchell, 1995). The MIDS eliminated this threat because regardless

of their thoughts about being part of a survey, respondents are unable to answer knowledge questions unless they have specific knowledge about disability. If a person knows very little about people with disabilities, he/she may rely on stereotypic thinking in answering questions (Antonak & Livney, 1988).

The MIDS distinguished itself from other tests on attitudes toward people with disabilities because the pool of items relied upon input from people with disabilities (Makas, 1991). The initial pool of 143 items came from 92 non-randomly selected individuals with disabilities. The final 49 items were selected by a panel of experts, 5 of whom had disabilities. The expertise of the panel was in test construction or in attitudes toward people with disabilities (Makas). The MIDS has been used in several research studies measuring attitudes toward people with disabilities.

Makas (1991) identified four broad research categories for which the MIDS has application (a) occupational comparison studies, (b) demographic/personality variable studies, (c) behavioral studies, and (d) attitudes change studies. For example, Sabharwal (2003) evaluated a disability awareness program by using the MIDS as a measure of attitude change.

Sabharwal (2003) evaluated the disability awareness program by administering the MIDS at program commencement and completion. Sabharwal concluded that the training program was effective based on the change in attitudes toward people with disabilities after completion of the disability awareness program. The MIDS has also been used in occupational comparison studies.

Hayashi (2004) compared the attitudes of social workers toward people with

disabilities both in the United States and Japan. The MIDS was administered to 93

Americans and 73 Japanese. Hayashi concluded that among both groups' attitudes toward people with disabilities were moderately positive. The MIDS may also be used with demographic variables.

In the current study students were asked to answer demographic questions regarding age, ethnicity, college major, graduate/undergraduate status, disability status, and progress in the program. Finally students were asked to answer three open-ended questions regarding experiences and relationships they have had with people with disabilities. Those questions were (a) How have your life experiences affected your attitudes toward people with disabilities? (b) Describe the nature of your relationship with a person with a disability and how it has influenced you? Nature of relationship would include information such as the amount of time you are spending or have spent with a person with a disability, specific relationship (relative, friend, co-worker, client, employer, neighbor), and shared goals, if any, and (c) How has the relationship described above affected your attitude toward all people with disabilities?

Variables

The independent variables were (a) the amount of contact a student had with a person with a disability (no time spent, casual or acquaintance contact, moderate contact or a great deal of contact) and (b) type of contact (friend, relative, neighbor, work, school, denied having a relationship, or identified themselves as having a disability). The dependent variable was the attitude the student had toward people with disabilities as measured by the MIDS.

Data Analysis

The revised MIDS (1993) contained 49 items that are responded to using a Likert Scale. According to the MIDS scoring instructions, the data should be handled such that surveys with more than three blanks are considered invalid. "Don't know" or "No opinion" are not considered a blank response. Blanks (up to the maximum of 3) were assigned a score of 4. Items 1,2,6,10,11,12,13,14,20,21,26,27,30, 33,36,37, 39,41,41, 42,44,45,and 48 were reverse coded. These items were reverse coded because a response of *strongly* disagree was considered the most positive response. For example, a response of 1 was converted to 7; 2 to 6; 3 to 5, etc. All other items were recorded as given with ranges from 1 - strongly disagree to 7 - strongly agree. Total scores may range from 33 (most negative) to 231 (most positive).

The authors of the MIDS did not provide a rating scale that identified positive and/or negative scores. Therefore, positive and less positive attitude scores were identified by an analysis of all current respondent scores. Based on the median score, attitude scores were evenly divided into inter-quartile ranges with 41 respondents in the upper strata, 90 participants in the middle range, and 39 participants in the lower strata. The top 25% of all scores were considered to be positive attitudes, the lower 25% of all scores were considered to be less positive. The middle 50% of scores considered moderate scores, fell between the upper 25% and lower 25% of scores.

A descriptive analysis was done for the qualitative responses regarding amount of time spent and type of relationship. Qualitative responses regarding the type of contact

students had with a person with a disability were divided into 7 categories (a) friend, (b) relative, (c) neighbor, (d) work, (e) school, (f) denied having a relationship with a person with a disability, and (g) identified self as having a disability.

In addition to analyzing the type of contact a person had with someone who has a disability, the time spent with a person with a disability was also considered. A content analysis was performed on the qualitative data regarding the amount of time spent with a person with a disability and four categories were subsequently identified: (a) no time spent, (b) casual or acquaintance contact, (c) moderate contact, and (d) a great deal of contact. Classification into one of the four categories was based on how respondents described the nature of their relationship. The nature of the relationship included information such as the amount of time spent with a person with a disability. Individuals placed in the no time spent category specifically stated they had no relationship with a person with a disability. Casual contact was considered to be greater than no time spent but less than moderate contact. An example of casual contact would be a school classmate in which there is an exchange of pleasantries such as acknowledgement of each other, asking questions about course work, or sharing a cup of coffee, but the relationship is kept casual without significant personal interaction outside of the school setting. Moderate contact was identified as greater than casual but less than a great deal of contact. For example, a personal interaction that occurs 3-5 times per week would be considered moderate. Another example of moderate contact would be working with someone with a disability. A great deal of contact was identified as contact greater than moderate, such as living with someone or having a disability yourself.

In order to cross tabulate the amount and type of contact with attitude score, each of the surveys was numbered beginning with 1 and continuing through to 170. On the front of each survey the MIDS score was placed in the upper right hand corner and the subjective questions were attached to the survey. After all the scores were recorded on each survey, the forms were placed into one of three categories (a) upper 25%, most positive, (b) middle 50%, moderate, and (c) lower 25%, less positive. Placing them into corresponding categories, allowed for correlation of attitude scores with time spent and type of relationship.

