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Police officers' perceptions regarding persons with mental retardation

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Police Officers' Perceptions Regarding Persons with Mental Retardation

by

Danielle M. Eadens

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Psychological and Social Foundations
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DEDICATION

I want to dedicate this study to all the persons with mental retardation whose lives have been lost or made harder due to the ignorance and/or prejudice of those in positions of authority.

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POLICE OFFICERS' PERCEPTIONS REGARDING PERSONS WITH MENTAL RETARDATION

Danielle M. Eadens

ABSTRACT

This study examined the attitudes held by police officers towards persons with mental retardation with regard to the domains of knowledge, social willingness, affect and contact. It also investigated relationships among group membership and perspectives towards mental retardation. An analysis of relationships between the four domains was also completed. A descriptive correlational design was employed to survey police officers, pairing the Social Distance Questionnaire with a researcher-designed instrument consisting of open-ended questions aligned with each domain. The sample included one hundred and eighty police officers from five different bureaus in one county in Central Florida.

Results of the study indicate that police officers hold generally positive attitudes towards persons with mental retardation, are knowledgeable about persons with mental retardation, and are socially willing to interact with such persons. In the domains of contact and affect, a discrepancy was found between the open-ended responses and the questionnaire data. The latter showed scores were skewed slightly higher than the neutral point of the scale, but the open-ended responses reflected lower contact and less positive affect. This inconsistency was attributed to instrumentation as the level of contact and affect were measured differently between the two surveys.

This study found that group membership by gender and race does in fact play a role in the shaping of police officer perceptions towards mental retardation, with females

having more positive affect and Hispanic officers scoring lower in social willingness. Significance was not found for either chronological age or years of experience. The analysis of relationships among the domains showed that each domain has a significant relationship with the other, with the strongest relationship between affect and social willingness. According to the study results, the most significant influence on a police officer's attitudinal score is the officer's social willingness to interact with persons who have that disability. The level of knowledge between the study participants was variable, but the responses and level of social willingness demonstrated more consistency when compared with the overall score. Information gained from this study is useful for developing disability awareness curriculum for public service providers and higher education.

CHAPTER 1: INTRODUCTION

Disability in Modern Society

“Congress acknowledged that Society's accumulated myths and fears about disability and disease are as handicapping as are the physical limitations that flow from actual impairment” (Brennan, *School Board of Nassau County v. Arline*, 480 U.S. 273, 284, 1987). Prior to the passage of the Americans with Disabilities Act (ADA) in 1990, Justice William Brennan and many researchers agreed that the attitudes held toward people with disabilities were barriers towards participation in mainstream society (Hergenrather & Rhodes, 2007). The passing of the Rehabilitation Act in 1973, the Civil Rights Commission Act in 1978, and the ADA in 1990 enabled people with disabilities to procure roles within society and the workplace. However, full participation in modern society is still inhibited by negative attitudes towards persons with disabilities (Hergenrather & Rhodes, 2007; Green, 2002; Lathrop, 1995). These negative attitudes not only impact statistics, such as number of workers with disabilities or percentage of persons with disabilities in management positions, but also impact the person with a disability's self concept. Hergenrather and Rhodes (2007) note that “a negative attitude toward persons with disabilities is significantly correlated with self-concept, personal issues related to one's disability, utilization of skills and abilities, and public vocational rehabilitation service outcomes” (p.66).

Quantifying the Disability Population

The literature suggests that the number of people with disabilities is a significant portion of the population, and that the number of people with disabilities worldwide is growing (Okoro, Balluz, Campbell, Holt, & Mokdad, 2005; Saketkoo, Anderson, Rice,

Rogan & Lazarus, 2004; U.S. Census Bureau, 2000, 2003, 2004, 2006). Fujiura and Rutkowski-Kmitta (2001) explain how the data counting disability is generally constructed through one of two models, the medical model or the functional limitation model. The medical model proponents assess “physical or mental abnormalities” while the functional limitation model advocates analyze those limitations that make everyday skills impossible to perform (in Albrecht, Seelman, & Bury, p.70). For the latter, they point out that the line at which a limitation or impairment qualifies as a disability is a fluid one. Mayhew (2003) focused on the multiplicity of ways to categorize people with disabilities and the strong potential to count those who have multiple disabilities more than once as they yield widely varying estimates that are generally irreconcilable with one another. Expounding further, Mayhew discusses the medical model of disability, which is based on morbidity, asserting that it offers the best account of disability causes, whereas the functional model is both simpler to apply and is of value to social security systems.

Quantifying Disability in the United States

According to Barnhart of the United States Social Security Organization (2005), the number of persons with disabilities who qualify for disabled worker benefits under Social Security, SSI disability payments, or Supplemental Security Income has grown dramatically over the past two decades. In 1985, the number was only half of the eight million workers listed in 2005. Since 1975, the number of adults and children receiving SSI or Supplemental Income has increased 130 percent.

According to the 2000 United States Census, 49.7 million people self-identified as having a disability or some type of long-lasting condition. Waldrop and Stern (2003)

translated the statistic to meaning in non-institutionalized persons at least five years old, nearly one person in five is identified as having a disability or long-lasting condition. It should be noted that the population of individuals over 65 strongly impacts the data, as their rates of disability are by far the highest. The Office of Disability Employment Policy breaks down the 49.7 million statistic farther, stating that only two-thirds of the 49.7 million have a disability classified as “severe” (U.S. Department of Labor, accessed Feb. 2007).

United States Census Bureau press releases (2003, 2004, 2006) indicate that the population distribution statistics have increased regarding noninstitutionalized individuals aged five and older who have at least one disability as follows: 49.7 million for both 2003 and 2004, and 51.2 million in 2006. The press release for 2005 is an outlier at 37.5 million; based on an examination of the other report years, this statistic may refer to those individuals identified as having a severe disability as that statistic is numerically closer; in 2006, the number of people with a severe disability was 32.5 million.

According to the Census Bureau (2003, 2004, 2005, 2006), the number of veterans who are receiving compensation for a service-related disability has also increased since 2003. In 2003, the total number of veterans with disabilities was 2.3 million with 366,000 injuries from conflicts in the Persian Gulf. In 2004, the respective figures were 2.4 million and 419,000. In the 2005 report, the respective numbers are listed at 2.5 million and 476,000, but in this report it is noted that the Persian Gulf data only covers service from August 2, 1990 through September 30, 2003. The 2006 report, which covers service through September 30th of 2004, puts the number of disabilities at 2.6 million and Persian Gulf figures at 540,000. Due to the ongoing conflict in the

Middle East, the number of U.S. veterans with disabilities and the number of those worldwide with physical and mental disabilities will continue to increase.

Okoro, Balluz, Campbell, Holt, & Mokdad (2005) investigated disability estimates across metropolitan and regions of the United States. The researchers found similar estimates between the Northeast, Midwest, and South and found the highest estimates in the West (p.1966). Okoro and her colleagues also found that the prevalence of disability is higher in women, those with a high school education or less and that it increased with age (p.1964).

Turnbull, Turnbull, and Wehmeyer (2007) focus on the number of children with disabilities, noting that approximately nine percent of all children from birth to adolescence are affected. Since the passing of the Individuals with Disabilities Education Improvement Act (IDEIA), defining disability restricts categorization and services to 13 disability categories: autism, deafness, deaf-blindness, emotional disturbance (or severe emotional disturbance), hearing impairments, mental retardation, multiple disabilities (two or more of the other disabilities listed), orthopedic impairments, other health impairments (e.g., HIV, sickle-cell anemia), specific learning disabilities, speech or language impairments, traumatic brain injury, and visual impairments including blindness (Mastropieri & Scruggs, 2007). In the United States during the 2003-2004 school year, Turnbull, Turnbull and Wehmeyer (2007) report percentages of children classified needing services as under IDEIA: 2.2 percent of infants and toddlers, 6 percent of children aged 3 to 5, and 9.05 percent of students aged 6 to 21.

Quantifying Disability Worldwide

The World Health Organization (WHO) estimates the number of persons with disabilities to be approximately 600 million, though it should be noted that many researchers feel worldwide statistics lack “an empirically based foundation for accurately representing disability populations internationally” (Fujiura, Park, & Rutkowski-Kmitta, 2005). Mayhew (2003) agrees, pointing out that the United Nations’ 1990 effort to publish international statistics on disability reported dramatically different disability rates among countries. Egypt was listed as having the lowest rate of disability, while Austria held the highest. Other published studies cite Canada, Australia, and the United States as having disability rates ranging between 15 to 20 percent of the population, rates even higher than that of Austria as listed by the United Nations (Mayhew, 2003, p.5). Fujiura and Rutkowski-Kmitta (2001) warned against taking the statistics at face value. Instead, the researchers suggested that the disability measurement model employed by the counting organization is the subject of the analysis rather than the statistics themselves. The assessors who employ the impairment model, like Egypt, report lower rates of disability, while agencies like the World Health Organization who employ the restricted activity model, report significantly higher rates of disability (Fujiura & Rutkowski-Kmitta in Albrecht, Seelman, & Bury, 2001).

Fujiura, Park, and Rutkowski-Kmitta (2005) studied the prevalence of intellectual disabilities in developed versus developing countries and found higher variability in the rates in the developing nations likely due to differences in diagnostic criteria and case finding methodology. Developed nations, those countries with well-established, free-market economies, report approximately three to five individuals born with an intellectual

disability per 1000. Developing nations have a larger range, from five per 1000 in India to 20 per 1000 in Bangladesh (Fujiura, Park, & Rutkowski-Kmitta, 2005).

Quantification as Political Arithmetic

Disability affects every ethnicity, gender, and socioeconomic status. The number of people with disabilities will continue to grow and the inclusion of this population into mainstream society will impact society at large. Societal acceptance and opinion will dictate whether this impact will be viewed as a positive one. Fujiura and Rutkowski-Kmitta (2001) describe counting disability as “political arithmetic” whose purpose is not statistical, but about the galvanization of awareness regarding disablement’s role in society (in Albrecht, Seelman, & Bury, p.93).

The Impact of Opinions about Disability

Persons with disabilities must struggle against stereotypes and misconceptions from the start of their education experience (Green, 2002; Lathrop, 1995). In examining how opinions regarding disability affect treatment of those with disabilities, it is logical to start with the kindergarten to twelfth grade educational experience. Some colleges and universities require general education pre-service teachers to take a course to gain understanding of various disabilities and how to accommodate and modify instruction for students with disabilities, while others do not (Carroll, Forlin, & Jobling, 2003).

Specialized training before becoming a full-time teacher, in-service training after the individual becomes a teacher, paired with ongoing support from special education professionals in the schools yield general education teachers who properly treat and understand how to educate and adapt instruction for exceptional students (Ross, 2002; Singh, 2001). George Eraclides (2001) presents self-reported complaints from teachers

regarding lack of training on how to identify, handle, and teach students with special needs.

Many other community groups play influential roles within the structure of our modern communities. One such group is the criminal justice system, specifically the police force. Criminal justice personnel, like educators, have regular interactions with persons who have disabilities. Another group is mass media, in that the media have influence over societal opinions, including opinions regarding disability. However, the training and ongoing support afforded to some educators regarding disabilities only highlights the deficiencies regarding the minimal training afforded to policemen and mass media personnel (Florida Department of Law Enforcement, 2006; Germaise, personal communiqué, May 3, 2005; Downes, personal communiqué, June 14, 2004; Jones, 2003; Hardin & Preston, 2002). Professional literature regarding maltreatment of persons with disabilities within the criminal justice system is extensive (AAMR, 2001; Beirne-Smith, Ittenbach & Patton, 2002; Greene 1991; Perske, 1990 & 1995). However, within this large body of literature, few solutions are proposed. Additionally, the relationship between perspectives regarding persons with disabilities among public servants and prior preparation in the area of disability has not been explored.

Training to become a police officer is extensive; cadets must learn everything from how to fire a weapon to interrogation techniques. While cadets and existing officers are trained in how to identify and ‘take down’ the mentally ill, there is only brief mention in regional trainings of handling persons with intellectual handicaps or other cognitive disabilities, as the focus is on physical disability (Florida Department of Law Enforcement, 2006). Many within the criminal justice system even use the terms

“mentally ill” and “mentally handicapped” interchangeably (Downes, personal communiqué, 2004). This under-serviced training area could potentially offer cadets and current officers tools to identify, understand, and assist persons with all kinds of disabilities, such as a person with a mental handicap. For example, Bowker (1994) conducted a study of 100 police officers, 75 lawyers, and 35 judges and found that “while criminal justice system personnel have some understanding of mental retardation, they are confused and uncertain how to deal with this population in a professional manner.”

Background

Attitude

Individual and societal attitudes toward those who experience disability influences interactions and treatment of those with special needs (Barrett & Pullo, 1993). Roberts and Smith (1999) discussed the theory of reasoned action, discussing that the best predictors of actual behavior are behavioral intentions, which are influenced by two components: personal attitude and a subjective norm. The latter is simply how the individual feels his/her peers and society as a whole will view the behavior. If attitude does indeed influence behavior, then measuring individual’s attitudes toward disability is the key to understanding what inspires such attitudes.

Personal attitudes can be affected by a multiplicity of factors, such as religious preference, profession, age, knowledge of disability, frequency and intensity of personal contact with people who have special needs, the kind of disability in question, and even the disability status of the experimenter (Aunos & Feldman, 2002; Castañeto & Willemsen, 2006; Essess, Beaufoy, & Philipp, 1993). Castañeto and Willemsen (2006) found that participants’ attitudes toward disability were more positive if the session

administrator had a disability him/herself. In the study, one of the experimenters had cerebral palsy and was in a wheelchair during the survey administration. An administrator's positive disability status influenced respondent attitude and, conversely, if the session administrator did not have a disability, the respondents' attitudinal scores were not as high. In studies of attitude towards disability, few researchers note the session administrator's disability status.

Haring, Breen, Pitts-Conway, Wilson, and Gaylord-Ross (1983) developed an attitudinal social distance questionnaire based upon the premise that "the degree of social distance one places between himself and others has a direct influence on the manner in which those persons socially interact." The researchers defined social distance as both a behavioral expression and self-perception of an attitude towards a person with a disability. The researchers set out to measure both of their constructs in the creation of the Social Distance Questionnaire (SDQ). Hergenrather and Rhodes (2007) agreed with Haring et al., as they suggested that social context plays a pivotal role in attitudes toward disability. They cited several studies that conclude attitudes are more positive in the social context of work rather than in dating or marriage.

Age and the amount of experience can also impact attitudes towards those with disabilities. Researchers who studied kindergartners' perceptions towards those with special needs concluded that, in the United States, Greece, and Canada, kindergartners are fairly accepting and have overall positive attitudes towards those with disabilities (Dyson, 2005; Nikolarazi, Kumar, Favazza, Sideridis, Koulousiou, & Riall, 2005). These positive attitudes may or may not maintain themselves as the children grow older, a reflection of their acculturation to the prevalent social distance norms discussed above

(Carter, Hughes, Conant & Budoff, 1983; Copeland & Breen, 2001; Clemenz, 2002; Krajewski and Flaherty 2000; Moon, Hart, Komissar, & Friedlander, 1991).

Nonetheless, many personal attitudes towards those with disabilities can be changed through purposeful intervention. Krahe and Altwasser (2006) investigated changing the negative attitudes of ninth graders towards persons with physical disabilities. They found the most successful intervention was a cognitive-behavioral intervention facilitating students gaining knowledge about the disability and participating in paralympic disciplines as instructed by athletes with disabilities. Many studies have been undertaken to change attitudes towards disability, most of which focus on disability awareness instruction as the independent variable of change.

Attitude and Quality of Life

The ideas an individual holds about persons with disabilities impact the quality of life of the person who has a disability (Barrett & Pullo, 1993). According to attitudinal measures of perceptions towards persons with disabilities, individual attitudes toward disability are affected by a multiplicity of factors, including knowledge, social willingness, affect, and contact (Carter, Hughes, Copeland & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983).

Knowledge

There is much research that shows that even at a young age, students are beginning to understand the fundamentals of disability. Dyson (2005) found that kindergartners in Canada were already aware of the concept of disability, “To them, a *disability* meant a different appearance and the inability to play” (p.102). In analyzing

the concept of disability per specific labels, Contant and Budoff (1983) found that awareness of physical and sensory disabilities is evident to children between age three and five, but they are not yet aware of mental retardation.

Smith and Williams (2001) point out that the research on the younger students' knowledge of disability as measured by awareness differs from knowledge of the consequences of disability. In this study, the researchers use consequences and characteristics interchangeably. Smith and Williams studied the knowledge of such consequences in different age groups of children, finding that preschoolers tend to generalize the consequences of one disability classification into another. For example, they will often perceive cognitive difficulties in students with emotional/behavioral disorders. The researchers also found that the conceptualization of learning impairments to be similar among older students and preschoolers, but that the eleven and twelve year olds could differentiate between the cognitive functioning of a person with Down's syndrome and an individual with a Specific Learning Disability while the younger ones could not. Although older children show a more accurate knowledge than younger children, as is evidenced by the Smith and Williams study, it does not necessarily lead to a more advanced/specific knowledge as one advances in age, per the findings on the Roper Starch Worldwide (1995) telephone survey. Roper Starch Worldwide (1995) conducted a random telephone survey of 1200 Americans about their knowledge of learning disabilities. The researchers' findings include the following: the general public knows that learning disabilities are widespread, but it does not understand what a learning disability is as 85% of the respondents associated it with mental retardation and 60% associated it with blindness. Roper Starch Worldwide surveyed the general public, but

others surveyed only the highly educated. Thompson and Bethea (1997) conducted a survey to study the knowledge of laws regarding disability among higher education faculty and found that most faculty were only marginally aware of the rights of students with disabilities in their classes. Among higher education faculty, Burgstahler (1994) noted positive attitudes regarding the inclusion of students with disabilities among higher education faculty, but that the knowledge of accommodations and disabilities is lacking. An increase in knowledge and more experiences with individuals with special needs leads to more positive attitudes towards such inclusion (Burgstahler, 1994).

Not having the knowledge about disability impacts other areas, such as having the social willingness to interact with those who have disabilities. A self-reported lack of knowledge regarding disability makes family daycare providers less willing to care for a child with a disability (Buell & McCormick, 1999). Additionally, not having the knowledge about disability is inversely related to actual contact with persons who have disabilities. The experiences a child has with others who have disabilities influence the conceptions he or she has about impairments (Diamond & Hestenes, 1994; Diamond, Hestenes, Carpenter, & Innes, 1997).

In order to change people's attitudes about disability, some researchers used disability awareness instruction to impact the participant's disability knowledge and, in turn, increase the positive attitudes towards those with special needs (Carter, Hughes, Copeland, & Breen, 2001). Other researchers believe attitude change simply has to do with contact and direct experiences with individuals with disabilities (Clemenz, 2002; Krahe & Altwasser, 2006). Based on the research, an argument can be made that awareness of disability and knowledge of disability are equitable terms and that direct

experiences with those who carry the label of disabled will simply increase the statistical measures of either (Carter, Hughes, Copeland, & Breen, 2001; Dyson, 2005).

Additionally, the other areas of contact and social willingness measures will similarly increase with such direct experience (Carter, Hughes, Copeland & Breen, 2001; Clemenz, 2002; Esses, Beaufoy, & Philipp, 1993; Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983; Krahe & Altwasser, 2006).

Social Willingness

Medvin and Mele (2003) examined preschoolers' willingness in playmate selection, finding that the children they studied preferred nondisabled playmates over those with disabilities in hypothetical situations. In comparing the preschoolers' preferences regarding playmates with physical versus developmental disabilities, they found playmates with physical impairments were preferred in the classroom setting while playmates with developmental disabilities were preferred in a playground situation. This positive attitude toward students with disabilities in leisure settings goes beyond the preschool age. Moon, Hart, Komissar, and Friedlander (1991) administered a peer interest survey to assess the recreational habits of 619 youth and found that the majority of the students they surveyed were open to same-age disabled peers being included in their recreational activities. Additionally, most of the students indicated they would like to get to know others better, no matter their disability (Moon, Hart, Komissar, & Friedlander, 1991).

Social context must be considered when analyzing the willingness and attitude towards persons with disabilities (Grand, Bernier, & Strohmer, 1982). Hergenrather and Rhodes (2007) conclude that "as social distance increases, attitude becomes more

positive,” as they pointed out ratings more favorable towards working alongside someone with a disability versus the lower ratings from participants regarding dating a person with a disability (p.67).

Affect

Affect is defined as simply a feeling or emotion (American Heritage Dictionary, 2000). The American Heritage Stedman’s Medical Dictionary (2002) defines affect as “a strong feeling with active consequences.” In studying adolescence, Larson, Richards, Moneta, Holmeck, and Duckett (1996) operationalized daily affect as the compilation of three feelings: happy/unhappy, cheerful/irritable, and friendly/angry. Moneta, Schnieder, and Csikszentmihalyi (2001) built upon the Larson et al. study but defined affect in daily activities as “feeling good about oneself and feeling happy” (p.125) Gerald Goldin speaks of affect as a system that both represents and communicates, “our emotional feelings and the complex structures involving them have *meanings*, even when we may not be consciously aware of those meanings, or be able to articulate them” (Hannula, Evans, Philippou, & Zan, 2004, p. 109).

Affect is an internal process most often measured by self-reported responses. DeBellis and Goldin (2006) looked at affect as an internal representational system. Affect is a complex internal process and such awareness of rapidly changing body feelings corresponds to emotional and behavioral responses (Bernet, 1996). Therefore, an individual’s affect towards persons with disabilities will clearly correspond to his or her behavioral response to the people he or she encounters who have special needs.

The act of learning itself is tied into the recognition of affect (Hanson, 1996). A person can only learn when he/she can accept either positive or negative feelings and

work with them. This ability to work with his/her own feelings, Hanson said, is the “highest form of rationality” (pp.10). Affect has been tied to many other areas beyond learning, such as achievement (Bong, 2002) motivation (Schweinle, Turner, & Meyer, 2002), conation (motivation in combination with volition), and cognition (DeBellis & Goldin, 2006; Kupermintz & Roeser, 2001). If indeed affect can be tied to learning, then a person’s affective outlook on those with disabilities may be subject to modification (Martin & Reigeluth, 1999; McCrary, 2000).

In the disability research, some authors have applied the term ‘affect’ in a different way. Castañeto and Willemsen (2006) relate affect to prejudice, noting “a person who is prejudiced might dislike (affect) people who are different from the self...” (p.1218). The researchers also discussed how prejudice can turn into discrimination against those with disabilities based on the public affect towards that population.

Contact

Many researchers discuss how contact with individuals of a certain population can positively impact attitudinal change. John Ray (1983) discussed the contact hypothesis, which is simplistically “the more one gets to know personally individual members of a minority group, the less likely one is to be prejudiced against that minority group” (p.3). Wells-Jensen, Wells-Jensen and Belknap (2005) compared pro-Braille attitudes between three groups of undergraduate students, concluding that the students whose instructor was blind himself had stronger pro-Braille attitudes than the other two groups whose instructors were sighted.

Krajewski and Flaherty (2000) found that high school students who had increased contact with persons who have mental retardation held more positive attitudes toward this

population than those who did not have planned contact. Similarly, Clemenz (2002) found that the nondisabled middle school student tutors' attitudes toward the mentally handicapped changed from fearful to positive attitudes and beliefs as measured by their qualitative responses. In self-reporting her attitude change, one tutor wrote, "[My attitudes] changed after the first day of this class because I realized there was nothing to be scared of and now the kids are my friends" (p.24). Even in kindergarten, attending an inclusive kindergarten increased positive attitudes toward people with disabilities (Nikolarazi, Kumar, Favazza, Sideridis, Koulousiou, & Riall, 2005). Curran (1998) demonstrated that attitudinal change is due to more than just the inclusion of individuals with disabilities. The undergraduate students in her study identified direct experiences with people who have mental retardation as the key to their belief change.

The studies in this section consisted of pre and post attitudinal measures whereby researchers introduced contact as the independent variable. In studies that used the Social Distance Questionnaire (SDQ), whereby prior exposure to persons with disabilities was one of several domains studied, researchers focused on the measurement of prior experiences such as seeing or talking with a person with a disability or whether someone in their family has a disability (Carter, Hughes, Copeland, & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983). These researchers found that increased contact prior to administration of the SDQ increased the likelihood that students would volunteer to work with special needs students (Carter, Hughes, Copeland, & Breen, 2001).