Significance of the independent variables (amount of time spent and type of relationship) with dependent variable (attitude) was determined by use of a two-way ANOVA. The two-way ANOVA is used when there is more than one independent variable. In the current research, there were two independent variables, amount of contact and type of relationship. The two-way ANOVA allowed the researcher to look at each independent variable one at a time. In addition, it allowed the researcher to look at the effect that the two factors (variables) had on each other.

The current research evaluated how the type of contact and amount of time spent with a person with a disability effected attitudes as measured by the MIDS. Data were also collected on the type of contact and the amount of time spent with a person with a disability. For descriptive analysis qualitative data were organized into the following time spent categories (a) no time spent, (b) casual, (c) moderate, and (d) great deal. Qualitative data were also organized into the following relationship categories (a) friend, (b) relative,

(c) neighbor, (d) work acquaintance, (e) school acquaintance, (f) denied having a relationship, (g) identified themselves as having a disability.

The MIDS survey scores were divided into inter-quartile ranges in order to identify the most positive, moderately positive, and less positive attitudes. After both the qualitative and quantitative data were organized they were evaluated for significance with the application of a two-ANOVA.

CHAPTER 4

Results

The current study evaluated both the amount of contact and the type of contact students had with a person with a disability and attitudes toward people with disabilities. For this research, 170 students participated in the survey. The majority of participants were graduate students, N= 134 (78%). The sample was a sample of convenience; all students were declared majors in one of the following; rehabilitation counseling, rehabilitation services, psychology, counseling, school counseling, school leadership, marriage and family counseling, applied behavioral analysis, behavioral intervention case management, and education. The survey was anonymous and voluntary; one person declined to take the survey. The student who declined to take the survey did not give a reason for declining, she simply said no. The Modified Issues in Disability Scale (MIDS) was administered to groups of students at the beginning of their counseling classes. The students were given instructions to rate each of the 49 statements using a Likert Scale. Students were also asked to answer demographic questions regarding age, ethnicity, college major, gender, graduate/undergraduate, and disability status. Finally, students were asked to answer three open-ended questions regarding the type of contact and the amount of time spent with a person with a disability.

The mean age of participants was 28.3 years and the median age was 29 years (14 [.08%] students did not identify their age). In racial/ethnic identity, 58% (N=98) of the participants identified themselves as Hispanic; 15% (N=25) identified themselves as European-American; 12% (N=21) identified themselves as Asian-American; 8% (N=14)

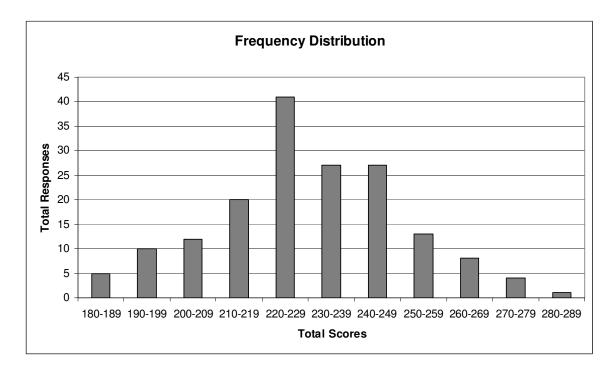
identified themselves as African-American; 2% (N=4) identified themselves as Armenian-American; 2% (N=4) were identified as other, and 2% (N=4) did not identify an ethnicity. Females represented 79% (N=134) of respondents and males 21% (N=36) of respondents. Majors were reported as follows: rehabilitation counseling, 26% (N=44); rehabilitation services, 15% (N=25); psychology, 12% (N=20); counseling, 11% (N=19); school counseling, 11% (N=18); school leadership, .06% (N=11); marriage and family counseling (MFC), .06% (N=11); applied behavioral analysis (ABA), .04% (N=7); behavioral intervention case manager (BICM), .03% (N=6); education, .02 (N=3); .04% (N=6) participants did not identify a major. Thirteen percent of participants (N=22) identified themselves as having a disability. The demographics of ethnicity and gender were somewhat representative of the university student body as a whole. The student body at California State University, Los Angeles was 63% female, with 51% of the population identified as Hispanic, 8% African-American, 25% Asian-American, and 15% European-American at the time this research was conducted (California State University, Los Angeles, 2005).

Total scores in this survey ranged from 182 to 289 and were evenly distributed with a mean of 229, a median of 228 and a mode of 227 (see Figure 1). The lowest score of 182 came from a female graduate student who had completed two-thirds of her degree in rehabilitation counseling. She reported that she did not have a disability and did not respond to questions regarding her ethnicity or age. The highest score of 289 was obtained by a 55 year-old European-American graduate student majoring in rehabilitation counseling. This participant identified himself as having a disability and as having

completed less than two-thirds of his degree. A descriptive evaluation was done for each of the group affiliation categories.

Figure 1

Frequency Distribution of the MIDS for all Survey Participants



Group affiliations included both relationship and time spent. Relationships were divided into 7 categories: (a) friend, (b) relative, (c) neighbor), (d) work, (e) school, (f) denied having a relationship, or (g) identified self as having a disability. Time spent affiliations were divided into 4 categories: (a) no time spent, (b) casual or acquaintance contact, (c) moderate contact, or (d) a great deal of contact. Of particular interest were differences in time spent and relationships between the upper 25% and lower 25% of attitude scores. This researcher was interested in looking at differences between these two groups to learn if the differences in attitudes, whose scores are most different from each

other, are related to differences in contact and type of relationships.

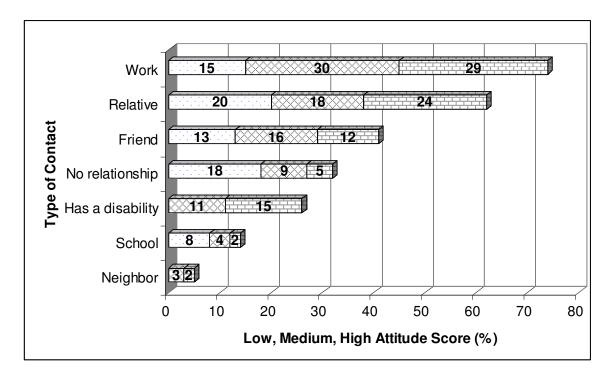
Respondents who did not have a relationship with a person with a disability, 18% (N = 7), had less positive attitudes compared with 5% (N=2) of respondents who never had a relationship with a person with a disability, scored in the upper 25%. Fifteen percent (N=6) of participants with the most positive attitudes identified themselves as having a disability compared to participants with the least positive attitudes in which no one identified themselves as having a disability.

Further descriptive evaluation revealed that the majority of respondents with positive attitudes, 29% (N = 12), had a work relationship with a person with a disability. Only 15% (N=6) of respondents with less positive attitudes had a work relationship with a person with a disability. Respondents in the lower attitude strata who had a relative with a disability made negative statements about the relative. For example, one respondent was angry with his brother-in-law who had a disability because "He did not do anything to improve his lifestyle." Another respondent reported "I would like to be taking care of myself but I am taking care of her." A respondent was embarrassed to be around her aunt with a disability. Another respondent had a mother with a back injury who reported that her mother "Cannot do things for herself." Respondents with more positive attitudes described their experiences with relatives differently, for example, "I have a father with a disability who has made me more open-minded about people with disabilities;" "I live with a relative with a disability and am able to see beyond stereotypes and understand people with disabilities;" "I have a sister with a disability and it makes me angry when people underestimate her potential;" and "I married a man with a disability; he gave me a

new view point" (see Table 1.1).

Table 1.1

Type of contact and attitude score converted to percentages



Eight participants described multiple relationships with people with disabilities. However, the relationships were of similar character. For example, four of the participants had more than one school acquaintance with a disability. Because the relationships were of like category, the participant's response was assigned to the contact category, school. The contact was assigned only once for each participant in order to prevent skewing of results. Two participants described having family members with a disability with whom they did not live. These participants were assigned the contact category of relative. Finally, two participants described having more than one friend with a disability; they were assigned the contact category of friend. In addition to the

assignment of contact categories participant responses were also assigned to amount of time spent categories, which was also evaluated descriptively.

Thirty-three percent (N=12) of respondents who had the more positive attitudes toward people with disabilities spent a great deal of time with a person with a disability compared to 21% (N=8) of those with the less positive attitudes. Those respondents who spent a "great deal of time" with a person with a disability and had a negative attitude described their relationship as a burden or described the person with a disability as not doing enough for him/herself.

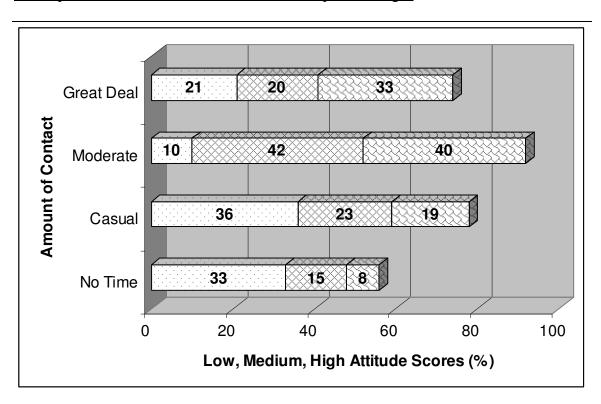
Eight percent (N=3) of the most positive respondents stated they had never spent time with a person with a disability compared to 33% (N=12) of respondents with the most negative attitudes. Those respondents with the most positive attitudes who had never spent time with a person with a disability described their understanding of people with disabilities from an empathic point of view. One of the respondents, a woman of color, stated that she identified with people with disabilities as a minority group and recognized that like her, they faced the same discriminatory challenges. Another positive respondent stated that his disability education had opened his mind regarding people with disabilities and he now considers them people first.

Most respondents in this survey described the time spent with a person with a disability as a moderate amount of time. Forty percent (N=14) of the most positive respondents spent a moderate amount of time with a person with a disability compared to 10% (N=4) of respondents with the most negative attitudes. The respondents with more negative attitudes who spent a moderate amount of time with a person with a disability

described the person with a disability as being "Isolated;" "Would not want to have my child to have a disability;" and "Disability has a life of its own".

Of the respondents with the most negative attitudes, 36% (N=14) had casual contact with a person with a disability compared to 19% (N=7) of the respondents with the most positive attitudes. None of the participants with less positive attitudes and causal contact described acquaintances or classmates in a negative way (See table 1.2).

<u>Table 1.2</u>
Time spent and attitude score converted to interquartile ranges



A two-way ANOVA was performed in order to uncover the main and interaction effects of the independent variables (a) type of contact and (b) amount of time spent with

a person with a disability. The between-subject factors were summarized. Results of this analysis indicated significant differences for the main effect of group affiliation (F [133.416], p<.000) and a significant difference due to the main effect of the amount of time spent with a person with a disability (F [2.697], p<.048). Additionally, a significant interaction effect was found between the type of contact and the amount of time spent with a person with a disability (F [976.419], p<.000) (see Table 1.3).

Table 1.3

Two-Way ANOVA of Between-Subject Effects

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	575.166	10	57.517	976.419	.000
Group	47.154	6	7.859	133.416	.000
Time	.477	3	.159	2.697	.048
Error	7.834	133	.059		
Total	583.000	143			

For this research attitudes were measured using the MIDS. The scores from the MIDS were divided into inter-quartile ranges which yielded a division of attitudes into most positive, moderately positive, and less positive scores categories. The scores were then correlated with time spent and type of relationship students had with a person with a disability. A two-way ANOVA was applied to the data and significance was found for the type of contact and amount of time spent, with group affiliation having the greatest amount of significance.