Statement of the Problem

Life profiles of persons with disabilities differ in many respects from those of the general population without a disability (Atherton & Robertson, 2006; Seltzer & Kraus, 2001). Nonetheless, persons with disabilities are increasingly becoming members of the larger society due to disability rights addressed in federal laws and court decisions (e.g., ADA, 1990; ACAA, 2004; IDEA, 2004; Pennsylvania Association for Retarded Children [PARC] v. Commonwealth of Pennsylvania, 1972). Individuals who have chosen the public servant career path interact with people who have disabilities on a frequent basis (Fitzsimons-Cova & Rothbart, 2001; McCullagh & Froyen, 1998; Saketkoo, Anderson, Rice, Rogan, & Lazarus, 2004). In the modern era of public service, public servants are responsive to the citizens, not to clients, customers, or constituents (Denhardt & Denhardt, 2000). A public servant's focus on the citizens leads to respect for all people and collaborative, democratic relationship-building within the community in which the public servant works (Denhardt & Denhardt, 2000). Additionally, the trained public servant positions of educator and police officers have guidelines and expectations to guide interactions with the public. Establishing an open, honest relationship with all citizens of the public servant's community, whether it be the officer's district or the teacher's classroom, is a pivotal expectation of both professions (Denhardt & Denhardt, 2000; Florida Department of Education, 2005; Swanson, Territo, & Taylor, 2001).

In contrast with the multitude of literature on teacher attitudes towards disability, there are gaps in the literature in both areas of understanding the police officer's perspective of disability and in exactly how that perspective shapes his or her interactions with such persons. The officer's personal perspective on the concept of disability in the

areas of knowledge, social willingness, contact, and affect clearly impacts daily interactions with those who have special needs. Formal analysis was conducted in order to understand the relationship between demographic variables, such as age, and the domains of knowledge, social willingness, contact, and affect. Additionally, this formal analysis determined additional training needs among the targeted populations of police officers as determined by their self-reported perceptions of people with disabilities, specifically mental retardation.

Theoretical Framework

Guba (1990) defines a paradigm as a basic set of values that guide our actions, both routine actions and purposeful scientific inquiry. The guidance for the current study comes from a combination of paradigms under the umbrella theory of social distance.

Social Distance Theory

The theory of social distance is part of the person-perception theoretical family (Young & Fox, 2002). Young and Fox (2002) explain the family of theories whereby individuals prefer certain attributes over others when interacting with people in society. Social distance researchers attempt to identify the “specific norms of avoidance that govern the interactions among individuals” (p. 537). Then, they measure the distance individuals employ when interacting with persons different than themselves (Young & Fox, 2002). In developing the Social Distance Questionnaire, Haring, Breen, Pitts-Conway, Wilson, and Gaylord-Ross (1983) believed that social distance was a fundamental concept in looking at how people interact with those who have disabilities. The researchers believed that social distance and attitude toward disability had a linear relationship, whereby the more time students spent with peers who had disabilities, the

more positively they felt towards that population. Gray and Denicolo (1998) offer an example of the social distance theory, noting that the way society approaches and deals with disability is where the problems with disability lie, not in the limitations of the disability itself.

In the current study, social distance was measured through the comparison of the objective domains of knowledge and contact with the subjective domains of affect and social willingness per the figure below:

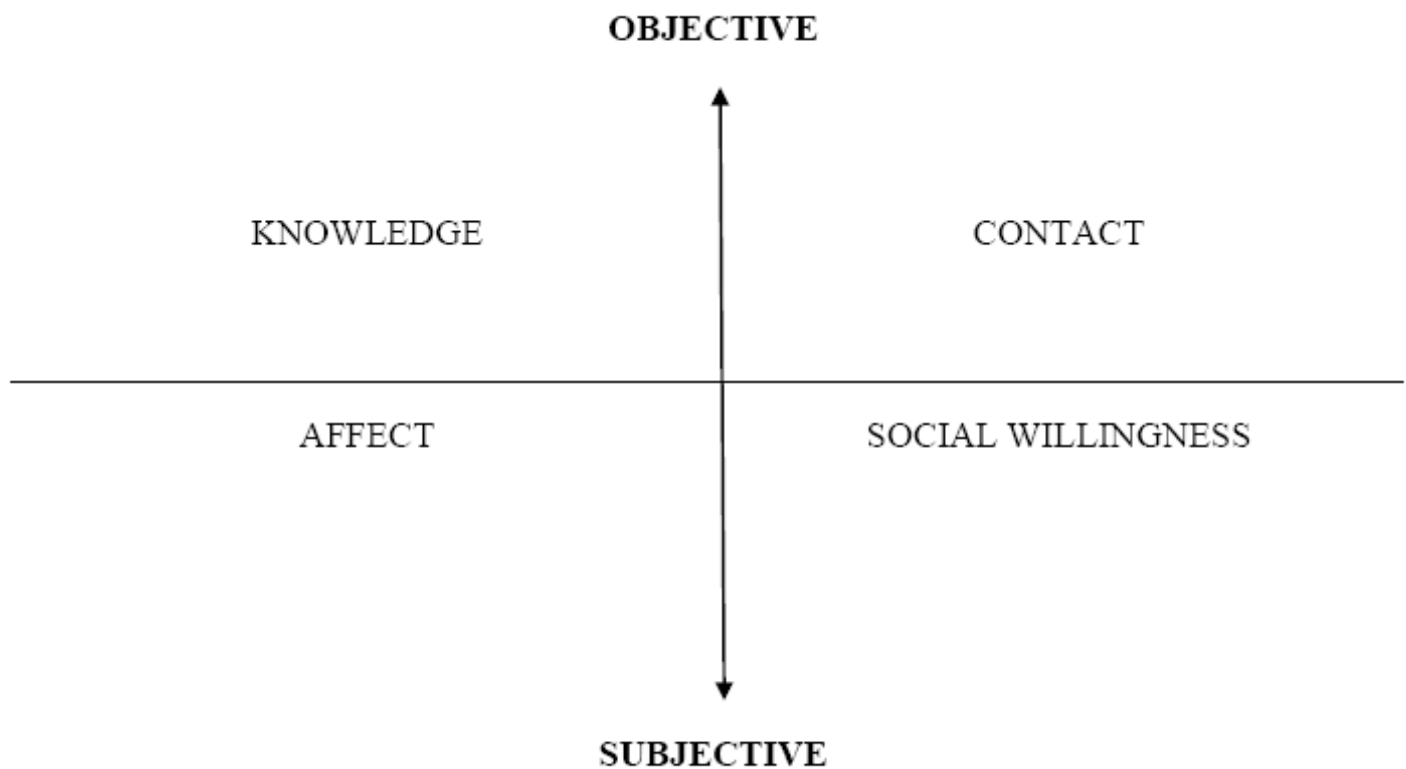


Figure 1. Objective versus Subjective Domains. Social distance was measured through the comparison of the objective domains of knowledge and contact with the subjective domains of affect and social willingness.

Paradigm Synthesis

Enveloped in the theory of social distance is the current study's synthesis of the two paradigms of postpositivism and normalization. Such synthesis leads itself well to mixed methodology, and the presence of synthesis or triangulation will only increase the usefulness of the study into public policy (Brown in Albrecht, Seelman & Bury, 2001). Synthesizing paradigms is not a new concept; in 1867, Edward Miner Gallaudet in studying teaching methods for deaf students, and W.E.B. DuBois' study *The Philadelphia Negro*, researched those in the minority by synthesizing value and methodological paradigms. The similarity in theoretical frameworks between their studies and the current study is worthy of notation. DuBois and Gallaudet both held a value paradigm that would currently be termed positivist thinking, whereby the inquiry was one based on the search for the truth. Also, all three inquiries have the end-goal of being used to improve the conditions for the minority group described in the study (Brown, 2001).

Postpositivism. The value paradigm selected for this study was based on a postpositivist theoretical framework. Though both objectivist frameworks of positivism and postpositivism hold that an external, objective, preexisting reality exists (Paul, 2002), the proponents of this theory are said to be critical realists, believing that humans can apprehend objective reality through flawed sensory perceptions (Paul, 2002). This critical realist ontology sets postpositivism apart from many of the other epistemological viewpoints, such as post-structuralism (Paul, 2004). The ontology of postpositivism is based upon this pre-existing reality, which can be observed and experienced, albeit imperfectly (Paul, 2004). The values of postpositivism boil down to the relationship

between inquiry and individuals whereby such inquiry must be trustworthy as it is immoral to affect the lives of others without having reasons that are trustworthy (Paul, 2004). Within the postpositivist framework, this study investigated how a person's group membership plays a role in his or her perspective of persons with disabilities in the areas of knowledge, social willingness, contact, and affect. Dennis Phillips (2004) emphasizes that understanding the causal relationship of factors is indispensable for framing policies and guiding interventions. He also focuses on the role of theoretical models as they lead humans to act or think in certain ways (Phillip's *A Postpositivist, Scientifically Oriented Approach to Educational Inquiry* in Paul, 2004).

Paula M.L. Moya is one of the forefront activists in the postpositivist realism movement and boils the theory down into two interdependent pieces, identity and experience. For Moya, identity goes beyond the essentialist views whereby identity is defined by membership to a particular group. Instead, an individual can inhabit more than one kind of identity and the collection of those identities shapes each and every interaction with society (McLemee, 2004). For example, a person who has chosen a certain career is more than just a teacher or police officer. They may also wear the label of wife, lover, mother, Latino, homeowner, or one of many other society-created identity groups. Instead, Moya defines identity as a "process that involves learning how to wrestle with actual structures of power" (McLemee, 2004, ¶18). With each label comes a vast variety of experiences; the labels worn by individuals shape each person's attitude and societal viewpoint, including how they view persons with disabilities. Finally, postpositivism lends itself well to this study as many social science scholars who work within the postpositivistic theoretical framework incorporate open-ended question

formats into their investigative methods (Toma, 1999). Postpositivism and normalization both have to do with life experiences and the combination of the two serves as the paradigm framework for this study.

Normalization. The normalization paradigm focuses on every person having the same access to life-cycle experiences and activities of daily living (Bailey & McWilliam, 1990; Carter & Parmenter, 1996; Wilson & Bartak, 1997). Normalized relations include a societal desire to implement accommodations that make available all conditions that the non-disabled take for granted (Shevlin, 2003; Wilson & Bartak, 1997). Proponents of the normalization movement point out that people with disabilities should be expected to have the same desires as the non-disabled to have sexual relations, raise children, and be financially successful (Aunos and Feldman, 2002; Baily & McWilliam, 1990).

The idealistic viewpoint of normalization as it applies to persons with disabilities presented by C.F. Goodey:

...What kind of society might it be (and still a complexly organized society) that had the ability to include people with the severest learning disabilities, to the point of not noticing, or not being anxious about, the difference between Wittgenstein [(a prominent Austrian philosopher)] and them (quoted in Simpson, 1998).

Social and structural disability theorist Michael Oliver offers a less-than-positive view of normalization saying it “offers disabled people the opportunity to be given valued social roles in an unequal society” (Neufeldt, 2001, p. 83).

Historically speaking, the normalization movement started with a focus on those persons with mental retardation. Before normalization was widely accepted, many

believed that society needed to be protected from people perceived as dangerous, which when paired with the prevailing medical model which focused on deficits, led many to believe that they needed protection from those with disabilities (Young, 2003). The normalization movement was a culmination of post-World War II ideas, attitudes and movements, including Goffman's critique of institutions, the psychological shift from controlling maladaptive behavior to reinforcing adaptive behavior, and the growth of psychology and humanism (Young, 2003). Since the acceptance of the normalization principle, integration of persons with disabilities into mainstream classrooms and communities has increased dramatically (Carter & Parmenter, 1990).

Within the framework of normalization, this study investigated how a person's career choice and other variables play a role in his or her perspective of persons with disabilities and how they relate to such persons in society. The individual opinions of persons were analyzed in the areas of knowledge, social willingness, contact, and affect.

Operational Definitions

Representatives from the American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (2005) collaborated to define disability as "A physical, mental, or developmental impairment that substantially limits one or more of a student's major life activities" or "A deviation in cognitive, motor, or sensory functioning that results in difficulty responding to environmental demands" (p.101). For those disabilities specifically named in this survey, the Diagnostic and Statistical Manual (4th ed. DSM-IV) was the source of the definition of the individual disabilities reported on in the current study (American Psychiatric Association, 1994). The disability mental retardation refers

to a discrepancy between “normal” IQ and a person’s lowered score *and* a discrepancy between “normal” adaptive behavior skills for the person’s chronological age and the person’s actual score on an adaptive behavior rating scale.

For the purposes of this study, public servant was defined as one who has been professional trained to serve the public. The American Heritage Dictionary of the English Language (2000) expands the definition of public servant to “a person who holds a government position by election or appointment.” The Fannie Mae Housing Initiative definition more closely reflects the term as used in this study. They expand the dictionary definition above to include those trained to serve the public, listing several professions: firefighters, police officers, nurses, emergency medical technicians, teachers, professors, social workers, case managers, military, government employees at any level, management analysts and financial analysts (Harris County Housing Authority, 2007). The public servants examined in this study are police officers. For police officers, this study was aimed at studying officers who have more frequent interaction with the public (e.g., patrol officer, detective) than those in administrative positions.

In this study, training referred to learning and development of skills to improve job performance with regard to specific emphasis on disability. This training also includes off-the-job instruction which has the intention of making the public servant “proficient with specialized instruction and practice” (American Heritage Dictionary of the English Language, 2000).

Level of experience was self-reported by participants as years spent in their current policing profession. Defining race was completed through categorization in the self-reporting of race as one of the following: Black/African American, White/Caucasian,

Hispanic/Latino or Other; for the latter, participants filled a blank describing their ethnic origin category. Gender and age are self-explanatory variables.

Attitude is defined by Plotnik (1996) as “any belief or opinion that includes a positive or negative evaluation of some target (an object, person, or event) and that predisposes us to act in a certain way toward the target” (p.540). Longoria and Marini (2006) point out the possibility of vast differences between a one’s behavior towards a person with a disability in societal context and that individual’s affect toward those with disabilities. Even though the individual may assist the person with a disability in a public situation, one “may have strong negative feelings toward this population (affect)” (p.20). The terms attitude and perspective were used interchangeably throughout the study.

For the purposes of this study, the attitudinal factors were knowledge, social willingness, contact, and affect. The definitions for the attitudinal factors emanate from the construction of the Social Distance Questionnaire (Carter, Hughes, Copeland & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson & Gaylord-Ross, 1983). Knowledge was defined as awareness of disability in tandem with an understanding of the characteristics of individual disabilities, such as mental retardation. The second factor is social willingness, which referred to a person’s proclivity to interact with persons who have disabilities, in particular mental retardation. The next attitudinal factor was contact, referring to the actual encounters an individual has experienced with persons who have mental retardation. Affect was the fourth factor, which examined an individual’s feelings toward persons with disabilities, especially mental retardation. The two factors of

knowledge and contact were classified as objective domains while affect and social willingness fell into the subjective realm.

Purpose

The purpose of this study was to examine the attitudes held by those in the police force towards persons with mental retardation with regard to the domains of knowledge, social willingness, affect and contact. The secondary purpose was to examine the relationship among group membership, whether it is level of experience, gender, age, or race, and perspectives towards mental retardation held by police officers with regard to the aforementioned domains. Finally, the relationships of the four domains to one another were analyzed, e.g., do stronger scores in the area of contact indicate higher scores in the other three domains of knowledge, social willingness, and affect? Information gained from this study can be used as a framework in the development of disability awareness training for the target population.

Research Questions

The questions addressed by this study are:

1. What are the perspectives of police officers regarding persons with mental retardation in the areas of knowledge, social willingness, contact, and affect?
2. What are the relationships among the variables of age, race, and gender as they pertain to police officers with regard to their perspectives of persons with mental retardation?

3. What are the relationships among the domains of knowledge, social willingness, contact, and affect among the police officers with regard to their perspectives of persons with mental retardation?

Significance of the Study

In analyzing the relationships among group membership and attitude towards mental retardation, reviewers and researchers understood whether there is a need for additional training. With the resulting data, appropriate training programs can be developed. Training programs should focus on the objective domains of knowledge and contact, which should, in turn, influence the subjective domains of affect and social willingness. This education should lead to fairer treatment of persons with disabilities.

Limitations of the Study

The delimitations of this study are due to its regionality. The results can only be generalized to these specific populations within this region of the country. The police officers' data can only be generalized to police officers in the same positions as those in the study and those who completed the same training program (the FDLE academy curriculum) as the officers in the study.

The limitations of the study include a significant concern regarding the variable of prior exposure. Some participants in the study (independent of the sample of which they are a member) may have family members, friends or other interactions with persons who have disabilities beyond the context of their job responsibilities. This is an impossible variable to control, but was quantitatively analyzed through the domain of contact and

qualitatively analyzed to look for trends based on open-ended responses on the survey. Other limitations included the amount of previous training, which often depends on which era the participant was educated and/or trained in, if it was in this region of the country, and the course content. Gender was another limitation to the study. Due to the overall demographics of the police officer population, the testing group had a significantly higher number of males than females.

CHAPTER 2: LITERATURE REVIEW

Introduction

In this literature review, areas pertaining to the topic under study included examination of the concept of disability, including its definitions and the sociological perspectives that shape how disability is viewed by public servants. Disability in the field of criminal justice was also examined to give perspective on the study population.

Defining Disability and Sociological Perspectives

Before the exploration of how knowledge regarding persons with disabilities may or may not affect treatment of such persons can begin, the importance of understanding disability must be defined and established. Historical documentation evidences the devastating effect ignorance and perspective can have on the treatment of people who are stigmatized by society.

Definition and Origin

Disability is defined by The American Heritage Dictionary of the English Language (2000) as “A disadvantage or deficiency, especially a physical or mental impairment that interferes with or prevents normal achievement in a particular area” (Definition 2).

Disability is considered the “main modern sense” of “handicap” which originated in the mid-seventeenth century as hand-in-cap, referring to bidders who indicated their desire to bid by placing their hand in a cap. In 1754, the umpire of a horse race “decrees the superior horse should carry weight as a ‘handicap;’ this led to a sense of ‘encumbrance, disability’ first recorded [in] 1890” (Harper, 2000). In 1852, the meaning

of handicap referred to “equalize chances of competitors..., but is implied in the horse-race sense” (Harper, 2000). In 1864, handicap was considered to mean to “put at a disadvantage” (Harper, 2000). The adjective version that most closely resembles the current term ‘disability’ is handicapped, which arose in 1915 (Harper, 2000). Hahn and Hegamin (2001) present “Nagi’s (1979) classic definition of disability as ‘a form of inability or limitation in performing roles and tasks expected of an individual within a social environment’” (p. 114).

Koch (2001) presents a division in disability theory. This division occurs between “those who insist it reflects a physical fact affecting life quality and those who believe disability is defined by social prejudice” (p. 270). Those arguing for the clinical model define disability “as a negative variation from the physical norm that necessarily disadvantages the physically distinct subject’s life and life quality” (p. 270). Those arguing for the social definition of disability “insist the importance of a physical difference lies solely in discriminatory social reaction to or ignorance of the effects of that difference” (p. 270).

Lamorey (2002) discusses different cultural beliefs on disability. Her concern addresses the Westernization of many educators around the world and the following Westernization of their perceptions on disability. Lamorey presents several cultural perspectives on causation (such as “magical or religious explanations”) to evidence the tremendous difference from United States’ perspective (p. 69). She points out that researchers excluding “these culturally sanctioned interventions in the special education research agenda is telling in itself and illustrates our monocultural understanding of disability” (p. 69). Lamorey proposes that our definition of disability must not be the

only definition considered when intervention plans are established for those from culturally diverse backgrounds. Much of Lamorey's proposed paradigm changed can be evidenced in the current movement toward multicultural education. She writes that cultural beliefs have a role "as protective factors or pathways to resilience" (p. 69). Cultural beliefs are important and often fortification for the family structure. They should be considered as a "protective buffer for families" rather than an "'old-fashioned', 'dangerous,' or 'foreign' belief system" that must be replaced with the "best practices in brain research, medical therapies, and behavior guidance programming" (p. 70).

Brown (2001) presents a definition of disability he believes is most known in the United States, "a major life impairment preventing them from participating easily in a major activity, such as walking, seeing hearing, seeing, hearing, thinking" (§2). Brown points out that "Worldwide there may be hundreds, if not thousands of definitions of disability" (§2). The American with Disabilities Act defines disability as "having a physical or mental impairment that substantially limits one or more major life activities, having a record of such an impairment, or being regarded as having such an impairment" (Colbridge, 2000, p.28). The ADA does not, however, differentiate between perspective – who is 'regarding' whether or not the person has an impairment, others and/or themselves? This raises another question, which could in and of itself be an area for future research looking at who has the right and/or privilege to "regard" and to question the presence of an impairment/disability.

Gartner (2001) discusses the terms often used to describe students with disabilities, ones "ranging from the seemingly benign to the saccharin to the offensive:

different learner, differently abled, disabled, deficient, lazy, slow, dumb, [and] incorrigible” (p. 555).

Link and Phelan (2001) discuss the stigma afforded to measuring disability, “‘most able-bodied experts’ give priority ‘to their scientific theories and research techniques rather than to the words and perceptions of the people they study’” (p.364). The authors mention a 1988 writing by Fine and Asch where they identified five assumptions of such a definition, “(a) that disability is located solely in biology, (b) that the problems of the disabled are due to disability-produced impairment, (c) that the disabled person is a ‘victim,’ (d) that disability is central to the person’s self-concept, self-definition, social comparisons, and reference groups, and (e) that having a disability is synonymous with needing help and social support” (Link & Phelan. 2001, p.364).

Measuring Disability

Measurement and disability are inexplicably bonded together. To qualify as having a disability, the person must be measured. Depending on the disability, different measurement procedures are utilized. According to Hahn and Hegamin (2001), “the most commonly adopted disability measures include scales designed to assess the ability to perform Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)” (p. 115). In this case, disability is measured as a physiological state impairment. Other measurements are used to test for different kinds of intellectual or behavioral disabilities. Standardized IQ tests are used to test from anything from a Specific Learning Disability (SLD) to Mental Retardation (MR). Emotional/Behavior Disorders (E/BD) are tested through the use of observation and behavioral checklists. Disability and testing are linked eternally because of the need to have a methodology

under which to qualify as disabled. Under the Individuals with Disabilities Education Act, children can be identified as having one or more of 14 defined disabilities:

mental retardation, a hearing impairment including deafness, a speech or language impairment, a visual impairment including blindness, serious emotional disturbance..., an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities (Sattler, p. 53-54).

Perspectives on Disability

Perspectives change views of disability and services those with disabilities require. Gartner (2001) discusses how these different perspectives perceive disability:

Psychological analyses tend to regard disability as an individual experience, with an eye to understanding how physical and mental limitations interact with personality development. Economic analyses treat disability as a social position with its own income stream, much like a job, and seek to explain the extent to which individual choice determines the assumptions of the disabled role.

Sociological analyses focus on the institutions that treat, house, and manage disabled people... and above all, they examine disability as a stigmatized social status...A political approach explores the meaning of disability for the state-the formal institutions of government, and the intellectual justifications that give coherence to their activities... School systems address disability both as a pedagogical matter-thus requiring special education-and as a means to ration scarce resources [with the perspective that students with disabilities] are no less human for being so different (p. 561).

Perspectives on Disability in the United States

In our country's not-so-distant history, persons with exceptionalities were sent to institutions where there was only a focus on custodial care with no educational focus such as academics or independent living skills (Braddock in Albrecht, Seelman, & Bury, 2001). Even before the day of institutions, until approximately 1820, persons with disabilities were the subject of a process called "bidding out." In this process, a person with intellectual disabilities or mental illness was auctioned off to the individual who said they would take care of the person for least amount of money from the state (Braddock, p. 27).