Descriptive results showed that a work relationship and a moderate amount of

time spent with a person with a disability yielded the more positive scores. When the amount of time spent with a person with a disability increased to a great deal of time, there was a shift in attitude scores from more positive to less positive.

CHAPTER 5

Summary, Discussion, and Recommendations

Summary

The purpose of this research was to investigate the amount of time spent and type of relationships students have with people with disabilities and the effect these variables have on attitudes toward people with disabilities. The sample population included graduate and undergraduate students at California State University, Los Angeles. Participants were asked to complete the MIDS followed by a series of demographic questions that identified gender, age, ethnicity, college major, and graduate/undergraduate status. These questions were followed by three open-ended questions asking respondents to identify the amount of time and the type of relationships that they have had with people with disabilities.

The MIDS was used because it is the only scale of its type that measures attitudes toward people with disabilities and at the same time, measures knowledge about people with disabilities. Makas (1991) noted that when people know little about people with disabilities they respond according to stereotypes they have learned. However, the more that is known about people with disabilities, the less likely people are to rely on stereotypic views.

The findings of the study indicated that group affiliation had the most significant impact on attitudes compared to amount of time spent with a person with a disability. In the present study, groups were identified as (a) work, (b) relative, (c) friend, (d) school, (e) neighbor and (f) having a disability. The work group contained the greatest number of

survey participants. In addition, the work group had the greatest number of survey participants with more positive attitudes. A surprising finding was the effect of amount of contact on attitude scores. As the amount of time spent with a person with a disability increased from no time, to casual, to moderate, attitudes improved with each increment. However, when the amount of time spent increased from moderate to a great deal of time, positive attitudes decreased and less positive attitudes increased. In addition, the greatest percentage of less positive attitudes was obtained by survey participants who had a relative with a disability.

The finding that spending a great deal of time with a person with a disability created a decrease in positive attitudes was in sharp contrast with the conclusions of prior research (Chen, et al., 2002; Budisch, 2004). However, the finding related to the type of relationship, for example work relationships related to positive attitudes, was consistent with prior research (Allport, 1954).

Discussion

The current findings regarding effect of various relationships on attitudes toward people with disabilities provided support for Allport's Theory of Contact (1954). Allport opined that positive attitudes were the result of four key conditions (a) equal group status, (b) common goals, (c) inter-group cooperation and (d) support from law. Allport cited work as an example of a group affiliation that met all of his key conditions. The current research supported Allport's premise regarding work. Most participants in the current study had a work relationship with a person with a disability and clearly the majority of positive respondents had a work relationship. Work not only meets Allport's four key

conditions, it also provides an environment for increased knowledge about disabilities

Martin, Scalia, Gary, & Wolfe (1982) found that rehabilitation counselors demonstrated more positive attitudes than other occupational disciplines. This positive attitude may be reflective of the knowledge that rehabilitation counselors have of their clients. As Makas (1991) noted, increased knowledge decreased the reliance on stereotypic views and stereotyping is generally negative. The MIDS measured both knowledge and attitudes of survey participants and the results showed that those individuals with the most positive attitudes were also the individuals who spent time working with people with disabilities. It is possible that in meeting the four key conditions of Allport, there is a concurrent increase of knowledge about people with disabilities. As Makas noted, increased knowledge increased positive attitudes. Peterson (1970) studied knowledge of mental retardation and attitudes toward the mentally retarded and concluded that there was a positive effect of knowledge on attitudes. The findings of the current study and prior research support the significance of disability education for students considering careers in working with people with disabilities. Disability education should be comprehensive such as classroom work (knowledge) in addition to internships that provide equal partner experiences for students. In addition, it is important for practitioners to appreciate the significance of an equal status relationship when working with a person with a disability. In the current study, the most positive attitudes were found in participants who had a work relationship or equal status relationship with a person with a disability. However, as previously noted a surprise in the current research outcome was the finding of a decrease in the number of people with

positive attitudes when the amount of time spent with a person with a disability shifted from moderate to a great deal of time. Not only was there a decrease in the percentage of positive attitudes in the great deal of time category, but the people with less positive attitudes had a relative with a disability. These findings were contrary to Chen et al., (2002) who compared differences in attitudes of people who had a family member or friend with a disability with people who did not. Chen, et al. concluded that individuals with a friend or family member with a disability had more positive attitudes.

It is interesting to speculate on the possible reasons why, in the current research positive attitudes would decrease when participants have a relative with a disability. Examination of the comments made by the respondents with less positive attitudes indicated perceptions of dependence by the person with a disability. This perceived dependence may create an asymmetrical relationship between the person with a disability and the relative. Jones (1984) described people with disabilities as stigmatized such that they are by definition lower in power and not on an equal footing with people without disabilities. This perceived discrepancy by both the person with and without a disability between the powerful and less powerful creates a disparity between the person with and without a disability. In addition, the skewed relationship between a caregiver and care receiver does not satisfy one of Allport's (1954) key conditions, equal group status. However, it supports Pettigrew's (1998) criticism of Allport because of his focus on short-term intergroup contact. It appears that when attitudes are evaluated beyond moderate contact such as in the current research there is a shift in attitude from most positive to less positive. Therefore, when the amount of time spent increased from

moderate to a great deal, the change in attitude scores may have had more to do with the inequality of the relationship, caregiver and care receiver. This finding may lead to a conclusion that spending more time with a person with a disability does not necessarily increase knowledge about the disability or that increased knowledge does not necessarily lead to a more positive attitude. Evaluation of this type of relationship and its effect on attitudes requires further investigation.

The current study had some limitations that have the potential to affect the results.

A weakness of the current study was the extent to which the findings can be generalized to other populations. The participants in this study were drawn from a sample of convenience and comprised of undergraduate and graduate students enrolled primarily in the helping professions. They may not be representative of other graduate and undergraduate students.

The university required detailed disclosure of the nature of this investigation to the participants prior to the collection of data. This could have introduced bias and cultivated in participants the desire to give socially acceptable responses. Students may have responded to items desirability, in essence claiming the desirable trait, rather than accurately responding to the item (Edwards, 1957). Therefore, it is unknown if the responses given in the survey accurately reflected the true attitude of the respondents. In addition, as Makas (1991) noted, when people know their attitudes are being evaluated they may respond differently. This may be true especially for students who are training for a career in the helping professions.

Recommendations

There are a number of factors in the present study that should be considered when designing future research on contact, relationships, and attitudes toward people with disabilities. The first factor to be considered would be a more representative sample of all graduate and undergraduate students.

The participants in this study were primarily students in a helping profession. A helping profession may be defined as counseling, social work, education, and rehabilitation, although there are others. Future research may seek to draw upon a more representative sample of students, such as students in non-helping professions. In addition, future researchers may want to consider deception of participants.

In some cases, deception may be a justifiable option in order to limit participants' knowledge of the true purpose and nature of the research. It may be possible to convince the students under study that their knowledge is being evaluated and not mention attitude. Another option may be to use more than one attitude survey and cross tabulate the results. Future researchers may also consider measuring attitudes of people who have frequent contact or live with a person with a disability and compare those situations to attitudes of students being trained to work with people with disabilities who do not have frequent contact or live with a person with a disability.

The present study highlighted the importance of time spent and relationships on attitudes. Positive attitudes toward people with disabilities create a more equitable world, ensuring equal access and equal participation (Altman, 1991). Rehabilitation counselors and students may reflect on their own relationships and the amount of time they have spent to understand how these variables affect their work. While the use of a sample of

graduate and undergraduate students who are majoring in helping professions warrants caution in generalizing this finding. The current study does suggest the importance of adopting and supporting educational procedures that increase knowledge about people with disabilities as well as creating internships that provide equal partner relationships and the sharing of common goals in pursuit of independent participation in the fabric of society.

APPENDIX

Consent Form

Measuring Attitudes of Graduate and Undergraduate Students Toward People with Disabilities

Survey on graduate and undergraduate students attitudes toward people with disabilities.

You are invited to take part in a research project conducted by Heidi Paul, assistant professor in Rehabilitation Counseling, California State University, Los Angeles. I am conducting this research in support of my doctoral thesis at the University of Arizona. In this study we hope to learn more about student attitudes toward people with disabilities. You are selected to participate in this study because you are a Cal State L.A. graduate or undergraduate student in the Charter College of Education. We hope that our research will lead to a clearer understanding of students and their attitude toward people with disabilities.

The survey is a 49 item questionnaire which asks you to respond to statements using a Likert Scale. At the end of the survey, there are 3 open-ended questions which you will be asked to complete. In addition to completing the survey and answering the questions you will also be asked for basic demographic information. It is important that if you choose to participate in the survey that you answer the demographic information. It will take approximately 15-20 minutes to complete the survey, open-ended questions, and demographic information.

There are no risks, discomfort, or inconvenience. In addition there are no individual benefits of your participation and there is no compensation for participating. Reports resulting from this study will not identify you as a participant. Since it is anonymous, there is no confidential information that can be given out. Also, there is no signature on this cover letter. Anonymity is maintained because your name will not appear anywhere on the survey sheet or the informational cover letter. The information will be kept in a locked location for 5 years following the survey. Your participation in this survey is voluntary. If you elect not to participate or wish to withdraw at anytime it will not be held against you in anyway as there will be no identification of students who decline to take the survey.

If you have any questions about this research at any time, please call Heidi Paul at 323-343-4439 or write her at hpaul@calstatela.edu, 5151 State University Drive, Los Angeles, CA 90032, Division of Special Education and Counseling. If you have questions about your rights as a research participant, please contact the University of Arizona Human Subjects Protection Program Office toll free 866-278-1455.

By completing this survey you agree to allow your responses to be used for research purposes. Please retain this consent form for your records

Heidi Paul, M.S. Assistant Professor Rehabilitation Counseling

REFERENCES

- Access Now, Inc & Robert Gumson v Southwest Airlines, Co., 02 CV 21734 (S.D. Fl. 2002).
- ADA & IT Technical Centers (n.d.). <u>Historical context of the Americans with Disabilities</u>

 <u>Act</u>. Retrieved April 22, 2005 from http://www.adata.org/whatsada-history.html
- Ajzen, I. (2001). Nature and operation of attitudes. <u>Annual Review Psychology (52)</u>, 52-58.
- Albrecht, G. (1992). The disability business: Rehabilitation in America. Newbury Park, CA: Sage Publications.
- Allport, G.W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.
- Allport, G.W. and Kramer, B.M. (1946). Some roots of prejudice. <u>Journal of Psychology</u> (22), 9-39.
- Allport, G.W. & Schanck, R.L. (1936). Are attitudes biological or cultural in origin?

 Character & personality: A quarterly for psychodiagnostic & allied studies (4),

 195-205.
- Altman, B.M. (1991). Studies of attitudes toward the handicapped: The need for a new direction. Social Problems, 28, 321-337.
- Antonak, R.F., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities. Springfield, IL: Charles C Thomas.
- Arenson, S. J., Lannon, P.B., Offerman, L.B., Kafton, A. (1982). The validity of attitude change by classical conditioning. <u>Journal of Social Psychology</u>, 117 (2), 243-249.