By the end of the eighteenth century, special education had its place as a "branch of education," though it was categorized under "charity" rather than formal education (Winzer, 1993, p. 5). In the United States, many of the schools that began as self-contained day schools for students who were blind and/or deaf became residential schools (Braddock, 2001). In the 1800s, alongside the development of these schools came the increase in asylums and other hospitals/institutions for those with mental illnesses. Due to the pushing from administrators of these asylums, the first institution for people with intellectual disabilities came about in the mid-nineteenth century. Prior to the civil war, the institutions for those with intellectual disabilities were often successful in training their residents and eventually returning them to their respective communities as "productive workers" (Braddock, 2001, p.36). With the economic recession due to the civil war, persons graduating from these institutions could rarely play in an increasingly competitive job market. Therefore, these "training schools" eventually became no more than "custodial asylums" (Braddock, 2001, p. 36-37).

As discussed in the societal opinion section of this paper, the onset of sideshows in the mid to late nineteenth century featuring those with physical and intellectual disabilities negatively impacted the views of people with disabilities as they became known as “freaks” and “monsters” (Braddock, 2001, p.38). Throughout the nineteenth century, persons with intellectual disabilities rarely remained with their families, but were housed in institutions or “belonged” to those orchestrating sideshows (Braddock, 2001; Winzer, 1993).

In 1904, disability was a tantalizing concept at the World’s Fair. At the 1904 World’s Fair in St. Louis, three prominent groups of disabilities were focused upon: “the blind and the deaf, the feebleminded, and premature babies” (Trent, 1998, p. 210). The blind and the deaf exhibit, which included eloquent discourse from Helen Keller, was separated from the exhibit on feeblemindedness. The symbolic geographical separation of the exhibits led to the development of “two dominant social constructions of disability... during the exposition” (p. 210). Social welfare officials and fair authorities “constructed a scheme to differentiate defectives who, they claimed, could improve from defectives who could not” which “showed a growing confidence in schemes for actively controlling defect. These active schemes included education for those who could change, and segregation, sterilization, and even euthanasia for those who could not” (Trent, p. 210). Additionally, “fair authorities followed the lead of social welfare officials in championing the use of science and education to justify this control” (Trent, p. 210). These perspectives disturbingly model that of Nazi Germany’s perspectives on disability which will be discussed in detail in the next section.

Due to the influence of the eugenicists, societal opinion categorized those with intellectual disabilities as incurable “deviant social menaces” (Braddock, p. 38). Babies born with birth defects were often refused medical treatment and many died due to this lack of care. At the start of the twentieth century, sterilization of those with intellectual disabilities or mental illness became more frequent. This offense against the field was discussed in great detail in the defining disability section.

During the great depression, families were more likely to utilize government-run institutions to take care of family members with disabilities. Those with intellectual disabilities were often targeted for illegal experimentation (e.g., testing food traced with radioactive elements) during the mid-twentieth century. During this same time, the onset of writings from persons with disabilities about societal attitude toward disability as the problem (not the disability itself) paired with the pushing from parents and friends of those with disabilities, this advocacy led to organizational developments in the field. Organizations like the National Association for Retarded Children and the Council of World Organizations Interested in the Handicapped were developed and began advocating for better services, institutions, rights and education for those with disabilities. Despite the growing evidence against the practice, throughout the 1960s, American society still tried to “control” those with intellectual disabilities through routine segregation, sterilization and isolation (Braddock, 2001).

In US History, the election of President John F. Kennedy marked a turning point in the way persons with mental retardation were treated. In 1961, Kennedy noted, “We as a nation have for too long postponed an intensive search for solutions to the problems of the mentally retarded. That failure should be corrected” (Braddock, p.46). He backed

up his words with action, developing a presidential panel to examine the issue, then by enacting laws that improved residential, community and preventative services for those with intellectual disabilities. With regard to education, the 1970s was a landmark time with the passing of Section 504 of the Rehabilitation Act in 1973 and the Education of All Handicapped Children Act in 1975. With the first, the federal government prohibited discrimination against persons with disabilities by institutions receiving federal funds, which prompted the accessibility movement. The latter is now referred to as the Individuals with Disabilities Education Act, but the premise remains the same, to offer students with disabilities a free and appropriate public education (Braddock, 2001).

Perspectives on Disability in Nazi Germany

Perspectives of disability can lead to societal stigmas and eventually to fatal consequences, as in the case of Nazi Germany. A synopsis follows of the historical progression of how perspectives of disability can start with a trivial concern over cost and snowball into murderous destruction. Additionally, propaganda's role in shaping societal opinion will be discussed throughout. Nazi Germany's views on disabled persons led to "significant precipitating historical events that served as a catalyst for what later became known as the Holocaust" (Mostert, 2002, p. 155).

Mostert summarizes the impact on today:

People with disabilities in Nazi Germany were assumed to be useless, subhuman, of no economic value, and certainly incapable of anything resembling a decent quality of life. These aspects won out over the few protests and documented evidence that, indeed, many people with disabilities, all things considered, lived

quite fulfilling lives (Mostert, 2002 & 2004, p. 168 & Conclusion section, respectively).

Prior to World War I, as in many other countries, persons with disabilities in Germany were often housed in state insane asylums and other private institutions. Once the war started in 1914, all sectors of the population experienced repercussions, both socially and economically. For those with disabilities housed in asylums, these repercussions included dramatic rationing of food, less heating and clothing, and a scarcity in medicine. These reductions led to increases in “communicable diseases and elevated mortality rates” (from 5.5% pre-war to 30% at the war’s end) (Mostert, p. 156). Societal perceptions began to change due to the fact that those not needing governmental support to survive (i.e. the nondisabled) were given a value of “higher economic worth” (Mostert, p.156). The Nazi party inundated society with propaganda promoting their position such as a poster titled “Cost of Hereditary Disease” whereby the cost of care of the person with a hereditary disease is compared with the cost of living for a notably Aryan family of five (USHMM, n.d.).

In the late 1920s, this stigma grew as societal tensions increased in intensity. Laypeople and German medical professionals held that the number of asylum inmates must be reduced in the long run for economic stability and that the infirmities of people with disabilities paired with “their sometimes inappropriate or undesirable behavior [became] a threat to public decency and social order” (Mostert, p. 156). In the public mind, the latter led to a “melding [of] disability and criminality,” not that dissimilar from the Hereditary era ending in the states just prior to the war. What may seem as non-ideal public perceptions soon led to much more dramatic consequences:

The juxtaposition of severe economic constraints, crowded asylums, the attachment of levels of economic viability to human worth, and the sense that people with disabilities formed a burdensome and often criminal element in society all significantly added fuel to ethical debates concerning euthanasia and sterilization. By the late 1930s, there was open discussion among many asylum administrators about actually killing inmates (Mostert, p. 156).

Euthanasia, which is by definition voluntary, took on a world of new meaning in Nazi Germany. The voluntary request for death was extended beyond the patient and “the economic burden that terminal illness or caring for the insane placed on families, caregivers, and the community was a factor to consider in decisions for euthanasia” (Mostert, p. 157). In 1920, Karl Binding and Alfred Hoche “called for the killing of people with disabilities, whom they viewed as ‘incurable idiots’ having no will or sense of living. Binding and Hoche put forth the notion that the right to live was earned “by being a useful economic contributor to society” (Mostert, p.157). Binding and Hoche described persons with disabilities as “empty human husks” who only consumed precious resources; “In Binding and Hoche’s terms, [persons with disabilities] were ‘useless eaters’ whose ‘ballast lives’ could be tossed overboard to better balance the economic ship of state” (Mostert, p. 157). Ewald Meltzer, an asylum director, was a critic of the two college professors and decided to conduct a survey of the parents of his patients. The survey’s results “showed a widely held contradiction among the parents that although they had strong emotional ties to their children, they simultaneously expressed, with varying degrees of qualification, a ‘positive’ attitude toward killing them” (Mostert, p. 157). This survey was eventually used a justification for thousands of murders of persons

with disabilities. Questions should be raised regarding the role that propaganda played in affecting the survey responses. One such example is a poster with a baby with birth defects paired with a caption that reads, “because God cannot want the sick and ailing to reproduce” (USHMM).

What is presently termed Social Darwinism theory was actually applied in the form of eugenics in Nazi Germany. The rationale was that the traits that made up human difference were all determined genetically. The Nazi party proliferated the idea that sterilization, incarceration and even death were effective ways of controlling the genetic population through unprecedented propaganda. Even prior to World War I, German eugenicists stated that the ‘feeble-minded’ were so due to inferior genetics and resulting physical characteristics, viewing ‘feeble-mindedness’ “as a hereditary degeneracy” (Mostert, p.158).

The first step the Nazi regime took to eradicate what they considered to be a hereditary degeneracy was to pass the Law for the Prevention of Genetically Diseased Offspring less than six months after the Nazi regime’s election. The law “decreed compulsory sterilization for persons characterized by a wide variety of disabilities” (Mostert, p.159). Estimates on the number of persons sterilized between 1934 and 1936 is staggering, categorized by disability:

persons with mental retardation (200,000), schizophrenia (80,000), Huntington’s chorea (600), epilepsy (60,000), blindness (4,000), hereditary deafness (16,000), grave bodily malformation (20,000), hereditary alcoholism (10,000), and other specified groups (Mostert, p. 159).

By 1938, the public opinion categorized persons with disabilities as being different, often engaging in criminal behavior and of little economic value. These dramatic perspectives eventually led to an increase in the requests for mercy deaths of persons with disabilities by family members. Disability had become justification for murder. The mercy death requests culminated in a request by a father of a child with multiple disabilities, cited as the Knauer child. After receiving no request from governmental authorities, he petitioned Adolf Hitler directly. Hitler sent his personal physician who assessed the child and said he saw a “creature... born blind, an idiot-at least it seemed to be an idiot-and it lacked one leg and part of an arm” (Mostert, p. 160). In response, Hitler assumed responsibility for the Knauer child’s death, directing that “the physicians [be assured] that any legal repercussions resulting from their actions [of killing the child] would be quashed” (Mostert, p.160). Through this step, “the state now both sanctioned murder and offered absolution from guilt for the perpetrators” (Mostert, p. 160). The case was a catalyst for Hitler, as he then encouraged his high-level officials to establish a state-sanctioned program to kill those children with intellectual or physical disabilities.

After 1939, the newly formed Committee for the Scientific Treatment of Severe, Genetically Determined Illnesses mandated that all children born with a disability be registered with a description of the disability. This registration packet was used by the committee to sort the children into three paperwork piles: (1) marked with a minus sign – the child was permitted to survive; (2) marked with either ‘temporary assignment’ or ‘observation’ “meant that a decision on the child’s fate was to be postponed until a later date”; and (3) marked with a plus sign – “identified for ‘treatment’, ‘disinfection,’

‘cleaning,’ ‘therapy,’ or ‘selection,’ all Nazi euphemisms for extermination.” (Mostert, p. 161). After the ‘plus’ children were transferred to one of 28 facilities, many of them hospitals, the children were killed through a variety of methods, including starvation, exposure to the cold, chemical warfare agents, or fatal injections to the heart. After the child was transferred, parents would be notified that their offspring was very ill and then another letter was quickly drafted announcing the child’s death, whereby the parents would not have enough time to visit their child prior to his/her death.

By December 1940, it was officially permissible to include children older than 3 for killing, and by late 1941, children and adolescents up to 17 years were also ensnared.... By 1943, ...it was extended to include healthy children of ‘unwanted races.’ By that time, approximately 6,000 children had perished (Mostert, p. 162).

In the summer of 1939, Hitler targeted adults with disabilities for execution. Based on the bureaucracy already in place for selection and notification to next of kin for children with disabilities, the simple continuation of these proceedings to adults with disabilities was uncomplicated. The registration process for adults with disabilities was now the responsibility of asylum directors. Between January 1940 and August 1941, tens of thousands were transported from asylums under the pretenses of a pleasant outing only to be transported to a designated ‘killing center.’ After the testing of many improbable suggestions for execution methodology, it was agreed that carbon monoxide gas would be the most effective. An official unit, the Community Foundation for the Care of Asylums, was established to be “responsible for hiring the killers and building staff, acquiring the gas, and later recycling gold teeth and selling jewelry from the dead” (Mostert, p. 163). Patients would arrive at the killing center and were ordered to remove

their clothing. Next, a physician would observe each person and match the patient with a fake cause of death. If the person had gold dental work, they were marked with an X across their backs and others were marked if appropriate for 'scientific' autopsy. Sixty at a time, patients were then told to enter a room designated the 'inhalation room' for therapeutic purposes, which was in reality a gas chamber measuring about 10 feet by 17 feet wide and 10 feet high. Then, "the inmates were locked in the chambers to await their deaths" (Mostert, p. 164). Bodies were then cremated. From these programs to execute persons with disabilities,

the official body count was 70,273, although postwar German prosecutors put the number at well over 80,000 adults with disabilities... This sad number was not a random achievement, however, but was the precisely calculated foal of the killing program. In the planning stages of the program, Nazi statisticians generated a formula for these deaths [based on killing the] worst of the worst [disabilities] (Mostert, p. 165).

These German "statisticians had also recorded the economic triumph of murdering those with disabilities; the 70,273 official 'disinfections' had saved the country 885,439,980 Reich Marks (RMs)" (Mostert, p. 165).

Perspective is everything. If a disability is defined by its economic cost, the person's life can become irrelevant. It is imperative that the definition of disability and its repercussions do not exclude looking at each person who has a disability as an individual. Mostert points out that though our modern day perspective is high in acceptance, service level, and tolerance, "perceptions of people with disabilities, especially those with severe and profound disabilities, are increasingly being framed by

their societal and economic worth” (Mostert, p.167). Euthanasia legislation is only present in Germany’s history as both Oregon and the Netherlands have made the state arbiters of life and death decisions for its citizens, including those with disabilities.

Mostert concludes *Useless Eaters* with a warning:

People with disabilities in Nazi Germany were assumed to be useless, subhuman, of no economic value, and certainly incapable of anything resembling a decent quality of life. These aspects won out over the few protests and documented evidence that, indeed, many people with disabilities, all things considered lived quite fulfilling lives. Learning these lessons and being aware of similar, if more subtle, problems and conditions facing people with disabilities in this new century should be carefully considered by special education professionals, parents and families, and society at large (Mostert, p. 168).

Mostert also makes the point that in studying disability, one must also consider the power of ideas, the convergence of macro-societal conditions, and the respective roles of propaganda, science and medicine.

In the early to mid part of the twentieth century, Margaret Mead wrote a great deal about appropriate treatment of persons with disabilities. She offers a warning similar to Mostert’s, “In order for people with disabilities to be genuinely included in their own culture, that culture must strive to make accessible to them the essential ‘wholeness’ of citizenship. That piece of a person that has been referred to as a disability must no longer be allowed to overshadow the ‘wholeness’ of the individual” (Smith, 1999, p. 131).

Societal Opinion Regarding Disability as Represented in the Mass Media

Mass media plays an integral role in shaping societal opinion at large. The perceptions of disability put forth by the media are often inaccurate representations of disability. Mass media's role in representing societal opinion was the basis for its analysis in this review. As previously discussed, shaping societal opinion about disability via media and/or propaganda can have devastating, even murderous effects, if not done with the best interests of the disability population in mind.

Stereotyping Disabilities

The mass media plays a key role in developing and proliferating societal opinions. Mass media research often concentrates on target group opinions, especially focusing on ensuring that minority groups are not offended. Unfortunately, one minority group is most often left out of these targeted groups, persons with disabilities. "Disabled people form the largest 'minority' group whose members consistently experience oppression and are denied fundamental rights" (Ross, 2001, p. 423). Levine (1998) offers perspective, saying that disability is simply part of life, but that the problem lies in the created societal barriers and that the media do little to reflect this truth.. Karen Ross (2001) makes a point based on the results of interviewing radio listeners with disabilities, "that a 'disabled' audience for radio (or any other medium, probably) simply does not exist... rather they are radio listeners with a disability: they are not a disabled audience" (p. 421).

The studies that do exist within the media field regarding how disability is presents evidence that within the dearth of media images about disability, all one will find are stereotypical and peripheral images of disability (Ross, 2001.). A group of people with disabilities interviewed by Ross spoke of the way they have been portrayed in the broadcast media, pointing out that portrayal does "have an effect on non-disabled

people's understanding of disability and disability issues, which in turn has an effect on how they treat disabled people in the real world" (Ross, 2001, p. 430). Farnall and Smith (2000) conducted a study analyzing such perceptions and found that "Viewers of positive portrayals of the disabled on television programs and the movies were more likely to perceive discrimination and less likely to say they had negative emotions when encountering people with disabilities," though it was said that they were uncomfortable with such encounters. The media does have an impact on public perception.

"Rejects or Supercrips." The media strategy conventionally used to frame persons with disabilities in the media classifies them into one of two constructed types, "either 'rejects' or 'supercrips',... which, at the same time, rests blame or accolade at the door of the individual" (Shaban in Ross, 2001, p. 425). Ross (2001) quotes Steve, one of her interviewees with a disability to illustrate, "'We're always portrayed either as victims or as super humans – as two extremes... not as an ordinary person with a visual impairment'" (p. 425). With these classifications, a person with a disability is either patronized as a victim or a 'super-cripple' worthy of accolade. With the latter, it carries with it the implication that all persons with disabilities can overcome all vicissitudes of his/her of her disability and that if they do no, they simply are not trying (Ross, 2001). Kraayenoord (2002) offers an example of the latter in a Brisbane newspaper published the day before Mother's Day with the headline *Mother Courage*. Next to the headline was a photograph of a woman in a wheelchair. The inside article described how three woman still had children despite being diagnosed with degenerative diseases which would be worsened by bearing children. Corbet, the editor of a national physical disability magazine, who speaks about how the mainstream press treat persons with

disabilities with admiration or pity, “Admiration because we live with what they think they could not; pity because they perceive our quality of life to be so low” (Levine, 1998, ¶10). Lathrop (1995) also emphasizes the point, saying that media coverage of disability tends to represent persons with disability as “objects of pity or courageous individuals struggling against adversity in order to ‘inspire’ others” (p. 36). In *Extra!*, Johnson (n.d.) offers an analogy, “like stories of women who excelled at baking contests or blacks who were credits to their race, ‘cripple stories’ have provided the only glimpses many Americans have had of the lives of people with disabilities” (¶6). Chrzanowski (2000) adds a third category to the media depiction of disability issue, whereby journalists represent those with disabilities “as pitiful cripples, super achievers or insane mental patients” (p. 38).

Additionally, Ross speaks of another construction on achievement regarding lowered expectations, where a person with a disability receives exaggerated praise for any minor success, which is also patronizing. Sarah, a person with a disability, explains the problem with the patronization, ““We’re not seen as people who have relationships, get married, have children. I know from my own experience of having a family and driving a car how that’s seen as out of the ordinary, like you’re so wonderful that you work and have an ordinary life”” (Ross, 2001, p. 426).

Any kind of portrayal of persons with disabilities in advertising creates points of contention between advocates and critics. Some people with disabilities will strongly approve of an advertising campaign using only models with disabilities. Critics may feel that such a campaign is only a “publicity gimmick” which “classed the disabled as a group” (McNamara, 1998, abstract section) There are some journalists, such as John La

Rock, who are in fact trying to portray persons with disabilities as having the same qualities as the rest of the population. In *AdWeek*, Butler (2001) describes a television advertisement for the Special Olympics where a young girl says, ““There’s this guy... He’s always in my face. Shouting at me. I have to cover my ears. But I still hear him. Just pushes me.... But I love him... He’s my coach”” (§6). La Rock says his goal in creating the spot was to demonstrate how the special Olympic participants held the same qualities as the nondisabled population. In London, Maria Eagle is quoted as she pointed out that “In 2003, more than half of all new government advertising campaigns have included disabled people... it is close to achieving its long-term target of featuring an image of disability in one in five of its executions” (“Analysis: Disabled move up the agenda,” 2003, ¶3-4). The minimal representation of people with disabilities “in advertising is completely out of balance with the actuality of their widespread presence in the real world” (“Analysis: Disabled move up the agenda,” p. 16). Eagle is quoted as reminding the public that ““Disabled people are consumers like everybody else”” (“Analysis: Disabled move up the agenda,” p. 16). Why is this the case? Do advertisers not know the population facts? Minnie Moll pontificates, “much advertising is aspirational, but disabled people are not seen as such and do not fit within the creative [thought process]... The belief that the more beautiful the people in a commercial, the more desirable the product” (“Analysis: Disabled move up the agenda,” 2003, p. 16).

“*Sanitizing Disability.*” The media often ‘sanitizes’ disability in order to make it “‘palatable’ for a predominantly non-disabled audience” (Ross, 2001, p. 426). Ross (2001, p. 426) asks “Why are disabled characters often left as two-dimensional ciphers, peripheral to the narrative thrust – unless the story turns to a disability theme...?”

In 1932, the circus horror film *Freaks* approached disability with a documentary-style film looking at ‘abnormal’ bodies of a circus sideshow. That film has been banned since shortly after its opening. In this film, the persons depicted had dramatic physical disabilities, but were depicted in a documentary-style format, showing the “‘freaks’ eating, joking, proposing marriage, even giving birth—in short, behaving as humans capable of ‘normal’ embodied actions and desires” (Larsen & Haller, 2002, p. 164). The subjects of the film are even shown as violent and rebellious against their oppressors, not as passive persons per the disability stereotype. Such reality simply was not palatable to the mainstream audience, leading to widespread banning of the film.

Penny Boot, a writer with a disability, explores what is described as a taboo subject, sex and disability. She argues that “we must speak out for our right to be sexual, to be human...Apparently we do not slog industriously, we do not f*ck, we do not raise families and so on – we are merely pitiable and jealous shadows of our nondisabled betters” (Boot in Ross, 2001, p. 427). Another challenger of “the long-standing social perception of persons with disabilities as asexual” is Ellen Stohl (Lathrop, 1995, p. 36). In 1987, she gained attention due to her appearance (with wheelchair) in *Playboy*. In 1994, she appeared on the cover of *New Mobility*, a magazine about physical disability, “dressed seductively and making no attempt to conceal her wheelchair” (Lathrop, p. 36). As a psychotherapist, Stohl expresses frustration with the media as she sees little change since her appearance in *Playboy* several years ago (Lathrop, 1995).

Why is this sort of sanitized representation the case? Why don’t those working in mass media know better? Ross (2001) explains that the program makers are concerned about acceptability for their non-disabled audiences, have limited imaginations, have had

very little, if any, contact with people who have disabilities and tend to fill disabled roles with nondisabled actors.

Lucy Gwin is the editor of the disability-rights publication *Mouth* and a brain-injury survivor. Gwin was once approached by a television newsmagazine producer who invited her to develop a story about the abuse of patients within residential rehabilitation facilities (Lathrop). He promised that he would run the story “if she could produce five or six people with ‘clean and cogent’ stories of abuse, and who were ‘attractive and personable.’” (Lathrop, p. 36). Gwin asked the producer if those terms were his way of asking for nondisabled interviewees. After more inquiry, the producer agreed that a person in a wheelchair would be acceptable, since they “could shoot around the wheelchair” and refused a woman who could not speak, but could write her story down (Lathrop, p. 36). Gwin spent a week searching for cases that met the producer’s criteria, only to give up and send the producer this facsimile: “I feel as if I’m a slave who’s just escaped from the plantation. I’ve made it up North, and by chance the producer of the top news show wants to expose the entire institution of slavery, but only if I can find him five or six white slaves” (Lathrop, p. 36).

Representation of Disability Types. The disabilities that are presented in the media are often restricted to certain, more ‘palatable’ disabilities, where the person looks normal and is, therefore, less likely to be offensive to the non-disabled mainstream audience. Interviewees with disabilities point out that “Blindness seems to get a monopoly” and that “obvious, visible disabilities – wheelchairs especially” are what the media presents (Ross, 2001, p. 427). McClimens (2003) discusses epilepsy, “It’s the second most common neurological condition after migraine yet unless it’s shoe-horned in

as a plot device none of the characters seems to be affected or know of anyone who is” (p. 27). He points out that the public is “entitled to demand more verisimilitude when it comes to the representation of that 5 percent of the population whose lives are made more difficult by a disabling society” (McClimens, p. 27).