Bardon-LaFollette Act of 1943 (P.L. 78-113).

- Barr, M.E. (1904). Mental defectives. Philadelphia: P. Blakiston's Sons.
- Braddock, D. & Parish, S.L. (2002). An institutional history of disability. In Braddock, D. (Ed.). <u>Disability at the dawn of the 21st Century.</u> Washington, DC: American Association on Mental Retardation.
- Braille Institute (2004). Helen Keller: A role model for humanity. Retrieved April 15, 2004 from the Braille Institute Web site: http://www.brailleinstitute.org.
- Brennan, M.L. (2003). The ADA: What's your plan? Facilities Manager, 19 (2), 32-33.
- Bryon, W.V. (2002). <u>Sociopolitical aspects of disabilities</u>. Springfield, IL: Charles C. Thomas.
- Budisch, K. (2004). Correlates of college students' attitudes toward disabilities. <u>UW-L</u>

 Journal of Undergraduate Research, 7, 1-5.
- Bureau of the Census (1998). <u>Historical statistics of the United States: Colonial times to 1970</u>. Washington, DC: Author.
- California State University, Los Angeles (2005). Cal State L.A. Facts #34. Retrieved June 2005 from California State University Web Site:

 http://www.calstatela.edu/univ/irm_as/reports.htm
- Chen, R.K., Brodwin, M.G., Cardoso, E., Chan, F. (2002). Attitudes toward people with disabilities in the social context of dating and marriage: A comparison of American, Taiwanese, and Singaporean college students: Attitudes toward disabilities. Journal of Rehabilitation, 68 (4), 5-11.
- Chubon, R.A. (1982). An analysis of research dealing with the attitudes of professionals toward disability. <u>Journal of Rehabilitation</u>, 48(1), 25-29.

- Civil Rights Act of 1964 (P.L. 88-352).
- Clayton, P. (1999). Diagnosing and treating bipolar disorder. Minnesota Medical

 Association, 82 1-5.
- Colorado State University, Resources for Disabled Students. <u>A brief history of legislation</u>. Retrieved April 17, 2005 from Colorado State University Web site: http://www.colostate.edu
- Convery, M., Graham, L.B., Payson, J., Phillips, C. & Pomeroy, C. (2004). <u>Legislation</u>
 and societal attitudes: A love-hate relationship. Retrieved February 11, 2006 from
 Bryn Mawr College Web site:
- Cook, B (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. <u>Journal of Special Education</u>, 34(4), 203-214.
- Coombs, N.C. (1990). <u>Disability and technology a historical and social perspective</u>. Paper presented for the Organization of American Historians, Washington, D.C.
- Covey, H.C. (1998). <u>Social perceptions of people with disabilities in history</u>. Springfield, Illinois: Charles C. Thomas.
- Danky, J. & Cherney, J. (2003). The new right. Retrieved May 10, 2005, from http://slisweb.lis.wisc.edu/~jcherney/newright.html.
- Darwin, C. (1859). On the origin of species by means of natural selection or the preservation of favoured races in the struggle for life. London: John Murray.
- Dixon, J.A., Durrheim, K., & Tredoux, C. (2005). Beyond the optimal strategy: A reality check for the contact hypothesis. <u>American Psychologist</u>, 60, 697-711.

- Dixon, J.C. & Rosenbaum, M.S. (2004). Nice to know you? Testing contact, cultural, and group threat theories of anti-Black and anti-Hispanic stereotypes, <u>Social Science</u>

 Quarterly, 85, (2), 257-281.
- Edwards, A.L. (1957). Social desirability and probability of endorsement of items on the interpersonal checklist. Journal of Abnormal & Social Psychology, 55, 394-396.
- Eller, A., & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew's reformulated intergroup contact model and the common ingroup identity model in Anglo-French and Mexican-American contexts. <u>Journal of Social Psychology</u>, 34 (3), 229-256.
- Emerson, Kimbro, & Yancey (2002). Contact theory extended: The Effects of Prior Contact on Current Social Ties. <u>Social Science Quarterly</u>, 83, 745-761.
- Fishbein, M., & Ajzen, I. (1975). <u>Belief, attitude, intention and behavior: An introduction</u> to theory and research. Reading, MA: Addison-Wesley.
- Fries, K. (Ed.). (1997). Staring back. New York: Penguin Group.
- Gallagher, B.J. (1987). <u>The sociology of mental illness</u>. Englewood Cliffs, NJ: Prince Hall.
- Garske, G, G. & Thomas, K. (1992). Self reported self-esteem and depression: Indexes of psychosocial adjustment following severe traumatic brain injury. Rehabilitation

 Counseling Bulletin, 36 (1), 44-52.
- Goodwin, S. (2004). <u>American Cultural History 1960-1969</u>. Kingwood, TX: Kingwood College Library.

- Hadley, R.G. & Mitchell, L.K. (1995). <u>Counseling research and program evaluation</u>.