Auslander and Gold (1999) found that newspapers in both Canada and Israel most often reported on and treated positively the classifications of physical disabilities, followed by disabilities of a psychiatric nature and then developmental disabilities. In addition to only presenting choice disabilities, Helen, a person with a disability, points out that “There’s a tendency for disabled characters to get better or die. They seldom just live ordinary disabled lives like most us” (Ross, 2001, p. 431). Additionally, Dr. Haller conducted a study which found that very few printed news stories revealed women as having disabilities (“How does the press view and report on disability topics?,” 2004). McClimens (2003) points out the impact of the absence of ‘real’ disability, “The continued absence of genuine portrayals of disability or impairment reveals something about the cultural values that underpin so much of what is on offer on our screens” (p. 27).

Disability Vocabulary

Mass media coverage revolves around language and communication to the public. Therefore, it is imperative that reporters, broadcast writers and radio personnel understand how to manipulate language and vocabulary to maintain audience interest without offense to people with disabilities. Many of the persons with disabilities Ross (2001, p. 429) interviewed complained about the way disability is represented in appeals programming, “as objects of pity requiring ‘our’ help, through the use of derogatory

terms such as ‘wheelchair-bound,’ ‘crippled,’ ‘handicapped’ or the most frequently heard, ‘the disabled.’”

Ross quotes Joan, another interviewee with a disability, who nicely summarizes how she sees the problem, “The problem is that the people working in the media aren’t disabled themselves, so what you get are sensational terms but no understanding of what lies behind them” (Ross, 2001, pp. 428-429). Leo (1990) is concerned, however, about “oversensitivity [running] rampant.” He explains,

The disability-rights movement objects to all use of the words crazy and moron as insulting to the mentally impaired. The movement also generally objects to cartoon characters such as Mr. Magoo (bad eyesight), Porky Pig (stutter), Daffy Duck (lisp) and the wicked witch from Disney’s ‘Snow White’ (the implied connection between evil and ugliness (Leo, p.17).

People-first language is the focus of the majority of the resources on the language of disability (Institute on Disability; Beyond the AP Stylebook, 1992; Auslander & Gold, 1999). The Institute on Disability offers some non-examples to illustrate: “Sally is a brain-damaged woman as a result of a car accident” and “Kate and Will’s visually impaired daughter Judy plays soccer” (§4 & ¶1, respectively). Person-first language simply means the person is put before the disability. For example, a reporter should say ‘A forty-year old man with autism’ rather than ‘An autistic forty-year old man.’ Something so simple could easily be weaved into the training of personnel within the mass media field. It also assists and reminds the writer to focus on the person rather than his or her disability. Beyond its impact onto the mass media personnel, it would

dramatically change the focus of societal opinion, including that of all public servants who work with disabilities.

Societal Stigmatization of Persons with Disabilities

Stigma is a historical concept with negative connotation. Goffman (1963) explores the term's development to what he offers as a current definition, "an attribute that is deeply discrediting" (p.3). In *Living Stigma*, Green, Davis, Karshmer, Marsh and Straight (2005) define stigma "as an adverse reaction to the perception of a negatively evaluated difference" (p.4). Understanding the important role media play in the proliferation of such stigma illuminates the need for additional education to avoid such stigmatization. In researching the concept of stigma, one finds that the media can create or spread concepts/constructs of stigma. The media portrayal offered of disability has and will continue to impact societal viewpoints of people with disabilities. Link and Phelan (2001) warn against a damaging effect of stigma, an 'Us versus Them' mentality.

When a person is diagnosed with a disability, whether it be a minor (such as Attention Deficit Hyperactivity Disorder) or a more serious disability (such as Cerebral Palsy), that person and his or her family are automatically placed into a separate category by society. Green (2002) explains,

The diagnosis [of their child having a disability] also thrusts parents into a stigmatized social category... They have had no preparation for the world in which individuals with disabilities and their families live. They suddenly come face to face with the vagaries of public reactions to disability, which range erratically from extraordinary acts of kindness to bizarre expressions of sadness and even conscious avoidance (p.22).

Another parent of a child with a disability illustrates Link and Phelan's Us versus Them mentality created through this stigmatizing categorization,

We parents of children with disabilities get a lot of 'you are so wonderful as parents taking care of Scott/Heather (you supply the name). I don't see how you do it all...working, doing all the stuff for your child, and keeping a home. I know I could never do it.'... If the other person had a child with a disability, he/she would do what has to be done (Seligman & Darling, 1997, p. ix).

From her perspective as a parent of a child with Cerebral Palsy, Green (2002) also explores the complexities of the stigma phenomenon, "The juxtaposition of these erratic public reactions with the reality of Amanda's happy, socially engaged, normalized life is often quite startling" (p.32).

With this stigmatization of disability comes an impact on the disability community. Stothers, editor of the disability publication *Mainstream*, points out that refusing to "identify oneself as disabled... Garner[s] a certain amount of social approval" since "in society's view..., it is the disabled person's duty to 'overcome' his or her disability" (Lathrop, 1995, p. 38). Therefore, even practicing journalists with disabilities hesitate to identify themselves as disabled. Stothers recalls his experiences at the *San Diego Union-Tribune*,

At the Union-Tribune I counted around twenty-five people who had disabilities, but probably no more than three or four of them would identify themselves as disabled. These were people with visual problems, with hearing problems, with mobility problems of varying degrees of severity—but they didn't think of

themselves as being disabled, and they certainly didn't identify with a movement (Lathrop, p. 38).

Stothers believes the media overlook putting stories about disability issues into a larger context of the disability community or disability movement.

Priestly's Categorical Perspective. Priestly (2003) identifies four categories in which the stigma of disability impacts a person, impacting biology, identity, culture and social structure. It is imperative that people working in the mass media field understand that disability affects all four of Priestly's complex categories and that these categories overlap. Disability is biological, with the majority of disorders having a significant biological component affecting the person's mind or body. The person's disability is part of his or her identity. It does not define them, but it is a piece of who they are. Additionally, the person's social and cultural structures are affected by the disability. Mass media plays a role in the latter two categories. Media personnel can be better public servants by removing many of the negative stigmas within the latter two categories which so negatively impact the lives of persons with disabilities.

Reporter Perspective

Lack of education has led to inaccurate representation of disability by reporters in the media. Don Germaise (personal communiqué, May 3, 2005) a reporter for WFTS' ABC Action News, states his preparation for being a reporter was through receiving a degree from the University of Florida in Broadcast Journalism and that any other training was "on the job training." When asked about specific training in handling persons with disabilities, he chuckled and said that he had received nothing beyond on-the-job training. Such training would be helpful, believing that any kind of "extra training helps." He

likened training of learning to handle a person with a disability to learning “how to handle a black person.” He stated that he would be willing to go for training and that the way to entice reporters to such training is simply to offer it. However, when asked if his job allotted time to attend such training, he said, “No,” affirming that time constraints would be an issue. He would be open to attending a training session on how to handle persons who have disabilities, but states that he “cannot speak for other reporters.”

When asked how he knows if a person has a disability, he stated that it is either “apparent or people tell me.” When asked which category his previous interactions with persons who are mentally handicapped fall into, he answered “half and half,” mentioning that if a person has a mental illness, such as bipolar disorder, they are more likely to tell him. If a witness to a crime is obviously mentally handicapped, he may treat them differently based on the extent of his or her disability. If the disability is more severe, he is less likely to use that interview on the air (Germaise, personal communiqué).

Mass Media Influence on Study Population

The mass media plays a crucial role in representing society to the masses. Propaganda is a powerful, powerful tool, as illustrated by the influence it had on societal opinions in Nazi Germany. Ignorance in any area will negatively affect this responsibility into a representation of inaccuracies to the masses, which includes the target population of police officers in this study, “Media messages are effective as reinforcers of people’s views [or] catalysts for change” (Ross, 2001, p. 430). Affecting societal opinion is a responsibility that cannot be taken lightly. Unfortunately, people working in mass media have very little, if any training to increase their knowledge about the very subject areas they report on. To have a career in the mass media, a degree within

the field is less than optional. Many well-known network television anchors never even attended college. Informal investigations of persons within the field have determined that, on average, only fifty percent of persons employed in mass media have a degree in the same. Hardin and Preston (2002) examined journalism textbooks looking at the issue of diversity and how they approach disability, finding little to no representation in the texts. Jones (2003) focuses on the lack of dissemination of disability-focused research and identify that ignorance on the part of the mass media plays a tremendous causal role, “Reporters easily understand race, gender, age, ethnicity, and religion, but when you talk disability their eyes glaze over” (¶17).

Positively Impacting Societal Opinion on Disability

Haller (March 2003) warns journalists against misrepresenting disability as pitiful or tragic, but to represent it as a part of daily life. She suggests four guidelines as a start for instructing journalists to better report on the concept of disability. The first is to “Improve sourcing. Seek out people with disabilities as sources, not just as subjects” (Haller, ¶4). The second is for the journalist to examine his or her own biases. If the journalist feels uncomfortable or that they do not understand the disability experience, they should increase the number of disability issues they cover to gain more exposure. Haller’s third guideline is to check terminology “because commonly used terms often do not represent” the experiences of persons with disabilities. She offers the example of the term ‘wheelchair-bound,’ explaining that wheelchair users do not feel bound or confined, but that “wheelchairs allow people mobility and independence” (Haller, ¶6). Finally, Haller tells journalists to make sure they know their history. In particular, she states three major acts of legislation with which they should be familiar, the Rehabilitation Act of

1973, the Individuals with Disabilities Education Act of 1975 (IDEA) – including reauthorizations in 1997 and 2004, and the Americans with Disabilities Act of 1990 (ADA).

Ross (1998) analyzed the results of a study conducted by the British Broadcasting Corporation (BBC) which consulted people with disabilities to gain their perspective on how the disabled population is portrayed in the mainstream broadcast media. Many of the changes those interviewed wanted to see had to do with respect. They want the media to practice

respecting the diversity of disability and portraying those varied experiences;
respecting the views of disabled people and consulting with them to provide more authentic and credible portraits; and respecting the abilities of disabled people and actively involving disabled media professionals in all aspects of program production against all genres (Ross, 1998, abstract section)

In another publication, Ross (1997) offers a nice summary, saying that the audience of people with disabilities wants broadcast media to depict disability as a part of everyday life.

Levine (1998) emphasizes that media coverage should put any disability stories into a larger context of the disability rights movement and “helping people understand that [disability issues] are civil-rights issues” (¶1). Lucy Gwin frankly presents a similar point:

Wake up, g*dd*mn it,’ she tells nondisabled journalists. ‘This is a civil-rights movement. There is a civil-rights movement happening right in your midst and you’re not covering it that way—you’re covering it as “tragic but brave.”’ Not

having a disability, she says, is no excuse. “You didn’t have to be black to see that there was a civil-rights movement. You didn’t have to be of draft age to see that there was an antiwar movement. Why can’t you see this? Why can’t you see past the pity?” (Lathrop, p. 37).

Ross (2001) expands the concept of education into understanding the experiences of persons with disabilities; if more people are working within the mass media field, both on air and off, knowledge will be expanded due to the experiences these personnel will bring. Levine (1998, ¶8) notes that reporters often only “talk with service providers or national organizations run by people who don’t have disabilities.” Instead, they should “consult the real experts—people with disabilities and the organizations run by them” (Levine, ¶8). However, Dr. Beth Haller’s 1998 study analyzed 256 printed stories about disability issues and found that in only 30 percent of the stories were sources cited as a person with a disability or his/her family. In *Extra!*, Johnson (n.d.) offers other ideas for news stories about persons with disabilities, suggesting that reporters look at the conditions people with disabilities face, including “rampant job discrimination,” how government has failed to enforce laws requiring new buildings to be handicap accessible, “the failure of Medicare or Medicaid to support disabled people who want to stay out of nursing homes,” and the difficulties persons with disabilities face in long-distance travel because the airlines do not honor a 1986 law which requires airplanes to be handicap-accessible (¶7).

Coleman (1999) also believes that beyond educating the media, the disability community needs to make some changes. Her first suggestion is to establish “a national media team” so national experts are identified and easily accessible (Coleman, Ideas

section). Secondly, fear about being misrepresented in the media must be overcome in order to help reporters understand perspectives of persons with disabilities. Persons in the disability community must approach reporters rather than waiting for them to be the ones who initiate contact. Additionally, as persons representing the disability community to the public, Coleman states,

We have to have our facts straight and the information as accurate and truthful as possible. We don't have to emphasize or bring up the down side, but if we're asked, we can't skim over it or not tell the truth, or they'll never come back to us again (The plans section, ¶3).

Finally, Coleman emphasizes the need for a unified front where people with disabilities stop advocating in isolation, but turn the movement and representation into one purpose-driven campaign.

Educating those employed in the mass media field is the key to reducing the proliferation of stigma regarding disabilities. Without key personnel understanding the impact of their portrayal (or lack thereof), societal change will not be possible.

Auslander and Gold (1999) surmise that people within the press have an important role to positively shape public attitudes toward disability. The destigmatization must start through our most proliferate mediums, broadcast, print and radio in order to change the way society as a whole, including those who serve the public, view the disability experience.

Criminology & Disability – Focusing on Intellectual Disability

Intellectual Disability/MR Defined

There are many terms used, even in current day, that represent intellectual

disability. In the schools, one will most often hear mentally handicapped, while in the research it is often referred to as mental retardation. No matter which term is being used, it is important to be able to distinguish the differences between a person with the intellectual disability and one without an intellectual disability. The American Association on Intellectual/Developmental Disability (AAIDD), formerly the American Association on Mental Retardation (AAMR) has an interesting introduction to the definition,

Mental retardation is not something you have, like blue eyes, or a bad heart. Nor is it something you are, like short, or thin.

It is not a medical disorder, nor a mental disorder.

Mental retardation is a particular state of functioning that begins in childhood and is characterized by limitation in both intelligence and adaptive skills (AAMR, 2003, Lines 1-5).

A diagnosis of mental retardation revolves around the requirement that the person must have “significant limitations both in intellectual functioning and adaptive behavior as expressed in conceptual, social, and practical adaptive skills” (AAMR, 2002, Page 1). It has been established that a person with mental retardation must be significantly limited in areas of adaptive skills. This raises the issue of developmental competency with respect to aberrant behavior. Nondisabled offenders have no diagnosis of such limitations to compare with that of offenders with MR.

In the assessment process, a person must have significant limitations in both areas in order to be diagnosed as having mental retardation. If they score low on an IQ test but age-level in adaptive behavior or vice-versa, they will not qualify. Corporal Dale Osada

of the Tampa Police Department has spent 25 years as a police officer, including time on the SWAT team and as a detective. He believes that police officers can know that a person has a mental handicap by speech, physical abnormalities, and the “way they do things” and his/her manipulation of himself/herself and objects.

T.C. Downes, also with the Tampa Police Department, notes a similarity between the mentally handicapped and the mentally ill, that police officers are unsure of how much a direction or a question is understood or how much the person with the mental illness or handicap should be held responsible for. Downes also surmises that people’s perception often motivates calls for authorities to get involved in a situation with a person who has a mental illness or mental handicap, “People call [police] because they’re odd” (Personal communiqué, June 14, 2004). The research supports the presupposition that persons with mental retardation are more likely to have encounters with law enforcement than nondisabled persons, whether it be as an assailant or victim of a crime (McAfee, Cockram, & Wolfe, 2001).

False Accusations

Beirne-Smith and her colleagues (2002) summarize the difference between persons with MR and nondisabled persons by quoting a police officer who stated that the mentally handicapped are “the last to leave the scene, the first to get arrested and the first to confess” (Page 140).

Another police officer, Corporal Dale Osada, notes that it is possible to get a mentally handicapped person to admit to a crime they did not commit with coercive questioning. He sees this to be especially true when the detective is overzealous, “has any indication that a mentally deficient person did it, or just wants to close the case”

(Personal communiqué, June 17, 2004).

Several studies have been conducted in order to determine what happens to individuals with mental retardation in the interrogation stage. Often, a person with mental retardation may wish to hide their disability or the police officer interrogating is not properly trained to handle the situation. Persons who hide the disability “may not want police officers to know that they do not understand the questions and consequently may avoid answering them,” inadvertently making themselves look guilty.(Beirne-Smith et al, 2002, Page 140). Krishef (1991) and Beirne-Smith (2002) both discuss the theory that persons with MR are more likely to not understand their Miranda rights and confess to leading questions in order to please authority figures (Beirne-Smith, Page 140; Krishef in Greene, Page 14).

Approaches in general interviewing/interrogation technique have been in a process of change. T.C. Downes of the Tampa Police Department notes the recent emphasis on a non-antagonizing approach in that it increases the chances of a genuine confession and/or statement. A friendly approach, Downes says, works better for negotiators and interviewers (Personal communiqué, June 14, 2004).

Krishef (1991) points out several issues a person with mental retardation may have with his or her lawyer and the court system,

- May have difficulty in conveying what transpired to their lawyer

- May not be understood by their lawyer to be handicapped

- May not be aware of plea bargaining procedures and may be sentenced on the basis of a more serious crime

- May not be given consideration for probation to the same extent as nonretarded

individuals (p.14).

Greene (1991) agrees, noting that the court system treats persons with MR differently than nondisabled or ‘non-retarded’ individuals. He lists some of the difficulties people with mental retardation have in the court system, “differential treatment in the system, more frequent guilty pleas, less frequent appeals, failure to deal with the issue of competency via a pretrial evaluation, . . . less use of pretrial diversion, probation, and other nonincarceration programs.” (Page ix).

T.C. Downes points out that defense attorneys will bring up their client’s mental handicap as a mitigating circumstance. If the victim is mentally handicapped, many precarious issues are raised. Attorneys rarely bring a case into a courtroom that is not “winnable.” Attorneys are often concerned about putting the victim on the stand in this case and feel limited by the person’s circumstances. Downes offers an example to explain this apprehension; he speaks of a situation in which a person with mental handicap claims to have been raped in a group home. Concerns arise over *assent* versus *consent* or even whether the person has the mental capacity to give consent legally. Without physical evidence it is nearly impossible to try the case. Even if physical evidence is present (e.g., semen), whether assent was given may still be an issue (personal communiqué, June 2004).

Robert Perske studied specific cases of persons with mental retardation and their experience in the criminal justice system. In *Deadly Innocence* (1995), Perske discusses precursors, the crime, and treatment of Joseph Arridy, a man condemned to die for his supposed role in the murders of two young girls. Perske conducts an in-depth investigation of his own after Arridy’s execution, researching an obvious moderate

mental impairment and what Perske believes was coercion by a higher-functioning gentleman into aiding in the aforementioned murders. Perske brings up the issue of how the mentally ‘retarded’ are treated in the criminal justice system from a historical viewpoint. His review is pointed, convincing, and provides Joe Arridy to add a face to a difficult issue.

In *Unequal Justice* (1990,) Perske compiles several case studies and specific issues in his convincing discussion of the inappropriate and unfair treatment of the mentally handicapped in the criminal justice system. Each chapter examines one case study (e.g., Johnny Lee Wilson, a mentally handicapped man convicted of a crime for which he was later declared innocent) or one specific issue (e.g., the maneuverability and subjectivity of IQ scores). In the latter, Perske frankly presents evidence of the disturbing discrepancy between truth and perception by many of those in the legal field. For example, Perske quotes “a few misguided defense lawyers,” “He can’t possibly be retarded...

...because he doesn’t drool.

...because you can see how normal he looks.

...because he’s so big.” (etc) (Page 41).

Perske’s frank writing style yields a compelling case and a quotable conceptualization of his arguments of the misguided understanding of mental retardation in the criminal justice system as is evidenced in the statements above.

Prison Population

Historically, the adult prison population has had a higher rate of persons with MR than the general population (Krishef in Greene, 1991, Page 4). According to the AAMR,

“Mental retardation is more prevalent (4% to 10%, according to various researchers) in the criminal justice system than it is in the population at large (1.5% to 2.5%)” (AAMR, 2001, Q.1: bullet 2).

Krishef (1991) reports on an analysis of studies conducted in the United States regarding the median percent of retardation in the prison population during certain historical periods. Historically, the prison populations have always included persons with MR. From 1910-1914, the median percent of prisoners with MR was at its highest at 50%. In the following time period, 1915-1919, the median percent went down to 28%. Then, from 1920-1924 and 1925-1928, the median percent of the population with MR was at 21% and 20%, respectively. By the 1960s, the median percent had gone down to approximately 2-9%, though Krishef is careful to note that the figure excludes any analysis of female sex delinquents.

Krishef (1991) discusses many explanations why the prison population has a higher frequency of MR. He says,

There is more exploitation of those who are retarded by nonretarded individuals... mentally subnormal persons are the ones most likely to be arrested and convicted because the criminal justice system often processes these individuals through the arrest, trial, and conviction stages without any real knowledge or concern about their condition or handicap (Page 4).

Krishef also notes the significant role historical attitudes of professionals have played in the general treatment and attitudes toward the criminality of individuals with mental retardation. These stages revolve around contemporary beliefs regarding causation. In the period termed the Hereditary Era, 1860-1915, the professional attitude toward

causation and criminality of persons with MR was that all “feeble-minded” were hereditarily predisposed towards criminal behavior. From 1916-1925, the Low Intelligence Era, professionals believed that low intelligence was the major cause of all crime and antisocial behavior, which meant that individuals with MR by definition had low intelligence, which in turn led to criminal behavior. In the Environmental Era, which took place from 1925-1945, professionals believed that MR had nothing to do with criminal behavior as environmental factors were what generated criminal behavior. From 1946 to the present day, professionals look at both mental and emotional handicap as only one factor of the puzzle in what leads to criminal behavior, thus terming the era the Multiple Factors Era (Krishef in Greene, 1991).

In comparing the time periods between the median percent of persons with MR in the prison population and the beliefs of the era regarding MR’s role in causing criminal behavior, the correlation between societal attitude and the percentage of the prison population with MR is significant. Between 1910-1914, during the Hereditary Era, the estimated prison population with MR was 50%. If society believed at that time that MR led to criminal behavior, it would logically figure that the prison population’s percentage of inmates with MR would be higher. Clearly, there is a relationship between the beliefs of the era and the percentage of the prison population with MR in looking at the eras that follow (Low Intelligence, Environmental, Multiple Factors). As the beliefs of the era became more politically correct and less blame was placed on the person’s disability, the percentage decreased.

Juvenile Justice and the MR Factor

School performance has also been linked to rates of delinquency and more often than not, students with disabilities do not display the same levels of academic performance as nondisabled peers. In fact, students identified as having a disability are, on average, 3.6 years behind expected grade level performance in both reading and mathematics (Blackorby, Chorost, Garza, & Gusman, 2003). However, not all students who perform poorly in school have a disability like mental retardation. Far too often, the attitudes of public servants are linked to a child's circumstance rather than focusing on each person with a disability individually.

Differences

Social Profile Differences. Research shows differences between the delinquent with MR and the non-MR delinquent. The MR offender is likely to be older, have attended special education while in school, be nonwhite, attended less school, and have less incidence of drug abuse than non-MR (Wallace in Greene, 1991, p. 25-26).

Kandel (1991) found that "delinquents have lower IQs than non-delinquents" regardless of whether they carry a label of MR or not (Kandel in Greene, Page 35). Kandel did not specify how large the difference in IQ is; this could qualify as an area for future research. If the IQ and Adaptive Behavior scale places the student in the Mentally Handicapped range, that would be significant. Another interesting area for further research is the link between low IQ and school performance; the results would likely to show a high correlation between the two.

School Role. Richard Greene (1991) explores the link between mainstreaming students with MR in school and future delinquency. He points out that persons with MR

are often placed in self-contained settings due to behaviors which are inappropriate or uncontrollable in a mainstream (regular education) classroom setting. He explains that mainstreaming these students with MR would ostracize the students even more, which will likely be the catalyst for the transition of the child's inappropriate school behaviors into more serious antisocial, predelinquent behaviors (Page x).

Greene (1991) also argues that a major difference between the nondisabled and persons with MR is that persons with MR are more likely to learn inappropriate behaviors and mimic behaviors they see in their educational environment due to their limitations in adaptive behavior and intellectual functioning (Page ix).

Similarities

School Predictor. Regardless of whether the delinquent was ever identified MR or not, school performance has been found to be a predictor of future performance across all socioeconomic statuses and races. If the person was successful in school, they are less likely to become a delinquent. However, if the person was a failure in school, they are more likely to become delinquent (Richardson, 1999, Page 103).

Similar Characteristics. Tonry, Ohlin, & Farrington (1991) discuss characteristics of general delinquency as analyzed through an accelerated longitudinal study they conducted in order to determine predictors of future delinquency by looking at similarities, regardless of labels of MR or non-MR. Researchers found that the child was more likely to be male, have lower verbal intelligence, be hyperactive and distractible, and was often unpopular with nondelinquent peers. Their families were more likely to have a history of crime and delinquency, have marital instability, engage in erratic and harsh disciplinary practices and experience economic adversity. The community they

lived in was more likely to be socially disorganized and often lacked needed human services. Essentially, the Tonry et al. study reemphasizes the beliefs of the Multiple Factors Era. Differing characteristics within the child's life, family environment and/or community structures increase a child's likelihood of engaging in delinquent behavior. For example, a male with Attention Deficit Hyperactivity Disorder (ADHD) from a poor abusive family in a dangerous and unorganized community who watched many family members engage in criminal behavior will be much more likely to choose to engage in delinquent behavior than a female from an upper middle class community with loving parents and a wonderful community setting. As palpable as this statement is when we read it, identifying these characteristics offers a list of which students should be targeted by school personnel and the community in order to prevent future delinquency.

Interrogation. In the interrogation stage of the investigation, police officers must adhere to laws within the Juvenile Justice system, regardless of whether the juvenile suspect has been labeled as having MR. Part of the Juvenile Justice and Delinquency Prevention Act of 1974 is the requirement of the "least coercive disposition" for juvenile justice. This is particularly important for juveniles with MR, as it is patterned similarly to the requirement for the "Least Restrictive Environment" for special education students (Richardson, 1999, Page 98). Some differences have been noted, however, as a study conducted by Henry and Gudjonsson's study illustrates.

Henry and Gudjonsson's (1999) study evolved from the lack of research on child witnesses with mental retardation. The literature only reveals that criminal cases with child witnesses who have mental retardation or a learning disability rarely make it into a courtroom. Expectations of the child's performance are negative. Thus, the researchers

conclude, there is a need for research in this area to discover the vulnerabilities and potential strengths in the eyewitness memory of children with mental retardation (MR). It is an important area for research because persons with MR are more likely to be physically and sexually abused than the general population. Those with MR are more likely to be witnesses to crimes because they are more likely to live in inner cities. Additionally, children with MR may be the only witnesses to crimes against other children in institutional settings.

Henry and Gudjonsson (1999) conducted a study where they compared suggestibility in two testing groups, children with MR and children without MR. This study was designed to see how well children could recall a day-old live event they witnessed. The subjects involved in this between-subjects design were classified into three groups: (1: the control group) 31 children with MR aged 11-12 years, (2: the CA group) 19 children without MR aged 11-12 years, and (3: the MA group) 21 children without MR aged 7-8 years. A live scene was scripted and delivered to students, without warning, during one morning in their normal school setting. In the scene, a woman entered the room with a cameraman under the pretense of filming the current condition of schools. The scene was designed to be interesting to children and to provide a rational explanation for the interruption so students would not be suspicious. One day later, the students were interviewed about the scene through free recall, general questions, open-ended specific questions, and closed yes/no questions. Following the interview, each child was seen for cognitive testing and the Gudjonsson Suggestibility Scale Parallel form.

Researchers compared the responses of children with mental retardation to peers of the same chronological age (CA) and peers of the same mental age (MA). They found more marked differences between groups on the Gudjonsson Suggestibility Scale than the measurements of eyewitness memory. On this scale, researchers found that “children with mental retardation recalled nearly half the amount of information that those in the CA-comparable group remembered during free recall, obtaining the same level of free recall as did the MA-comparable group.” Researchers also found that those with MR were more suggestible, as indicated by higher scores on measures of total suggestibility, yield, and shift. Free recall did differ significantly between the MR group and the CA comparable group, but did not differ on the eyewitness measure. Researchers explain the difference in that children with MR “produced their ‘optimal performance’ on a naturalistic, unexpected, everyday memory task as opposed to the more artificial laboratory memory task of recalling a story.”

Henry and Gudjonsson determined that eleven-year-olds with MR in the study were able to recall a witnessed event one day later as well as nondisabled eleven-year-olds. However, those students with MR were as suggestible as the younger (MA) students in the study when asked misleading questions. They concluded that the children with MR were more suggestible in response to closed misleading questions than were children in the CA (Chronological Age)-comparable control group, and scored similarly to those in the MA (Mental age)-comparable group. (Paragraphs 38-43) These findings warn that caution should be taken in the interrogation and response interpretation of persons with mental retardation. Researchers advise looking at the comparable MA of the person with MR as a good guideline for interpretation.

Treatment of Juvenile Delinquents with MR

The Law Enforcement Assistance Administration (LEAA)'s official position on the issue is that juvenile offenders with MR should not go to nondisabled juvenile correctional facilities and "should not even be processed through the juvenile justice system." (Santamour & Watson, 1982, Foreword: Efforts to Promote Coordination) LEAA believes that juvenile delinquents with MR should be serviced through special education or mental health facilities.

Treatment of Adult Criminals with MR

Death Penalty

Beirne-Smith and her colleagues (2002) identify some of the characteristics of individuals with mental retardation in order to show that individuals who are mentally handicapped "lack the culpability necessary for imposition of the death penalty." These characteristics are, impulsiveness, poor judgment, possessing a lack of cause-and-effect reasoning and lower intelligence. (Page 140).

Official organizations publicly declare that the death penalty should not be imposed on persons with mental retardation. The "Board of Directors of CEC-MR [(Council for Exceptional Children – Mental Retardation)] resolves that capital punishment of persons with mental retardation is cruel and inappropriate... and should not be imposed." (Beirne-Smith et al., 2002, Page 141). The AAMR is also against the death penalty being used as punishment for persons with mental retardation:

People with mental retardation should not be eligible for the death penalty. This is not to suggest that people with mental retardation should not be punished when they break the law, nor does it suggest that people with mental retardation are not

responsible for their actions. It suggests that people with mental retardation cannot be held culpable for crimes to the extent that the death penalty would be considered an appropriate punishment (AAMR, 2001, Ans. to Q.5).

The AAMR notes steps taken by government in the death penalty issue, that Eleven of the forty death penalty states have enacted legislation to prohibit the execution of people with mental retardation (Arkansas, Colorado, Georgia, Indiana, Kansas, Kentucky, Maryland, New Mexico, New York, Tennessee, & Washington). Also, the federal government has enacted legislation that prohibits the execution of people with mental retardation (18 USCA s 3597[c], 1994) (AAMR, 2001, Ans. to Q. 3).

In 2002, the Supreme Court of the United States designated death penalty as unconstitutional in *Atkins v. Virginia*, “which held that the execution of the mentally retarded constituted ‘cruel and unusual punishment’ in violation of the Eighth Amendment” (Schwartz, 2004, ¶2). The Pennsylvania Senate determined that clarification was needed on the ruling, placing “the determination of mental retardation in the hands of a jury during the sentencing phase of a capital trial” (Schwartz, 2004, ¶2). Clearly, the legislation has followed suit with the AAMR and CEC-MR’s stance against capital punishment for persons with mental retardation.

Cochran, Boots and Heide (2003) conducted a study that examined societal attitudes toward the death penalty with special populations. The study design used a factorial survey to collect opinions. Examples of the factorial survey were not offered for review. Researchers found that “the influence of the offenders’ age and mental capacity were found to affect attitudes toward the death penalty and preferences for punishment

meaningfully, such that only 18.7%” recommended the death penalty (Pages 82-83). The researchers also found that persons with a dispositional attribution style were more likely to be more supportive of capital punishment, while those with a situational attribution style were less supportive of the death penalty, less punitive, and more likely to recommend alternative punishments. Attribution styles refer to a person’s perspective on the cause of behavior. A person with a dispositional attribution style is more likely to see internal causality while a person with a situational attribution style will see external causality (McKinlay, 2005). It should be mentioned that Cocran et al. found that there were some exceptions to the attribution style finding: political conservatives, men and southerners were more likely to recommend capital punishment.

Fair Treatment

The debate over how to treat persons with mental retardation who commit crimes is one that is full of different philosophies. On one hand, some people believe that “the mentally retarded offender is not so much a lawbreaker as a person who lacks training on how to function responsibly in society,” thus they feel that the individual should be placed in a facility for this training, not in a prison for punishment. Others insist that “mental health agencies are ill-equipped to deal with the sometimes violent and aggressive behavior of the mentally retarded individual [and] insist such a person can be treated only in a correctional facility” (Santamour & Watson, 1982, Foreword: Efforts to Promote Coordination).

Those advocating for a person with mental retardation must walk a fine line between creating an environment of least coercion into false admission and justice for the person accused of the crime. Moschella (1982) warns against “narrow advocacy and an

overly paternalistic attitude toward mentally retarded offenders” (in Santamour & Watson, Page 195). Moschella presents the Model Penal Code test as the measuring stick for criminal responsibility:

A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either not to appreciate the criminality or wrongfulness of his conduct or to conform his conduct to the requirements of the law (Page 200).

Richard Greene (1991) presents an extreme proposal called An Exceptional Peoples Court to make the process fair to persons who unquestionably have MR. Richard Allen originally proposed it in 1986 and Greene quotes his suggestion, “...a specifically constituted court empowered to assume leadership over any adult person shown to be substantially impaired intellectually who has committed an act which if committed by an adult without said impairment would constitute a felony or serious misdemeanor...” He goes on to add that if at any time the person in ‘regular’ court is suspected of having such a handicap, no matter what stage of the process the system is in, the person must be transferred to exceptional court. Once the person is referred to the exceptional court, the first step is an assessment in order to determine whether there is “any gross intellectual deficit” as determined by a judge based on expert evidence. The procedures for such a court would model a juvenile court system with a focus on rehabilitation and no coercion; flexibility would be at the core of this system (Page 127). The exceptional court would require experts on disabilities in every position (judge, prosecutor, defense attorney, etc). and is designed to truly offer justice to people with special needs.

Case Law Regarding the Americans with Disabilities Act and Law Enforcement

Many plaintiffs with disabilities have filed suits against police departments claiming that their rights have been violated per the American with Disabilities Act and/or the Rehabilitation Act. One such recent case is Crocker v. Lewiston Police Department (2007), whereby George Crocker, who is deaf, filed suit because the department did not provide an interpreter or augmentive communication upon Crocker's arrest. This Maine Police Department opted to settle with the plaintiff as historic case law supports the application of the ADA and 504 acts to state and local police activities. In Lewis v. Truitt, et. al, (1997) courts held that the ADA did in fact apply in the arrest of a deaf individual. Many other cases support the extension of the application of ADA to the police department ranging from the routing quarantining of animals upon entering Hawaii (Crowder v. Kitagawa, 1996) as discriminating against those with visual impairments, to the role of ADA in interrogations at police stations (Calloway v. Boro of Glassboro Dept. of Police, et. al, 2000) In 1998, the United States Supreme Court even extended Title II of the ADA into covering state prison inmates (Pennsylvania Dept. of Corrections et. al., v Yetsky, 1998), noting that the statute can be "applied in situations not expressly anticipated by Congress" as that "demonstrates breadth" of interpretation, which is how the statute should be read.

Only in the Gohier v. Enright and City of Colorado Springs (1999) case, did the courts articulate the terms "wrongful arrest theory" and "reasonable accommodation theory" to use in analyzing an ADA claim related to action taken by police officers (Brodin, 2005, p.161). In Gorman v. Bartch, the plaintiff argued that he had been arrested because he had a disability, arguing the "wrongful arrest theory". However, the

courts noted that the plaintiff could only claim reasonable accommodation as he had not, in fact, been arrested due to his disability status (Brodin, p. 164). Lack of knowledge regarding disabilities and the acts that protect those with disabilities has led to lawsuits alleging mistreatment. For example, in Jackson v. Inhabitants of the Town of Sanford, et. al., Jackson was accused of driving under the influence when in fact his behavior was indicative of physical disabilities he had due to a prior stroke. Educating those in the criminal justice system seems to be integral to reduce litigation and improve overall quality of life for those with disabilities (Department of Justice, October 2006, p.16).

Law Enforcement and Other Disabilities

Mental retardation is not the only disability population who will have frequent interactions with the law enforcement community. The disabilities of autism, emotional/behavior disorders and even those with attention deficit/hyperactivity disorder are more likely to have more interactions than the nondisabled individual (Bartley, 2006; Kewley, 2001). The police officer's attitude is influenced by more than just the nature of the disability he or she is encountering. Even whether they are in a rural or urban department plays a strong role in their attitude towards individuals and the profession of policing itself. O'Shea (1999) found that the rural police officers feel better about their departments, are more willing to change, collaborate with community members and are even less distrustful of the community when compared with urban officers in Chicago.

Training Options

Santamour and Watson (1982) suggest:

The solution is to overhaul the system as it relates to the mentally retarded individual. Training must be provided for law enforcement officers, judges,

prosecutors, defense attorneys, and probation officers, so that they will be familiar with the symptoms of these difficulties. (Foreword: Meeting the Need).

The research advocates for education and understanding to be disseminated to all law enforcement personnel regarding the special needs of delinquents with mental retardation. Dr. William Blount recognizes that training must be expanded to all those involved in the criminal justice system, since the problem is system wide (personal communiqué, 2004). Training is provided in many public servant fields whereby some discuss disability and other do not.

Professions such as teaching or nursing require college coursework within the field of study. State certification comes with the testing of the material presented in the required coursework. On the other hand, most police officers are *not* required to have completed college coursework to gain their certification. Instead, they must attend specialized training in a police academy setting. The issue of whether a police officer should be required to have a college degree is a controversial issue within the criminal justice literature (Sewell, 1999). Dr. Michael J. Palmiotto argues for the degree, “American society is becoming increasingly more complex, sophisticated, better educated, multicultural, and multilingual; its police should do no less” (in Sewell, 2005, p.73). Palmiotto even argues that policing is not a profession since it lacks “preparatory advanced education” (Sewell, p.74).

Dr. Max Bromley has a different perspective, identifying problems with structure, advancement and the lack of specificity. The paramilitary hierarchical structure of the police force is not conducive to the creativity and the community relations skills that often come with a college education. Bromley cites Wilson (1974) who found that

officers with a college education are more likely to “be resistant to authority within the command structure and more likely to leave police service within the first few years” when compared to officers who did not have a college education (Sewell, p. 78). Additionally, the lack of plentiful administrative or supervisory positions within the policing organization leads to infrequent promotions and frustration for college-educated officers who have higher expectations for themselves. Dr. Bromley also discusses the lack of uniformity in a college degree entry-level requirement; “the lack of specificity with regard to not only the level of degree but also the curriculum content does little to enhance policing as a profession” (in Sewell, p. 79). Dr. Bromley suggests an alternative solution, that the requirement of a college education “be enacted at the managerial/executive levels of police organizations” (in Sewell, p. 82). Dr. Palmiotto disagrees with changing the existing system of promotion since most promotions in the police organization come from within, “eventually, a line officer can become a manager” (in Sewell, p.87).

At this time, the vast majority of police departments do *not* require a college degree, only completion of the mandated training. In the state of Florida, this training is approximately six months (attending full-time) and every police academy must follow the Basic Recruit Training designed and distributed by the Florida Department of Law Enforcement (FDLE). Each instructor must hold a certification from the same. After police officers are practicing, they have the option of attending Advanced Training courses, which are also known as salary incentive courses, since the accumulation of a certain number of hours qualifies for a stipend. Advanced training can also be used to fulfill mandatory retraining requirements of 40 hours every four years (FDLE, 2006).

Training of law enforcement officers, whether at the basic recruit or advanced level, can generally be placed into one of three categories. The first is “knowledge learning” which includes instruction of on laws or constitutional rights. The second is “skill learning” whereby the cadet/officer learns how to properly use a firearm, drive a vehicle, or engage in hand-to-hand combat. The final category is “attitude learning” where, for example, the topics of community relations or reactions to stress are presented (Bovè, 1987).

Police Training on disabilities in the State of Florida. T.C. Downes, who is in charge of Training Operations for the Tampa Police Department, speaks of a change in the way police officers are trained in the state of Florida. A state-initiated mandate for standard-based training was started in 2002. As part of the standardization of the curriculum, the state included a 14-hour component on the mentally ill in the basic recruit training. Of those 14 hours, four hours are spent specifically on the mentally handicapped (personal communiqué, June 2004). The Regional Community Policing Institute (RCPI) lists available trainings, one of which is titled *Managing Encounters with the Mentally Ill* (LaHaie, 2003).

Downes outlines training needs for the Tampa Police Department. The current four-hour mentally handicapped training needs to be updated with a career track focus. For example, the situation a member of the SWAT team will encounter that involves a person with a mental handicap will differ greatly from the interactions a School Resource Officer will have with such a situation. Officers are responsible for making the initial determination of the cause of a person’s behavior, whether it is the result of alcohol, drugs, mental illness, mental handicap, or from another cause. Officers need additional

training in the methodology of identification. Both officers and detectives need additional training in understanding when a confession is valid for someone with a mental handicap. Additionally, a course for current police officers to update their skills would be best presented in a class that covers a plethora of disabilities, rather than limiting training to how to identify and handle persons with a mental handicap. Persons with mental handicaps make up a very small percentage of the general population. In order to make the training appealing and useful to officers in many situations, a training covering a variety of disabilities would increase applicability. For example, the inclusion of training to understand the ‘triggers’ for a person with an emotional or behavioral disorder would increase officer and suspect safety while also give officers more tools with which to work. The training also needs to include discussion of physical issues of persons with disabilities. Downes speaks of an issue he once had with physical issues and disability, where the person only had one arm and needed to be handcuffed. His solution was to handcuff the man to his own belt.

FDLE Advanced courses for existing officers. According to Chris Minardi of the Florida Department of Law Enforcement (FDLE)’s Curriculum Section (C. Minardi, Curriculum Section supervisor for Advanced/Specialized Officer Curricula Development, FDLE, personal communication, December 1, 2005), all of the Florida advanced courses police officers take as a part of the salary incentive program are in review. Courses that need revision are identified, and committees of content area experts are brought together to discuss where revisions are needed, and broken into smaller groups to write/rewrite the individual lessons within the curriculum.

In the most recent revision of the advanced course originally entitled, “Crimes Against the Elderly and Disabled-Course 100,” the subject matter experts decided to dramatically revamp the existing course. The title and content were both changed to take out any terminology referring to people with disabilities, since the training in reality only addressed issues having to do with the elderly (which differ from issues of persons with disabilities). Additionally, a lesson was created by Heather Cooper, the statewide pharmacist with the Attorney General’s Medicaid Fraud Control Unit, covering the medical aspects of the elderly population, including common pharmaceuticals and the five most common medical problems faced by the elderly. Another section was developed addressing issues of dementia (including Sundowner’s syndrome, Alzheimer’s Disease, etc.) All facts throughout the curriculum were updated and adult learning strategies were infused into the instructor guide.

In this study, the need for an advanced course covering the deeper issues of disability has been identified. If this is shared with a person in Mrs. Minardi’s position, then the need to her supervisor who will approve or disapprove creation of the new course. If the need is viable, then the process begins. The first meeting is for task analysis. Mrs. Minardi heads up committee of experts, including practicing law enforcement officers, who identify what the curriculum needs to cover. By the end of that week-long meeting, group members will have developed the course objectives. A couple of months later, another group of subject matter experts (SMEs) will come together to write the curriculum based on the objectives and lessons outlined by the first group meeting. Mrs. Minardi points out that the committee members vary between the two groups in that the first has a higher percentage of practitioners, but the second has

more expertise in the subject at hand. Additionally, Mrs. Minardi states that she tries to keep a couple members from the first group in the second in order to assure that there is someone to explain the rationale behind objectives and ideas created by the first group. Then, the courses are approved by the Florida Department of Law Enforcement and the formalized curriculum is distributed.

There are indeed needs in law enforcement training that are not currently being addressed. For instance, Dr. James Sewell sees a need for an examination of the four hours in Basic Recruit training that cover stress recognition and management. First, he points out that four hours out of the 320 total Basic Recruit hours is far too little to cover an issue with which nearly all police officers must grapple. He sees a need for training to go beyond the traditional methods of physical fitness, diet/nutrition and human relations. After that basic foundation, officers need “regular in-service and specialized training [in order to learn how to] actually apply the techniques of communication, diet and nutrition, and physical fitness” to themselves as individuals. Dr. Sewell emphasizes the need for specialized and individualized stress management instruction.

Another need is for a course covering the issues of those with disabilities, since, as previously mentioned, it was not covered in the original Advanced Course 100. Due to the request of this author, Mrs. Minardi is supporting the development an advanced course to cover the issue of disability and law enforcement through her chain of command. A realistic timeline for such a development would be approximately one-and-a-half to two years from the approval to initiate the process. Other organizations also recognize the need for training in this area. The Autism Society of America, in partnership with its Howard County chapter and LEAN on Us, Inc., has received funding

from the Office for Victims of Crime (part of the Department of Justice) “to develop, pilot and distribute a training curriculum on autism for professionals who assist victims of crime” (ASA, 2005). Experts in the field should include those with extensive background in law enforcement, community representatives for adult programs (e.g., UPARC), experts in the field of disabilities, especially in the areas of behavior disorders, mental retardation and autism as those are the disabilities for which police most often need to be involved.

The development of police training curricula is dramatically influenced by the thoughts and inclinations of the experts in the groups developing the curriculum. Therefore, it is imperative that the FDLE and other law enforcement agencies bring in the most knowledgeable experts who have the ability to write interesting and accurate curriculum that law enforcement personnel will find personally and professionally relevant.

Police training on disabilities outside Florida. In Louisiana, personnel developed a crisis unit developed at the New Orleans Police Department to handle any dealings the department has with the mentally ill or handicapped. Members of the crisis unit are specially trained to handle difficult situations and to recognize special needs so they can be referred to someone trained in the specific area. One report from Cecile Tebo, a coordinator of the NOPD crisis unit, describes a typical day:

A 20-year-old woman puts her 1-year-old and 5-month-old to sleep as she prepares to take her own life. A 48-year-old man, homeless and wracked by his mental illness, roams the streets naked, covered in feces. A 38-year-old man, diagnosed as a paranoid schizophrenic, barricades himself in his home after

running through the streets with a knife, threatening to harm his neighbors. A young 14-year-old in utter despair and anger attempts to set his school on fire (Tebo, 2007).

The end result of such a unit is true, fair, and appropriate treatment in the first step of the criminal justice system.

The United Kingdom's Blackstone's Police Operational Handbook includes a comprehensive disability section (Bridges, 2006). This manual is designed to be used by patrol officers as a daily reference. Despite disability being covered in only three pages, it is highly informative, defining many of the disabilities and offers tips to officers, such as "Many people have disabilities that are not visible" and a warning against using terminology like "the blind" or "the disabled" (Bridges, 2006, page 702).

The most useful resource found was developed by the University of Chicago entitled *Disability Awareness for Law Enforcement: a Curriculum for Law Enforcement Professionals and Police Social Workers* (Fitzsimmons-Cova & Seidman, 2001). The curriculum is designed as a two-day course and includes many resources, including Power Points, video, glossary, overheads and manuals for both instructors and participants. The course curriculum is divided into six parts: 1) Introduction and overview; 2) Legal Issues; 3) Recognition, Communication and Interaction; 4) Victimization of People with Disabilities; 5) Offenders with Disabilities; and 6) Disability Services and Resources. Though the manual is tailored to Illinois, the majority of the curriculum is universally applicable and slight modification from state to state would be all that is required to utilize the training. The curriculum uses well-researched

instructional strategies such as objective-driven instruction, problem-based learning, and multi-modal approaches.

Summary of Literature Review

Definition & Societal Opinion

Disability is defined in many ways, but the most common definition focuses on an impairment that inhibits participation in major life activities, such as thinking, walking or hearing. For a person to be classified as having a disability, measurement in some form must take place. The number of persons with disabilities is growing worldwide, but differences in disability definition make it difficult to quantify disability.