 Pacific Grove, CA: Brooks/Cole Publishing Company.
- Hayashi, L. (2004). An exploratory study on attitudes toward persons with disabilities among U.S. and Japanese social workers. <u>Journal of Social Work in Disability and Rehabilitation</u>, 2 (2/3), 65-85.
- Haydu, J. (1991). No change in existing standards? Production, employee representation & government policy in the United States 1917-1919. <u>Journal of Social History</u>, 25 (1), 5-25.
- Herbert, J.T. (2000). Therapeutic adventure staff attitudes and preferences for working with persons with disabilities. <u>Therapeutic Recreation Journal</u>, 34, 211-226.
- Jackman, M.R. & Crance, M. (1986). Some of my best friends are Black: Interracial friendship and Whites' racial attitudes. <u>Public Opinion Quarterly</u>, 50 (4), 459-486.
- Jenkins, W.M., Patterson, J.B., & Szymanski, E.M. (1992). Philosophical, historical, and legislative aspects of the rehabilitation counseling profession. In R.M. Parker & E.M. Szymanski (Eds.), <u>Rehabilitation counseling: Basics and beyond</u> (2nd ed., pp. 1-42). Austin, TX: Pro-ed.
- Jones, T.W. (1984) A framework of identification, classification, and placement of multi-handicapped hearing-impaired students. <u>Volta Review</u>, <u>86</u> (3), 142-151.
- Kautzman, A.M. (1998). Virtuous, virtual access: Making web pages accessible to people with disabilities. Searcher, 6 (6), 42-50.
- Kowalski, K. (2003). The emergence of ethnic and racial attitudes in preschool-aged children. Journal of Social Psychology, 143(6), 677-690.

- <u>Leap of faith</u> [Motion picture]. Manheim, M. & Picker, D.V. (Producers), & Pearce, R. (Director). (1992). United States: Paramount Pictures.
- Lichtenstein, N., Strasser, S. & Rosenzweig, R. (2000). Who Built America? New York: Worth Publishers.
- Link, B.G., Elmer, L., Neese-Todd, S. (2002). On describing and seeking to change the experience of stigma. Psychiatric Rehabilitation Skills, 6 (2), 201-231.
- Livert, D.E. (2004). Contextual influences on intergroup prejudice & friendship formation. <u>Dissertation Abstracts International</u>, 65, 1597.
- Livneh, H. (1982). On the origins of negative attitudes toward people with disabilities.

 Rehabilitation Literature, 43, 338-347.
- Longmore, P.K. (1987) Uncovering the hidden history of people with disabilities.

 Reviews in American History, 15, 355-364.
- Mackelprang, R.W. & Salsgiver, R.O. (1999), <u>Disability: A diversity model approach in human service practice</u>. Pacific Grove, CA: Brooks/Cole Pub.
- Makas, Elaine (1991) In the MIDST: Modified issues in disability scale testing. <u>The Social Organization of Disability Experiences</u>, Salem, OR: The Society for Disability Studies and Willamette University, 109-114.
- Malacrida, C. (2005). Discipline and dehumanization in a total institution: Institutional survivors and descriptions of time-out rooms. <u>Disability & Society</u>, 20(5), 523-537.
- Malle, B. (1996). Social psychology (3rd ed.). Pacific Grove, CA:Brooks/Cole.
- Mandeville, K.A. & Brabham, R.(1992). The State-Federal Vocational Rehabilitation

- Program. In R.M. Parker & E.M. Szymanski (Eds.), <u>Rehabilitation counseling:</u>

 <u>Basics and beyond</u> (2nd ed., pp. 1-42). Austin, TX: Pro-ed.
- Martin, W.E., Scalia, V.A., Gary, D.A., & Wolfe, R.R. (1982). Beginning rehabilitation counselors' attitudes toward disabled persons. <u>Journal of Applied Rehabilitation</u>

 <u>Counseling, 13</u>, 14-16.
- McCaughey, T.J. & Strohmer, D.C. (2005). Prototypes as an indirect measure of attitudes toward disability groups. <u>Rehabilitation Counseling Bulletin</u>, 48, (2), 89-99.
- Miller, F. (2002). Youths' perceptions of race, class, and language bias in the courts.

 Journal of Negro Education, 71 (3), 193-204.
- Moody, J. (2001). Race, school integration, and friendship segregation in America.

 <u>Journal of Sociology, 107</u> (3), 679-716.
- MSNBC (2005). Rosemary Kennedy, JFK's sister, dies at 86. Retrieved April 17, 2005 from the MSNBC web site htp://msnbc.msn.com.
- Nesdale, D., Maass, A., Griffiths, J. & Durkin, K. (2003). Effects of in-group and outgroup ethnicity on children's attitudes towards members of in-group and outgroup. <u>British Journal of Developmental Psychology</u>, 21 (2), 177-192.
- Neugebauer, R. (1987). Exploitation of the insane in the New World. Benoni Buck, the first reported case of mental retardation in the American Colonies. <u>Archives of</u> General Psychiatry, 44(5), 481-483.
- Niskanen, W. (1988). <u>Reaganomics</u>. Retrieved April 21, 2005 from The Library of Economics and Liberty web site: http://www.econlib.org
- Noll, S. (1996). The feebleminded in our midst: Institutions for the mentally retarded in

- the south, 1900-1940. Chapel Hill: University of North Carolina Press.
- Olson, M.A., & Fazio, R. H. (2002). Implicit attitude formation through classical conditioning. <u>Psychological Science</u>, 12 (5), 413-417.
- Parallels in time: A history of developmental disabilities. Retrieved May 25, 2005 from http://www.mncdd.org/parallels/menu.html.
- Patterson, J.B. & Witten, B, (1987) Myths concerning people with disabilities. <u>Journal of Applied Rehabilitation Counseling</u>, 18 (3), 42-44.
- Pavlov, I.P. (1941). <u>Conditioned reflexes and psychiatry.</u> Moscow, Russia: International Publishing Company.
- Peterson, D.D. (1970). More than knowing: Clergymen and their attitudes toward and knowledge of the mentally retarded. Mental Retardation, 8 (2), 24-26.
- Pettigrew, T.F. (1998). Intergroup contact theory. <u>Annual Review of Psychology</u>, 49, 65-85.
- Pfeiffer, D., Sam, A., Guinan, M., Ratliffe, K., Robinson, N., Stodden, N. (2003).