Persons with disabilities must struggle against stereotypes and misconceptions from the start of their education experience onward. Historical documentation evidences the devastating effect ignorance and perspective can have on the treatment of people who are stigmatized by society, as in the case of Nazi Germany, whereby tens of thousands of persons with disabilities were murdered. The propaganda put forth by Nazi Germany cautions against the current societal opinion in the United States towards disability, as represented by media portrayal of disability. The mass media plays a crucial role in representing society to the masses, but ignorance is often present and transforms this responsibility into misrepresentation of disability to the masses, whereby disability representation is fragmented, stigmatized and inaccurately represented.

Police Officers

Officials in the field agree that those serving as police officers will have frequent interactions with persons who have disabilities. Historically, prisons have had higher percentages of persons with mental retardation than the rest of the population. The

characteristics of MR make it likely that a person with the disability is likely to be misunderstood by authorities and possible that they may even offer a false confession in an effort to please the authority figure. Difficulties persons with MR have with the criminal justice system do not stop at the station, but extend into their rights in the courtroom since there is no provision to try persons with MR in a separate courtroom whereby all involved are educated in the disability field. Even if convicted, the person may not have been offered a fair trial.

School performance has also been linked to rates of delinquency and more often than not, students with disabilities do not display high levels of academic performance. Due to the statistics on the treatment and trial of those with MR, many states and even federal case law is against the death penalty for persons with mental retardation. Many law enforcement agencies are finding themselves in court for violating the Americans with Disabilities Act in one or more ways. The Department of Justice concludes that educating those in the criminal justice system is integral to reducing litigation and improving overall quality of life for those with disabilities.

Police officers are required to attend the police academy and during their time in Florida's academy's the instructors spend approximately 14 hours discussing the mentally ill with four short hours on the mentally handicapped. Advanced courses are offered to assist Florida's police on how to improve themselves, but, at this time, there is no advanced course that offers education on disabilities, only one that covers elderly issues. However, there are programs out there that offer such education, including a valuable resource from the University of Chicago which just needs adaptation to Florida's law enforcement policies.

Review of Literature as Related to Study Analyses

The literature evidences the fact that the criminal justice system, like societal opinion at large, is wrought with issues in not understanding disability (knowledge), not being willing to spend time with those who have disabilities in leisure settings or even admit to having a disability (social willingness), being fearful of a person with a disability's behavior (affect), and not having frequent and/or purposeful positive interactions with persons who have disabilities (contact). In order to improve the current system, in-depth analyses were performed to understand the role each of the aforementioned attitudinal domains play in shaping a police officer's opinion towards persons with disabilities.

CHAPTER 3: METHODS

Research Design

This descriptive correlational study examined the perspectives of police officers with regard to persons with mental retardation in the domains of knowledge, social willingness, contact, and affect. The study also compared the strength of the association among factors such as years of experience, age, gender, and race with regard to knowledge, social willingness, contact, and affect as they pertain to the participant's perspective about persons with mental retardation. Finally, this study investigated relationships among the domains of knowledge, social willingness, contact, and affect among the police officers with regard to their perspectives of persons with mental retardation.

Sampling

A convenience sample of 188 participants consented to participate in this study. This number was determined by conducting a Cohen power analysis to determine magnitude. To start the analysis, the effect size, power needed for magnitude, and alpha level all needed to be determined. A low to moderate effect size is generally utilized in the field of education (Rodden-Nord & Shinn, 1992). Therefore, the effect size selected was .30. A power of .80 was selected to increase the generalizability of the study and reduce the chance of a Type II error. According to general rules of thumb for sample sizes, t-tests with a medium effect need between 100-150 participants and correlation analyses require between 65-85 participants. Gall, Gall & Borg (2003) note a sample size of 64-100 is needed for a medium effect t-test, with an alpha of .05. Correlation analyses require a sample size of 42-66 (Gall, Gall & Borg, 2003). Cohen (1992) estimates that if

at a power of .80 with a medium effect size, then a sample size of over 150 would be more than appropriate.

To conduct the study, each participating officer received a manila envelope that contained a survey packet. Each survey packet contained five items (Appendix G). The first part was a cover letter approved by the IRB to obtain the participant's permission to cooperate with the investigation and it includes the aims of the study, risks, benefits, confidentiality of data, research procedures, right to withdraw, contact information, and signature. The second part was a demographics questionnaire used to collect information on career, years of experience, gender, age, and race. Five qualitative questions preceded the formal survey. In this portion, the participant answered four open-ended questions, each primarily representing one domain of knowledge, social willingness, contact, and affect. The fifth open-ended question was designed to analyze the participant's training experience with regard to disability. Finally, the fourth section consisted of a quantitative survey where participants responded to statements using a four-point Likert-type scale on a revised version of the Social Distance Questionnaire (SDQ) (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983). The last item in the packet was a blank raffle ticket intended to increase response rate of surveys (Appendix D).

The survey was administered at five different bureaus in the county which is located in Western Central Florida, selected to offer a representative sample of the police force. All precincts were selected to offer a combination of both large and small departments to control for differences in attitude. All participants in this investigation read the informed consent and completed the questionnaire.

Sampling Adjustment

In selecting departments within the local county to administer the survey, the researcher contacted every department in the county who employed over twenty sworn officers. In addition to the need to ‘sell’ the study so that police chiefs would let the researcher come in to “use department time,” as one chief put it, an incident happened in the middle of the study in a neighboring county regarding a police officer’s mistreatment of an individual with a disability. In arresting a man who used a wheelchair, the officer did not believe that he could not walk and dumped him out of his chair onto the ground. The incident was caught on videotape and made international news. The Associated Press wire article is shown in Appendix I. This incident happened during the week whereby the largest individual department was convening to decide whether or not to let the researcher study police officer’s perceptions of mental retardation. Shortly after the incident made the news, the researcher was informed via e-mail that she would not be allowed to utilize that department. The majority of other departments behaved similarly after the incident so the researcher requested permission to stop soliciting surveys, lower the power from .95 to .80, and increase the effect size from small to medium which would adjust the required sample size from 290 to 150. Permission was granted and the solicitation of surveys stopped at that time, leaving a participant sample of 188 police officers who had already submitted surveys.

Participant Characteristics

Of the 188 officers who participated in the study, a slight majority (60.6%) described themselves as patrol officers as described in Chapter 4. Only 22 of the officers who responded to the survey were female. The respective means of the years of

experience and age was commensurate with the researcher's expectation for the targeted police officer population. The mean for the years of experience variable was 11.8 years. The average age of respondents was 40.3 years. Also commensurate with the police population, 88.3% of the survey respondents were male. The race of respondents was dominated by the White/Caucasian population with 90.4% of participants identifying themselves with this category. Black/African American Respondents represented 5.3% of respondents; Hispanic/Latino represented 3.2%; and those who self-identified as Other represented 1.1%.

Variables

The dependent variable in this study is the attitude of the participants regarding persons with mental retardation in the domains of knowledge, social willingness, contact, and affect. The dependent variable is primarily measured through a quantitative analysis of participants' responses to the survey questions. The main independent variable is the participant's group memberships, to include the participant's gender, age, race, and years of experience in said occupation, all of which are measured by the person's survey response to each respective question.

Data Collection Procedures

Data collection took place over the period of two months. The researcher visited various police stations within the region to administer the survey to the targeted populations. Each participant received a five part survey packet (Appendix G). The first part is a cover letter approved by the IRB to obtain the participant's permission to cooperate with the investigation and it includes the aims of the study, risks, benefits, confidentiality of data, research procedures, right to withdraw, contact information, and

signature. The second part is a demographics questionnaire used to collect information on career, years of experience, gender, age, and race. Five qualitative questions precede the formal survey. In this portion, the participant answered four open-ended questions, each primarily representing one domain of knowledge, social willingness, contact, and affect. The fifth open-ended question is designed to analyze the participant's training experience with regard to disability. Finally, the fourth section consists of a quantitative survey where participants responded to statements using a four-point Likert-type scale on a revised version of the Social Distance Questionnaire (SDQ) (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983). The last item in the packet was a blank raffle ticket intended to increase response rate of surveys (Appendix D). The entire packet was estimated to take each participant approximately fifteen minutes to complete.

Any participants wishing to receive the results of the data analysis were offered an email sign-up sheet separate from the survey instrument where interested participants can anonymously share their email address in order to have the results sent to them at the end of the study. Participants and other involved parties will only have access to the final results of the study, not to the raw data.

Institutional Review Board

In order to ensure the protection of the study participants, the University of South Florida's Division of Research Integrity and Compliance reviewed the research proposal and survey instrument. The study was approved for implementation by the Institutional Review Board on January 15, 2008 with the exempt certification protocol number #106482.

Selection of Instrument

This study used a revised version of the Social Distance Questionnaire (SDQ) (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983). The original instrument was developed to measure the “attitudes of secondary regular education students toward their severely handicapped peers.” Construction of the 63 original items was based on the premise that knowledge, social willingness, contact, and affect are critical indicators of the manner in which people would interact with persons with disabilities. The present study adapted the original items to the population of police officers in order to provide context and meaning to the population under study.

Many of the original authors used the SDQ instrument as one of two measurement tools used to compare high school peer tutors, “special friends,” a control group of high school students, and non-volunteers for the peer tutoring program’s attitudes and social interactions toward peers with severe handicaps (Haring, Breen, Pitts-Conway, Lee, & Gaylord-Ross, 1987, p.281). The SDQ was paired with a social behavior probes analysis of social interactions with both those who had a handicapping condition and those that did not. Using the SDQ as a pre- and post-test procedure, the researchers found that for the students who interacted with the students who had a severe disability in any way, their respective attitudes toward disability remained positive. The researchers did note that the control group, students who volunteered to participate in the program, had higher levels of social willingness than the non-volunteers. There no other significant difference between the special friends and peer tutors groups.

Carter, Hughes, Copeland and Breen (2001) adapted the SDQ instrument in order to compare the attitudes of two groups of general education high school students; one

group of students participated in a peer buddy program designed to increase their exposure to peers who have severe disabilities and one group did not. Carter et al. (2001) found that participation in the peer buddy program significantly increased the scores in the domains of social willingness, knowledge, and contact.

Prior to the selection of the SDQ, two other surveys were also considered, the Disability Social Relations Generalized Disability (DSRGD) Scale (Hergentrather & Rhodes, 2007) and another unnamed survey developed by Longoria & Marini (2006). The DSRGD was an adapted form of the Disability Social Relationship (DSR) Scale from Grand, Bernier, & Strohmer. The DSR was designed to analyze how social context impacts attitudes towards people with disabilities. Grand, Bernier, and Strohmer (1982) wrote the DSR items to focus on the disabilities of visual impairment, epilepsy, cerebral palsy, and epilepsy. In Hergentrather & Rhodes' study, they analyzed the attitudes of undergraduate students towards persons with disabilities using the DSRGD. Just like the original DSR, the DSRGD has three subscales: dating, marriage and work. The DSRGD was inappropriate for this study since the survey questions were representative of the questions dealing with social willingness on the SDQ. Since this researcher wanted to look at additional domains beyond social willingness for the purposes of this study, the DSRGD would have only represented one piece of this four-part research study.

The second scale considered by this researcher was discussed in the article by Longoria and Marini and was designed for their target population, 8-12 year old Mexican-American children. The survey did analyze attitudes towards disability, but was focused exclusively on physical disability. The survey could not be modified for the purposes of this research study to refer to general disability because all survey items

referred to pictures of two children: one sitting in a wheelchair and another sitting in a kitchen chair.

Instrument

Social Distance Questionnaire (SDQ). Permission for this researcher to use the Social Distance Questionnaire for this study was granted by one of the authors of the instrument, Catherine Breen (Appendix J). The original SDQ contained 63 items representing four subscales: knowledge, social willingness, contact, and affect (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983). Ten items constitute the knowledge subscale, eliciting responses pertaining to accurate knowledge about persons with disabilities. The social willingness subscale had 20 items asking respondents to indicate their self-perception and attitudes toward persons with disabilities. The contact subscale had 25 items soliciting information about actual interactions with persons with disabilities. A final set of eight items, labeled affect subscale, probes the feelings of participants toward persons with disabilities.

The original study contained a combination of dichotomous and three-part scales and 30 of the 63 items had means near the middle of the scale. Seventeen of those 30 were within .30-.40 of the middle of the scale and four more were within .10 of the middle scale value (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983).

With regard to the correlation of the individual items scores with the total test scores, the part-whole correlation was greater than .40 for 24 of the 63 items, yielding a high internal consistency coefficient whereby the Cronbach alpha was 0.89. The alpha for each of the subscales was not stated. Twenty-two of the 24 held part-whole

correlation coefficients of .40-.70 while two more held coefficients above .70 (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983).

The researchers also conducted a non-rotated principal factor analysis and identified four unnamed factors which they attributed to counting for a minimum of 10% of the variance per factor: 47.6%, 12.9%, 11.7% and 10.9% respectively. Adding the variances cumulatively for factors 1, 2, 3 and 4, yields: 47.6%, 60.5%, 72.2% and 83.1%. Of the 63 items, 32 items had factor loadings over .40 and 8 of those 32 had factor loadings over .70. This means that 31 items had factor loadings under .40. Haring and his colleagues concluded that most of the items, 26 of the 63, that substantially loaded on a factor did so on Factor 1. Most of the 26 items were classified under the social willingness or contact subscales, while a few were from the affect subscale. The only two items in Factor 2 that loaded over .40 were from the contact subscale. Factor 3 also had only two items, one from the knowledge subscale and the other classified under the contact subscale. Factor 4 consisted of item number 12 only, which was claimed by the affect subscale. In analyzing the factor analysis, Haring, Breen, Pitt-Conway, Wilson and Gaylord-Ross (1983) concluded that there is a social contact willingness factor also measured by the SDQ.

The item with the best psychometric properties with regard to mid-scale value, part-whole correlation and factor loading was social willingness item number 23, “I would go to a movie with a retarded person” (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983, p.4). In addition to the statistics provided by the original researchers, Carter, Hughes, Copeland and Breen (2001) obtained a test-retest reliability of .94 for the version of SDQ where they modified only for updated terminology.

Like the modification by Carter and his colleagues, adaptation of the original survey for the current study consisted of updating the terminology in the survey such that it reflects the current terminology in the field. Terminology in the original SDQ that read as “retarded person” or “handicapped person” was exchanged for “person with mental retardation.” For the purposes of this study, this researcher researched perspectives on mental retardation so all terminology referring to disability in the general sense was modified to refer to mental retardation exclusively. Additionally, since the focus of this study is on adults and not high school students, terms referring to “students,” “class,” or “school” were exchanged for “people,” “social situation,” or “leisure activity.” Another modification was in the participant’s response format. The original survey has multiple format responses (e.g., “agree/disagree/unsure,” “yes/no,” “hardly ever/once in a while/a lot”). The rating scale in the adapted SDQ is “forced choice” in the sense that no neutral choice is available (4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree). A Likert or Likert-type scale is commonly used in the social sciences, having the advantages of easy construction, being appropriate for measuring attitude across multiple dimensions, and most importantly, increasing the reliability of participant responses (Hergenrather & Rhodes, 2007).

The first subscale addresses participants’ knowledge of persons with mental retardation. This domain contains items such as: “People with mental retardation always end up in institutions” and “People with mental retardation have a greater sex drive than normal people.”

The second subscale is social willingness, termed “social contact willingness” in the original SDQ. A person’s proclivity to interact with persons who have mental

retardation is measured by items such as: “I would go to a movie with a person with mental retardation” and “I would like voluntarily to spend time once a week with a child who has mental retardation.”

The third subscale, contact, measures the “actual contact” a person has had with persons who have mental retardation. Example items include: “I have a brother or a sister with mental retardation” and “I have seen a person with mental retardation at the beach or park.”

Affect is the fourth subscale, measuring the participant’s feelings toward persons with mental retardation. This domain contains items such as: “I feel sorry for people with mental retardation” and “It can be rewarding for me to talk with or help people with mental retardation.”

Open-ended Questions.

In order to explore each police officer’s attitude towards people with mental retardation in a more personal way and to clarify the views empirically secured by the quantitative (SDQ) questionnaire, a questionnaire of open-ended questions was included in the survey packet. Each of the first four questions was developed to capture the participant’s free-response as he/she relates primarily to one of the four domains, knowledge, social willingness, affect, or contact. The questions were validated by content area experts and grew out of the literature in Chapter 2 of this study. The validation process started with experts in the field locally, Dr. Errol Dupoux and Dr. Ann Cranston-Gingras. From this point, the researcher distributed the questions for validation to other experts nationwide using contact points in the Teacher Education Division of the Council for Exceptional Students. To review the request form for validation that was

emailed for validation, see Appendix C. Finally, the questions were offered to one of the creators of the initial SDQ, Catherine Breen.

The question under the domain of knowledge is “How do you know if someone with whom you are interacting has mental retardation?” The next question is classified under the contact domain, “Please describe any personal experience you have had with a person who has mental retardation.” The third relates to affect towards persons with mental retardation: “Under what conditions would you adopt a child with mental retardation?” The final question is a social willingness question: “If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.” The final qualitative question is “Please describe any previous disability training you have received,” which offers additional information regarding the study topic and need for future research. All open-ended questions were analyzed for themes and key responses were identified. The themes were coded and the key for response and theme coding is presented in Appendix H and discussed in Chapters four and five.

Background Instrument

In addition to the quantitative SDQ survey modified from Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross (1983) and the open-ended questions discussed above, this researcher developed a background instrument to collect the data for the variables of career, age, years of experience, gender, and race. The survey packet remained the same for all precinct administrations. Gender, age, race, and years of experience were quantitatively analyzed through the analyses described in the data analysis section.

Pilot Study

A pilot study was conducted utilizing police officers in one convenient sample, following the same guidelines as the final study. The pilot study sample involved 19 officers from a police department in the local area. The administration of the surveys took place over a two-day period. Each of officers in the department who served during the three shifts (am, pm, graveyard) had the opportunity to voluntarily complete the survey. Each officer had access to an individual envelope during roll-call which contained: the informed consent document, survey packet, and pilot study feedback form (Appendix A). On the pilot study feedback form, as depicted in Appendix A, the participants were asked to point out any item numbers they found convoluted or offensive and if there were any adjustments they felt necessary for the final study. The envelope also contained a blank raffle ticket (Appendix D). On the front of each envelope a letter containing directions was attached which included a list of contents and instructions to submit the survey packet in one box and the raffle ticket (which contained the officer's name) in another. This was to ensure anonymity of submission as the raffle tickets were given to the commanding officer to select a winner. Next to the collection boxes, the officers had the opportunity to sign up to receive the final results of the study by listing their email address as depicted in Appendix E.

From the results of the pilot study, the survey questions were analyzed and reduced in quantity for the final study based on which items had the strongest statistical reliability characteristics with regard to the correlation between item and overall domain score. The results of the pilot study revealed that 12 questions were inconsistent within their respective domains (Appendix F). Once these questions were removed, Cronbach's

alpha increased to .79. The majority of the removed questions corresponded with the comments regarding inappropriate or unclear items provided by participants on the pilot study feedback form. The final study version of the quantitative survey contained 47 items.

The open-ended questions and background instrument were analyzed to ensure clarity for the final study. In this analysis, the results showed that the participant's open-ended responses reflected their quantitative responses by domain. There were no adjustments to the open-ended questions or the demographic form between the pilot and final study. The final study included 188 participants.

Data Analysis

Quantitative Data Analysis

Analyses of the different group membership variables were accomplished through varied data analysis techniques, depending on whether the variable was categorical or continuous and the needs of the analyses. The first research question addressed discovery of the perspectives of police officers regarding persons with mental retardation in the areas of knowledge, social willingness, contact, and affect. To analyze this research question, a univariate descriptive analysis was conducted. This analysis included descriptions of the score distribution for each subscale in relation to total score and discussions of descriptive statistics paired with visual analyses of results (i.e. histogram).

The second research question investigated the relationships among the variables of age, race, and gender as they pertain to police officers with regard to their perspectives of persons with mental retardation. This question was answered through a combination of descriptive analyses and inferential tests. Originally, both gender and race were to be

analyzed by performing a t-test to see how each gender/race scored on each of the attitudinal domains and the participant's overall attitude toward persons with mental retardation. However, race could not be analyzed with a t-test as three categories came about during data analysis so a one-way ANOVA yielding pair-wise comparisons for race was conducted instead. Age and years of experience were similarly examined, but an analysis of correlation coefficients for each of these continuous variables was the test of choice.

Finally, the researcher used a four-by-four correlation matrix and a multiple regression analysis to explore the strength of the relationships among the domains of knowledge, social willingness, contact, and affect. All four domains offer a measurement of the person's attitude toward disability. Relationships among the four domains were assessed through both the matrix and multiple regression analysis, which suspends the influence of the other three domains to assess the effect of that domain on the person's overall attitude towards disabilities. The researcher used an analysis of variance to determine the amount of variability in the dependent variables associated with the variability in the independent variable (Newton & Rudestam, 1999). Variance accounted for measures sought to measure how the variability in one domain, e.g. knowledge, could have affected the person's overall perspective towards persons with disabilities.

All data was coded using the program SPSS (originally, Statistical Package for the Social Sciences) and the survey responses. The implications of the results, paired with the results from the quantitative content analysis, are discussed in detail in Chapter 5 of this study.

Analysis of Open-ended Question Responses

A content analysis was used to analyze the open-ended question responses. This took place in three parts: the data collection process, data reduction, and data display. Since the open-ended responses were collected simultaneously with the quantitative responses, data collection was complete prior to the start of the analytical process (Onweugbuzie & Teddlie, 2003). An examination of the responses in relation to the statistical data from the quantitative questionnaire and background instrument will be discussed in Chapter 5 of the study.

Open-ended Question Data Reduction

The qualitative questions were analyzed by a theme analysis of the first twenty-two submitted surveys in an exploratory analysis of responses. The content of each question's responses were analyzed and categorized into response categories by grouping similar answers together. Then, general categories of responses were quantitatively coded to measure attitude toward disability in each of the respective domains. Each of the respective response categories was quantified and an open-ended questionnaire coding key was developed (Appendix H). The data from the exploratory analysis was converted into response categories by taking the content of the response and assigning it to the highest valued response category. For example, if on the knowledge question, a respondent wrote "physical signs and level of cognition," it would be categorized as "5: cognitive characteristics/content of conversation" rather than "4: physical characteristics." After all surveys had been coded, the response categories were grouped into themes (Appendix H). Detailed descriptions of the coding process for each of the five respective-open-ended questions is discussed in Chapter 4.

Data Display

Analysis of each question's response categories and respective themes was completed through frequency distributions. The frequency distributions for each respective domain are presented in Chapter 4 to display the results in both answer categories and themes. In both Chapters 4 and 5, the data from the open-ended response questions was examined in relation to the quantitative results.

Level of Significance

This study used an alpha level of .05 based on the participant sample, theoretical framework, research topic, and measurement analysis. Fraenkel and Wallen (2000) note that in the field of educational research, alpha level .05 is considered the conventional choice more so than alpha level .01 in order to create a balance between Type I (failure to retain) and Type II (failure to reject) errors.

CHAPTER 4: RESULTS

Introduction

The purpose of this study was to investigate the perspectives of police officers with regard to persons with mental retardation in the domains of knowledge, social willingness, contact, and affect. The study also compared the strength of the association among factors such as years of experience, age, gender, and race with regard to knowledge, social willingness, contact, and affect as they pertain to the participant's perspective about persons with mental retardation. Finally, this study investigated relationships in the domains of knowledge, social willingness, contact, and affect among the police officers with regard to their perspectives of persons with mental retardation.

Analyses of the different group membership variables were accomplished through descriptive analyses, inferential tests, and correlation testing. The design involved a sample of 188 police officers from several departments in a county located in Western Central Florida. Officers' perceptions of mental retardation were collected using a modified Social Distance Questionnaire (SDQ), which includes questions that measure the participant's attitude toward persons with mental retardation in four domains: knowledge, social willingness, contact, and affect.

The study analysis is divided into three sections. The first section reviews the officer's characteristics. In this section, a summary of the characteristics and background information is represented as reported by the officers in the study. The second section evaluated the reliability of the instrument and reviewed the data coding process. The third section presented inferential statistics to analyze the research questions using the methodology described above.