 Attitudes toward disability in the helping professions. <u>Disability Studies</u>

 Quarterly, 23, (2), 132-149.
- Pinkerton, S. & McClair, C. (1976). Influences of client diagnosis of cancer on counseling attitudes. <u>Journal of Counseling and Psychotherapy</u>, 23, 575-578.
- Public Broadcasting System (n.d.). <u>Timeline: Treatments for mental illness.</u> Retrieved

 June 24, 2005 from the Public Broadcasting System Web site:

 http://www.pbs.org/wgbh/amex/nash/timeline/timeline2.html
- Public Papers of President John F. Kennedy (1961-1963). Retrieved April 17, 2004 from

the John F. Kennedy Web site: http://www.jfk.com.

Rehabilitation Act of 1973 (P.L. 93-112).

Rehabilitation Act Amendments of 1984 (P.L. 98-221).

Rehabilitation Act Amendments of 1986 (P.L. 99-506).

Rehabilitation Act Amendments of 1992 (P.L. 102-569).

Rehabilitation Act Amendments of 1998 (P.L. 105-220).

- Rehabilitation Comprehensive Services and Developmental Disabilities Amendments of 1978 (P.L. 95-602).
- Roper, P. (1990). Changing perceptions through contact. <u>Disability, Handicap & Society,</u> 53 (3), 243-255.
- Rothman, D. (1971). <u>The discovery of the asylum: Social order and disorder in the new</u> republic. Boston: Little, Brown.
- Rustemli, A., Mertan, B., & Ciftci, O. (2000). In-group favoritism among native immigrant Turkish Cypriots: Trait evaluations of in-group & out-group. <u>Journal of Social Psychology</u>, 40 (1), 26-34.
- Sabharwal, F.S. (2003). Increasing disability awareness of future spinal cord injury physicians. Journal of Spinal Cord Medicine, 26 (1), 45-7.
- Seligman, M. (1975). <u>Helplessness: On development, depression, and death</u>. New York: W.H. Freeman.
- Sellin, D. & Mulchahay, R. (1965). The relationship of an institutional tour upon opinions about mental retardation. American Journal of Mental Deficiency, 70 408-412.

- Shafer, M.S., Rice, M.L., Metzler, H.M.D., & Haring, M. (1989). A survey of employees' attitudes toward mental retardation. <u>Journal of the Association for Persons with</u>

 <u>Severe Handicaps</u>, 14, 137-146.
- Sigelman, C.K. & Shafer, D.R. (1995). <u>Life span human development</u> (2nd ed.). Belmont, CA: Brooks/Cole Publishing.
- Skinner, B.F., (1990). Can psychology be a science of mind? American Psychologist, 45 (11), 1206-1210.
- Slininger, D., Sherrill, C., & Jankowski, C.M. (2000). Children's attitudes toward peers with severe disabilities: Revisiting contact theory. <u>Adapted Physical Activity</u>

 <u>Quarterly</u>, 17, 176-196.
- Social Security Act of 1935 (P.L. 74-271).
- Social Security Administration (2004). Traditional sources of economic security.

 Retrieved April 16, 2004 from the Social Security Administration Web site:

 http://www.ssa.gov/history/briefhistory3.html
- Sommer, K.L., Williams, K.D., Ciarocco , N.J. , & Baumeister, R.F. (2001). When silence
 - speaks louder than words: Explorations into the interpersonal and intrapsychic consequences of social ostracism. <u>Basic and Applied Social Psychology</u>, 23, 227-245.
- Spartacus (2004). <u>The New Deal</u>. Retrieved April 14, 2005 from the Spartacus Web Cite http://www.spartacus.schoolnet.co.uk/USARnewdeal.htm.
- Spielberger, Levin, & Shepard (1962) The effects of awareness and attitudes toward the

- reinforcement on the operant conditioning of verbal behavior. <u>Journal of Personality</u>, 30 (1), 106-122.
- Starner, J.W. (1999). Renaissance government and self government. Retrieved May 25, 2005, from http://wilkes1.wilkes.edu/~writing/government.html.
- Staats, A.W. & Staats, C.K. (1958). Attitudes established by classical conditioning.

 Journal of consumer research, (18), 1-22.
- Stiker, H. (1997). A history of disability. AnnArbor, University of Michigan Press.
- Tam, S. (1998). Comparing the self concepts of persons with and without disabilities.

 The Journal of Psychology, 132 (1), 78-87.
- Technology-Related Assistance for Individuals with Disabilities Act of 1988 (P.L. 99-407).
- Tyor, P.L. & Bell, L.V. (1984). <u>Caring for the retarded in America: A history</u>. Westport, CT: Greenwood Press.
- University of Missouri (2000). Orientation to Rehabilitation. Retrieved April 17, 2005 from the Region VII Rehabilitation Continuing Education Program Web Site http://www.rcep7.org.
- Vocational Rehabilitation Act Amendments of 1968 (P.L. 90-391).
- Walker, D.D. (2000). <u>The rebirth of federalism</u>. New York: Chatham House.
- Welch, P. (2004). A brief history of disability rights legislation in the United States.

 Retrieved from April 27, 2005 from the Universal Design Education Online Web Site http://www.udeducation.org.

- Welch, P. (1995). <u>Strategies for teaching universal design</u>. Berkeley, CA: MIG Communications.
- West, J. (1991) <u>The Americans with Disabilities Act: From policy to practice</u>. New York: Milbank Memorial Fund.
- World Book (2004). <u>Protest and civil unrest</u>. Retrieved April 16, 2004 from the World Book Web Site http://www2.worldbook.com.
- Wright, B. (1960). <u>Physical disability: A psychological approach</u>. New York: Harper & Row.
- Yuker, H.E. (1988). <u>Attitudes toward persons with disabilities</u>. New York: Springer Publishing.