Description of the Sample

Response Rate

Not including the pilot study participants, three different police districts were surveyed. One of the three was split up into three bureaus, one bureau of detectives and two geographically separate patrol bureaus. The districts surveyed were assured they would not be named in the study, so each respective district is represented by a variable and accompanying description. The response rate was variable between districts due to different levels of pressure to complete the survey from each bureau's administrative team as is represented in the table of response rates for each of the respective districts represented below:

Table 1

Response Rate by District

District	Distributed	% Return
A: Small, higher SES district	25	88.0
B: Medium sized, medium SES district	100	29.0
C: Large district: investigative bureau	100	45.0
D: Large district: north patrol bureau	145	52.4
E: Large district: central patrol bureau	245	6.5
Total	615	30.6

Description of Participants' Demographics

Of the 188 participants, a slight majority (60.6%) described themselves as patrol officers as depicted in Table 2. Since one of the highest response rates came from an

investigative bureau to which the detectives are assigned, the percentage was not surprising.

Table 2

Frequency Distribution for Police Officer Position

Position	n	%
Patrol	114	60.6
Other (most often detective)	72	38.7
No information	2	1.1
Total	188	100.0

The respective means of the years of experience and age was commensurate with the researcher's expectation for the targeted police officer population. The mean for the years of experience variable was 11.8 years. The average age of respondents was 40.3 years. Also commensurate with the police population, Table 3 represents the gender variable showing that 88.3% of the survey respondents were male.

Table 3

Frequency Distribution for Gender

Gender	n	%
Male	166	88.3
Female	22	11.7
Total	188	100.0

As depicted in Table 4, the race of respondents was dominated by the White/Caucasian population with 90.4% of participants identifying themselves with this category. Based on the demographics of the police force in the areas studied, this is commensurate with the researcher's expectation. Black/African American Respondents represented 5.3% of

respondents; Hispanic/Latino represented 3.2%; and those who self-identified as Other represented 1.1%.

Table 4

Frequency Distribution for Race

Race Category	n	%
Black/African American	10	5.3
White/Caucasian	170	90.4
Hispanic/Latino	6	3.2
Other	2	1.1
Total	188	100.0

Summary of Demographic Information

Of the 188 officers who participated in the study, a slight majority (60.6%) described themselves as patrol officers. The respective means of the years of experience and age was commensurate with the researcher’s expectation for the targeted police officer population. The mean for the years of experience variable was 11.8 years. The average age of respondents was 40.3 years. Also commensurate with the police population, 88.3% of the survey respondents were male. The race of respondents was dominated by the White/Caucasian population with 90.4% of participants identifying themselves with this category. Black/African American Respondents represented 5.3% of respondents; Hispanic/Latino represented 3.2%; and those who self-identified as Other represented 1.1%.

Analysis of Officers’ Attitudes

The second level of analysis utilized inferential statistics to determine the relationship between the independent variables (group membership) and the dependent variables (officers’ attitudes). The SDQ consisted of 47 statements designed to elicit

police officers' perceptions toward persons with mental retardation. Analyses of the variables were accomplished through descriptive analyses, inferential tests, correlation testing, and a one-way ANOVA for pair-wise comparisons in race.

Scoring Guidelines

In reviewing the raw data, it was noticed that some participants failed to respond to one or more questions on the survey instrument. If the missing response was in the demographics form, it was left blank. If it was in the SDQ, then a rule was applied: if four or more questions out of the 47 were left blank, that participant was excluded from the data. This rule applied to eight of the 188 submitted surveys. If the participant failed to answer less than four responses, the average score for that participant in the domain addressed by the question was substituted for the missing number. Out of the 180 surveys quantitatively analyzed, 18 were missing a response to one of the 47 questions, four surveys were missing two responses, and one survey was missing three responses. If the participant failed to answer one or more questions in the qualitative section, several rules were applied. If four or more questions were not answered, then that participant's data was not included in the qualitative-quantitative domain comparison analysis. This rule applied to nine of the 188 submitted surveys. If the participant failed to answer three or less questions then it was assumed that the response was that the participant did not know or was responding with a no (as in no experience or no training), which was most often coded "1" per the qualitative coding key (Appendix H). Fifteen of the 47 items in the quantitative section (item numbers 1, 3, 4, 6, 8, 11, 14, 18, 20, 22, 23, 31, 34, 37, 44) needed to be reversely coded since an "Agree" response represented a negative affect, for example. This coding was completed by replacing Strongly Agree responses with

Strongly Disagree, Agree with Disagree, Disagree with Agree, and Strongly Disagree with Strongly Agree.

Reliability

Reliability was established at a high level with an overall Cronbach alpha of .92, even better than the pilot study value of .79, which determined the suitability of the SDQ for the studied population. When reliability was broken up by domain, the number of questions for each respective domain played a strong role in the reliability values. With only seven items each, affect and knowledge had the lowest scores, Cronbach alphas of .60 and .49, respectively. The Contact domain reliability was adequate with a Cronbach alpha of .69. Social Willingness had the highest reliability score at .92.

Findings Related to Research Questions

Perspectives by Domain

The first research question addressed discovery of the perspectives of police officers regarding persons with mental retardation in the areas of knowledge, social willingness, contact, and affect. To analyze this research question, a univariate descriptive analysis was conducted. This analysis included descriptions of the score distribution for each subscale in relation to total score and discussions of descriptive statistics paired with visual analyses of results (i.e. histogram). The descriptive statistics for subscales show that the police officers studied have higher scores in the knowledge domain, social willingness scores are slightly higher, and that the values in affect and contact have a normal amount of variability as depicted in Table 5 and Figures 2-7 based on comparison of the scores in the histogram and a normally distributed sample.

Table 5

Descriptive Statistics for Subscales and Total

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Knowledge Domain Subscale Score	180	2.71	4.00	3.65	.31	-.93	.49
Contact Domain Subscale Score	180	1.65	3.71	2.86	.40	-.26	-.43
Affect Domain Subscale Score	180	1.86	4.00	3.01	.46	-.30	-.32
Social Domain Subscale Score	180	1.31	4.00	3.03	.60	-.49	-.27
Total Score	180	1.92	3.87	3.14	.37	-.49	.04

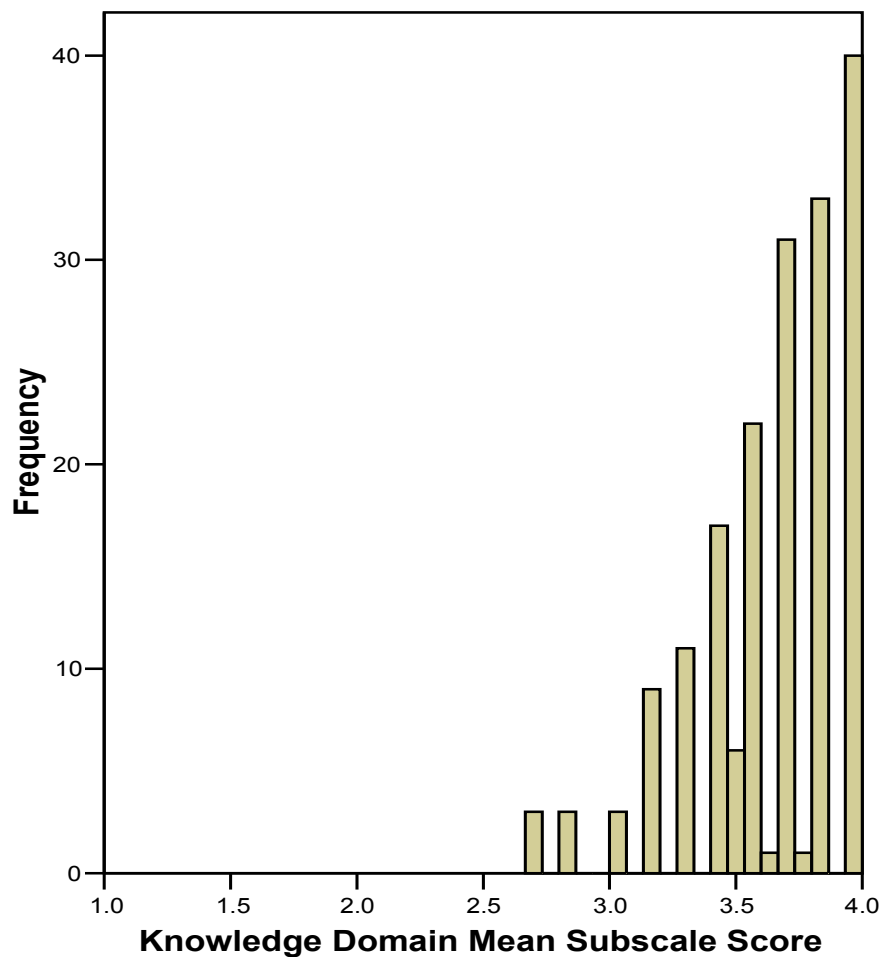


Figure 2. Knowledge Domain Subscale Score Histogram. This histogram shows that knowledge is significantly skewed toward the higher scores.

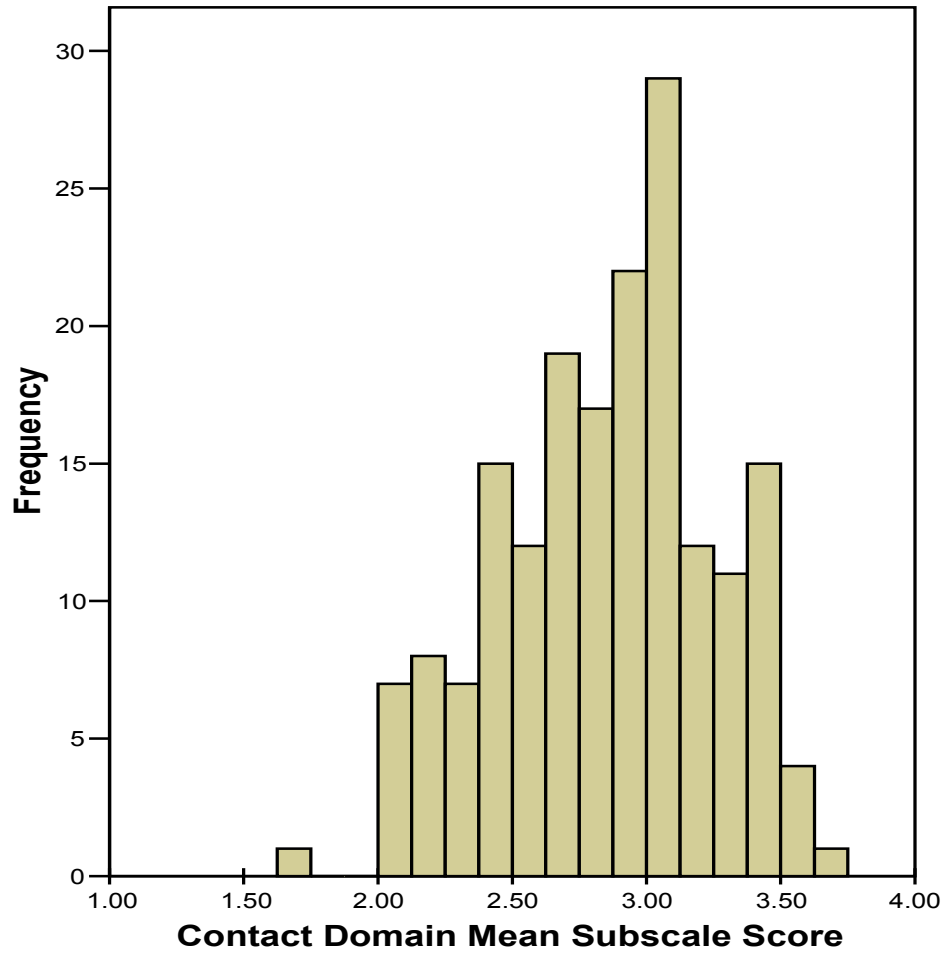


Figure 3. Contact Domain Subscale Score Histogram. The histogram for the contact domain is slightly skewed towards the higher end of a normal distribution.

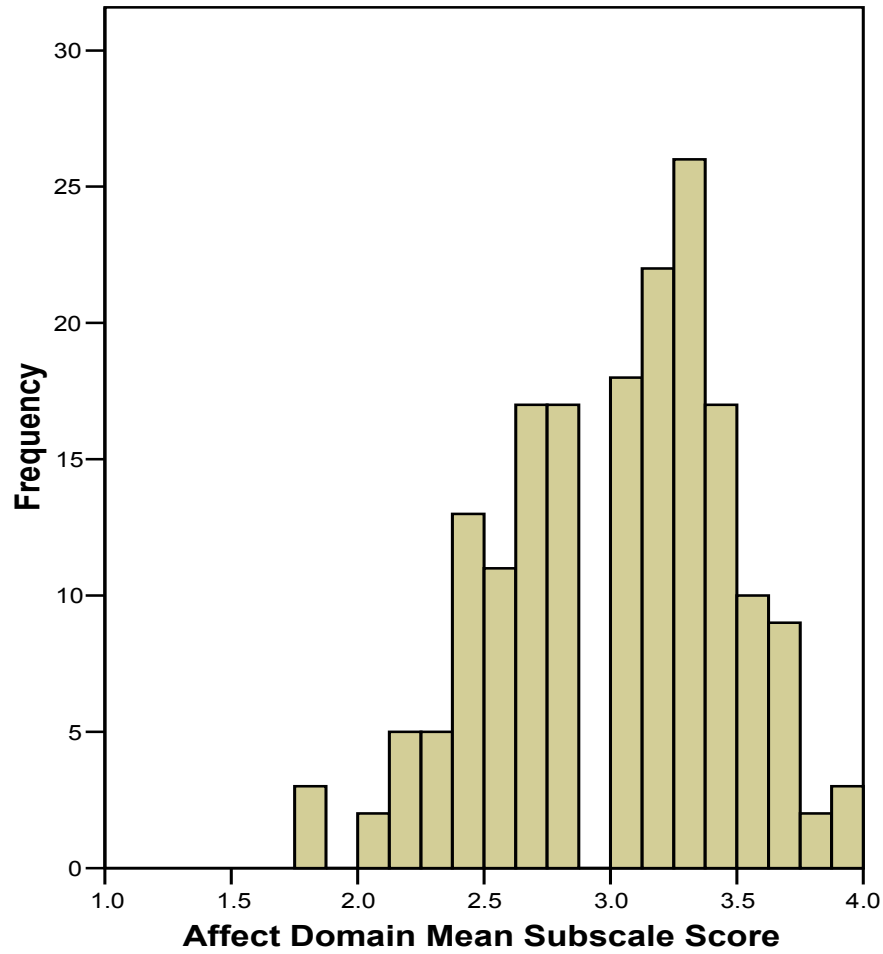


Figure 4. Affect Domain Subscale Score Histogram. Like the contact histogram, the affect domain histogram is slightly skewed toward the higher end of a normal distribution.

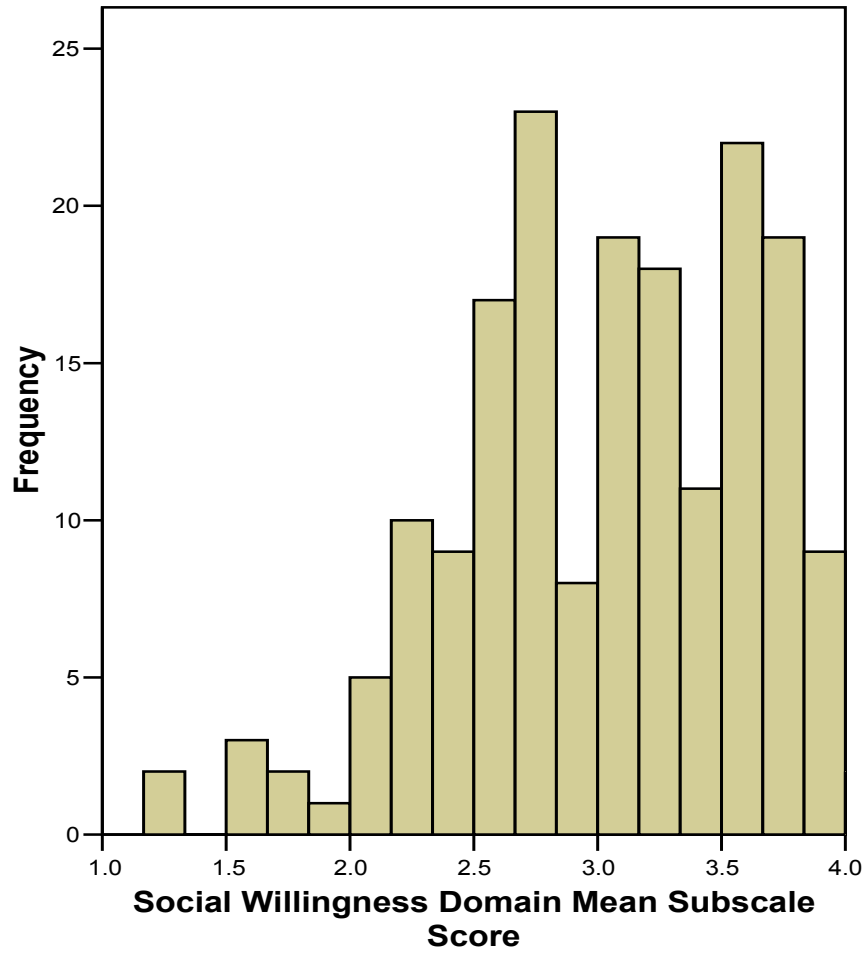


Figure 5. Social Domain Subscale Score Histogram. Like the contact and affect domains, the scores are slightly skewed to the higher end.

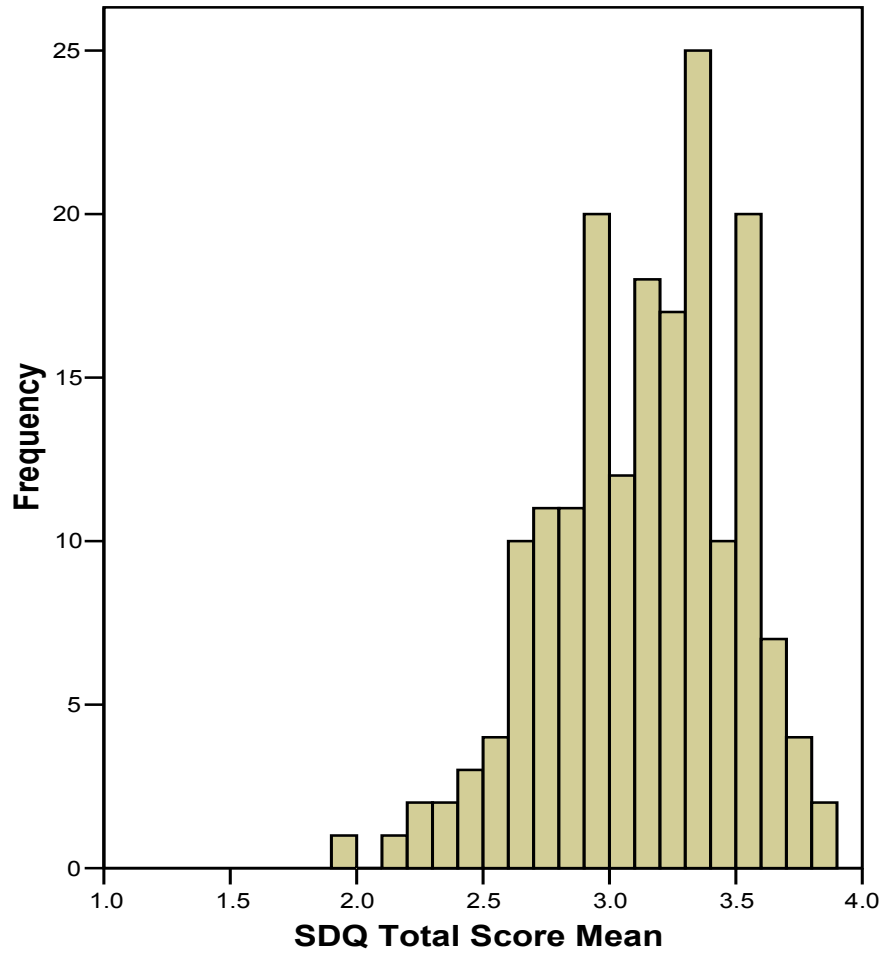


Figure 6. Total Score on SDQ Histogram. The total score for attitude toward persons with mental retardation reflects the domain sub scores as it is slightly skewed to the higher end.

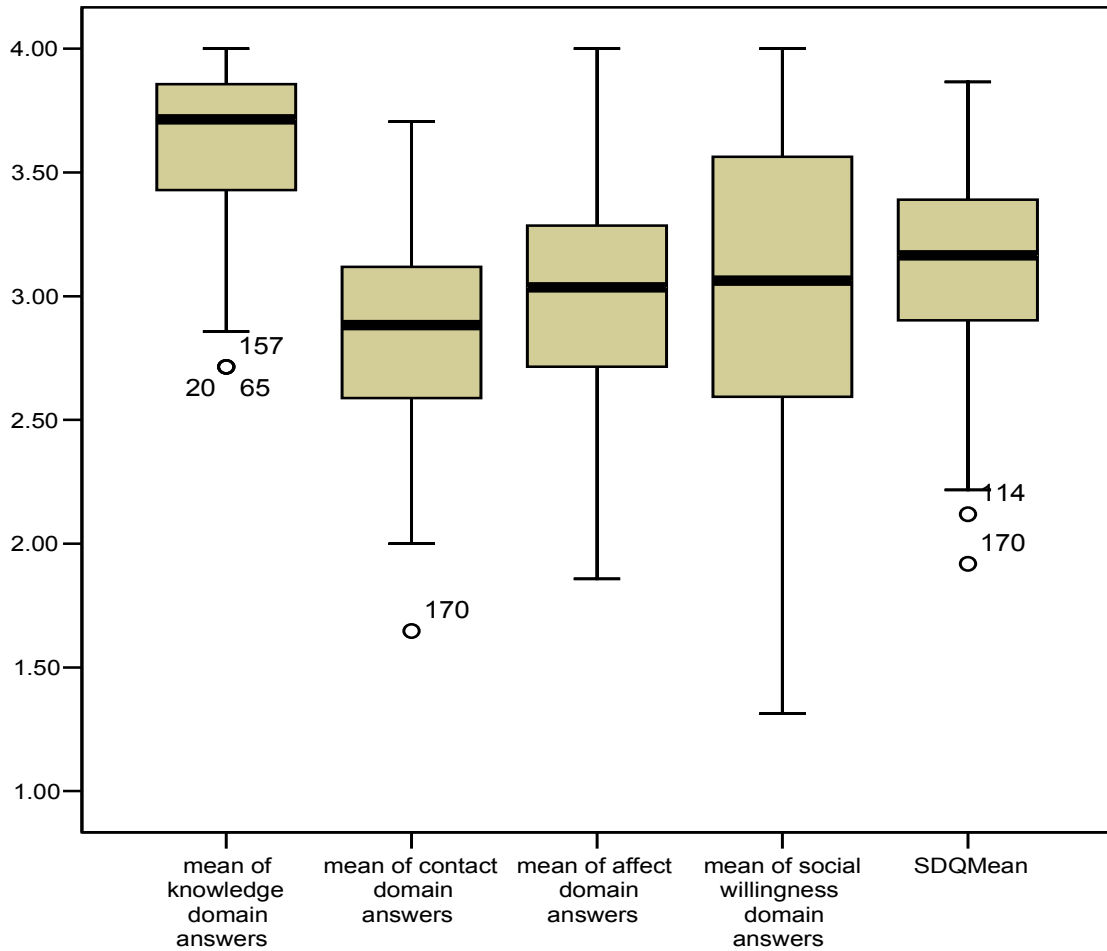


Figure 7. Comparison of Mean Box Plot. The domains of affect and social willingness are commensurate with the mean attitudinal score. The average for contact scores is slightly lower than the overall mean, whereas, the scores in the knowledge domain are significantly higher. The outlying values are identified in the graph above through the identification of the survey number to which the score corresponds.

Group Membership and Officers' Attitudes

The second research question investigated the relationships among the variables of age, race, and gender as they pertain to police officers with regard to their perspectives

of persons with mental retardation. This question was answered through a combination of descriptive analyses and inferential tests.

Gender was analyzed by performing an independent samples t-test to see how each gender scored on each of the attitudinal domains and the participant's overall attitude toward persons with mental retardation. As depicted in Table 6, the effect size analysis showed that a medium to large effect size should be noted for the domain of affect, with a value of .62. According to Cohen, large effect size is commensurate with a value of .8 and medium effect sizes are represented by a *d* value of .5 (Green, Salkind, & Akey, 2000). Small effect size is identified by Cohen at .2, so a small effect size should be noted for the domain of social willingness and for the overall attitudinal SDQ score. The domains of knowledge and contact are commensurate with a rating of no effect size, meaning there was no notable difference between the gender groups.

Table 6

Gender Differences Group Statistics

	Gender	N	Mean	Std. Deviation	Effect size (<i>d</i> value)	Obtained <i>t</i>	Sig. (<i>p</i>)																																												
Knowledge Domain Subscale Score	Female	21	3.64	.37	-.03	-.12	.90																																												
	Male	159	3.65	.30				Contact Domain Subscale Score	Female	21	2.85	.37	-.02	-.09	.93	Male	159	2.86	.40	Affect Domain Subscale Score	Female	21	3.26	.38	.62	3.12	.00	Male	159	2.98	.46	Social Willingness Domain Subscale Score	Female	21	3.15	.42	.23	1.30	.20	Male	159	3.01	.62	Total Score	Female	21	3.22	.27	.25	1.51	.14
Contact Domain Subscale Score	Female	21	2.85	.37	-.02	-.09	.93																																												
	Male	159	2.86	.40				Affect Domain Subscale Score	Female	21	3.26	.38	.62	3.12	.00	Male	159	2.98	.46	Social Willingness Domain Subscale Score	Female	21	3.15	.42	.23	1.30	.20	Male	159	3.01	.62	Total Score	Female	21	3.22	.27	.25	1.51	.14	Male	159	3.13	.38								
Affect Domain Subscale Score	Female	21	3.26	.38	.62	3.12	.00																																												
	Male	159	2.98	.46				Social Willingness Domain Subscale Score	Female	21	3.15	.42	.23	1.30	.20	Male	159	3.01	.62	Total Score	Female	21	3.22	.27	.25	1.51	.14	Male	159	3.13	.38																				
Social Willingness Domain Subscale Score	Female	21	3.15	.42	.23	1.30	.20																																												
	Male	159	3.01	.62				Total Score	Female	21	3.22	.27	.25	1.51	.14	Male	159	3.13	.38																																
Total Score	Female	21	3.22	.27	.25	1.51	.14																																												
	Male	159	3.13	.38																																															

An independent samples t test was conducted to analyze the relationships between gender and both domain and attitudinal score. As shown in Table 6, the test was significant ($t=3.12$, $p=.004$) in one domain as female police officers scored higher on the affect toward persons with mental retardation scale than male police officers. In all other domains and the total score, the null hypothesis that gender has no affect on attitude towards disability could not be rejected.

Race could not be analyzed with a t-test as originally planned since three categories came about during data analysis, so a one-way ANOVA paired with pair-wise correlation testing was used instead to analyze ethnicity's role in shaping police officers' attitudes toward disability. In this analysis, three subgroups were identified, Black/African American, White/Caucasian, and Hispanic/Latino. Since only two of the 188 respondents self-identified as 'Other', that category was excluded from the analysis due to statistical insignificance. In addition to the eight excluded from all quantitative analyses due to non-response, the analyses of ethnicity group membership consisted of 178 participants whose mean scores are reported by domain in Table 7 below. In regards to total score and every individual domain score, the highest scores came from those respondents who self-identified as Black/African American. In all domains except knowledge, the second highest scores came from White/Caucasian respondents, and then the lowest scores came from respondents who identified themselves as Hispanic/Latino. In the domain of knowledge, Black/African American had the highest mean score, and then came Hispanic/Latino, followed by White/Caucasian.

Table 7

Ethnicity Differences Group Statistics

	Race	N	Mean	Std. Deviation
Knowledge Domain Subscale Score	Black/African American	10	3.62	.37
	White/Caucasian	162	3.00	.30
	Hispanic/Latino	6	3.47	.37
Contact Domain Subscale Score	Black/African American	10	3.06	.29
	White/Caucasian	162	2.85	.41
	Hispanic/Latino	6	2.63	.34
Affect Domain Subscale Score	Black/African American	10	3.28	.41
	White/Caucasian	162	3.01	.45
	Hispanic/Latino	6	2.74	.64
Social Willingness Domain Subscale Score	Black/African American	10	3.23	.50
	White/Caucasian	162	3.03	.59
	Hispanic/Latino	6	2.46	.85
Total SDQ Score	Black/African American	10	3.30	.25
	White/Caucasian	162	3.14	.37
	Hispanic/Latino	6	2.83	.49

The next analysis of ethnicity's relationship to attitudinal scores consisted of descriptive statistics using box-plots to compare mean responses. Each of the four domains of knowledge, contact, affect, and social willingness were analyzed based on mean scores and the variability in the reported scores as depicted in the box plots labeled Figures 8-12.

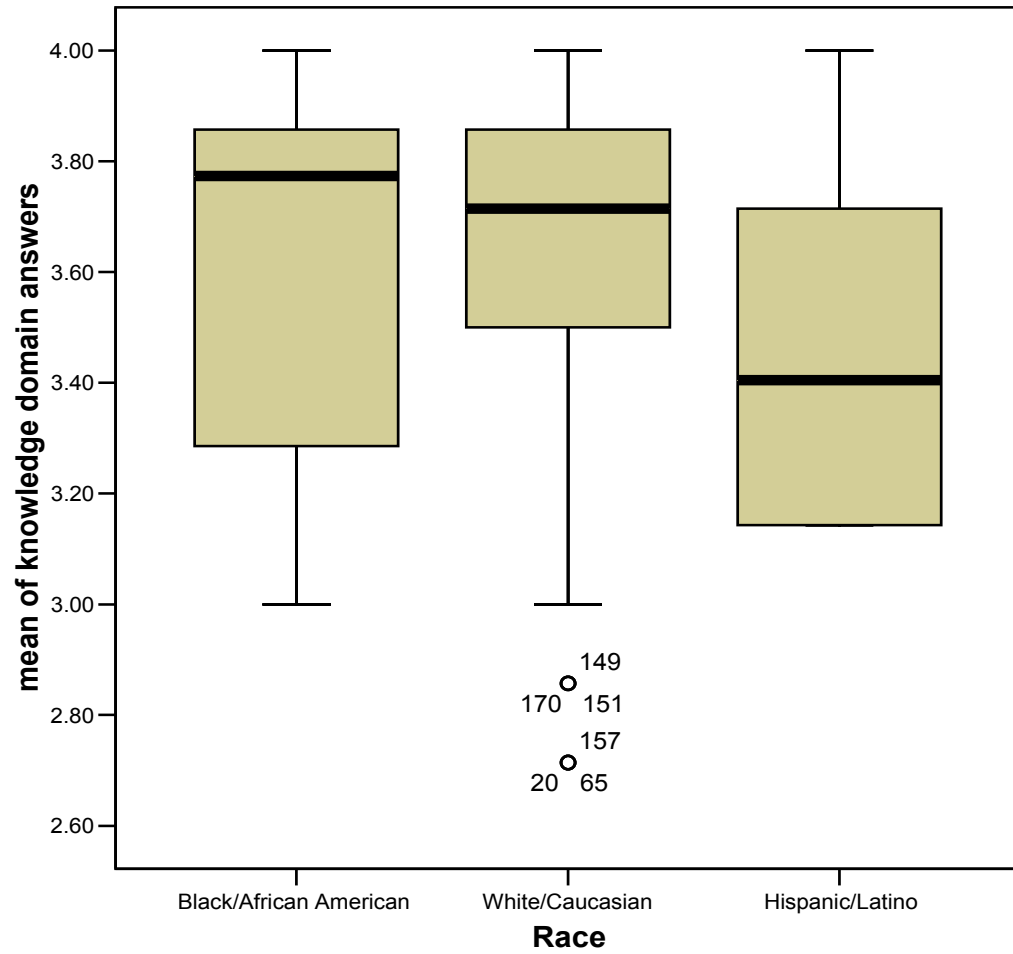


Figure 8. Comparison of Knowledge by Race Box Plot. The scores for Black/African American and the White/Caucasian respondents were close, but the average response from Hispanic/Latino respondents was lower than the other two groups. The outlying values are identified in the graph above through the identification of the survey number to which the score corresponds.

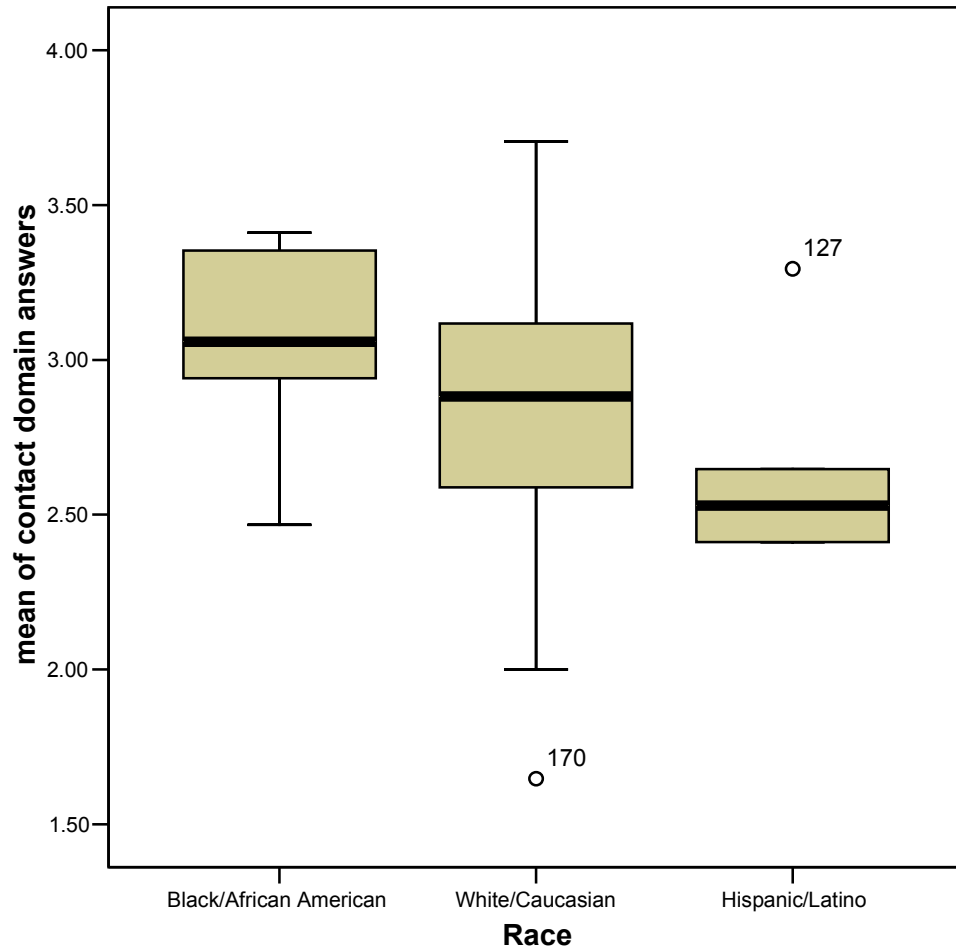


Figure 9. Comparison of Contact by Race Box Plot. The mean scores in the contact domain for Black/African American and the White/Caucasian respondents were somewhat close, but the average response from Hispanic/Latino respondents was lower than the other two groups.

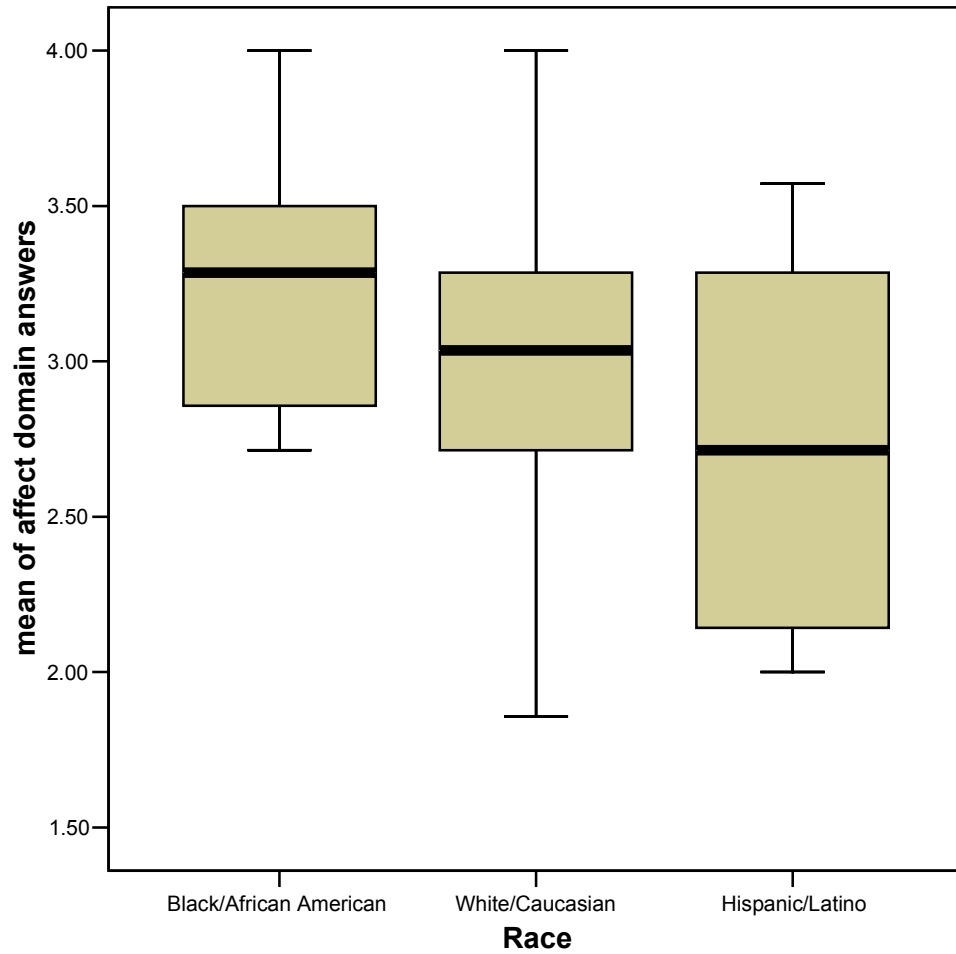


Figure 10. Comparison of Affect by Race Box Plot. The mean scores in the affect domain for Black/African American and the White/Caucasian respondents were somewhat close, but the average response from Hispanic/Latino respondents was lower than the other two groups. However, there was a large amount of range within the responses from those who identified as Hispanic/Latino.

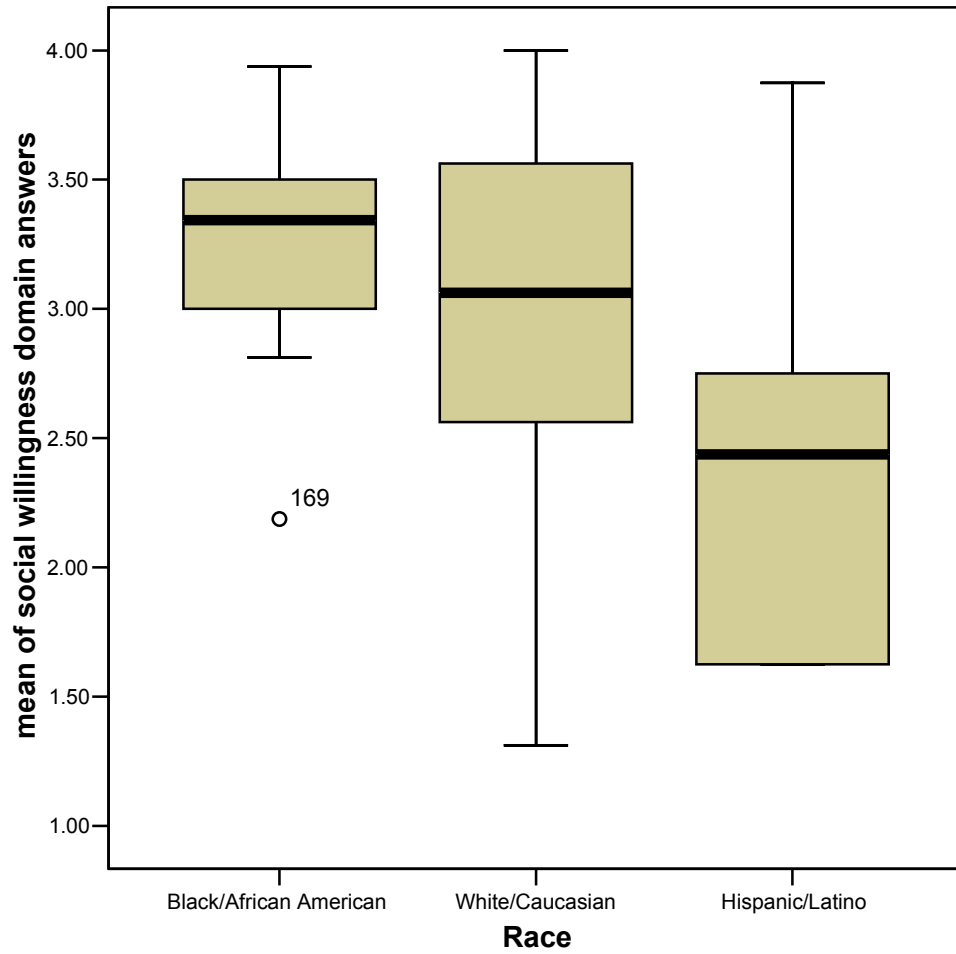


Figure 11. Comparison of Social Willingness by Race Box Plot. The mean scores in the social willingness domain for Black/African American and the White/Caucasian respondents were somewhat close, but the average response from Hispanic/Latino respondents was lower than the other two groups.

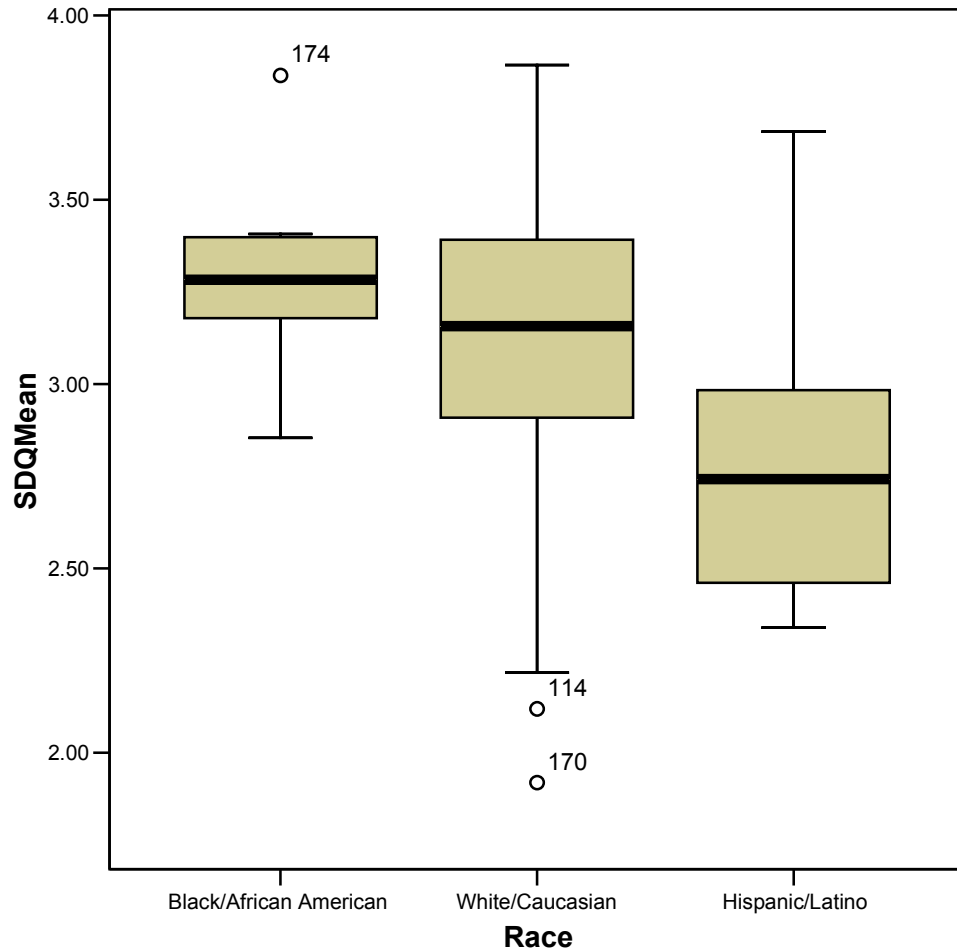


Figure 12. Comparison of Overall Score by Race Box Plot. The mean scores in the social willingness domain for Black/African American and the White/Caucasian respondents were close, but the average response from Hispanic/Latino respondents was lower than the other two groups.

As a follow-up test, a one-way ANOVA with Bonferroni correction for inflation of Type I error which consisted of pair-wise comparisons for race was conducted. In the testing for differences among these three ethnic groups, the results showed that even though differences were identified in the descriptive analyses, they were not necessarily significant. Statistically significant differences were found only in the social willingness

domain and in total score as described in Table 8 below. However, the effect size is small, likely due to the inequity of the group sizes and item numbers per domain. The only pair-wise comparisons that were significant ($p < .05$) were in social willingness and in overall score comparison. In the social willingness domain, the results showed that Black/African American respondents scored significantly higher than participants who self-identified as Hispanic/Latino ($p = .04$). Similarly, in the overall score, the results showed that Black/African American respondents scored significantly higher than Hispanic/Latino participants ($p = .04$). The same analyses were used to analyze race within the open-ended question results and no significant relationships were identified.

Table 8

Ethnicity Significance Between-Groups Test Results

Independent Variable	Dependent Variable	F	Sig. (<i>p</i>)
Ethnicity	Knowledge Domain Subscale Score	1.27	.28
	Contact Domain Subscale Score	2.23	.11
	Affect Domain Subscale Score	2.77	.07
	Social Willingness Domain Score	3.34	.04
	Total Score on SDQ	3.13	.05

Age and years of experience were examined using an analysis of Pearson correlation coefficients for each of these continuous variables. As depicted in Table 9, the results showed that the police officers' attitudes were not correlated with their respective age or level of experience. The two subscales were, however, strongly positively correlated ($r = .57$).

Table 9

Correlations Between Age and Years of Experience Variables and Attitudinal Scores

	Knowledge	Contact	Affect	Social Willingness	SDQ Overall	Age
Age	.10	.11	.02	.02	.07	1.00
Years of Experience	.07	.03	-.12	-.06	-.04	.57

Subscale Domain Relationships

To analyze the strength of the relationships among the domains of knowledge, social willingness, contact, and affect a four-by-four correlation matrix was selected as the combination of the four domains offers a measurement of the person's attitude toward disability. In Table 10, the Pearson Product Moment Correlation values are presented for each of the respective domain relationships. According to the correlation testing, every domain has a significant relationship (at the .01 level with a 2-tailed test) with each of the other domains.

Table 10

Relationships Between Subscales and Total Scores

	Knowledge	Contact	Affect	Social Willingness	Coefficient of alienation (1-R ²)
Knowledge	1.00	.35	.45	.50	.03
Contact	.35	1.00	.53	.66	.04
Affect	.45	.53	1.00	.75	.04
Social Willingness	.50	.66	.75	1.00	.05
SDQ Overall	.65	.78	.86	.93	-

Variance accounted for measures in the correlational analyses determined the amount of variability in the overall total SDQ score associated with the variability in the subscale scores (Newton & Rudestam, 1999). In analyzing how much of the variance in the total score was a result of the sub-scores using the total SDQ mean, the results showed that knowledge accounted for only 42.25%, contact for 60.84%, affect for 73.96%, and social willingness for 86.49% of the total variance. Much of the variance is shared by two or more domains, which is why the numbers do not add up to one. In order to get an accurate representation of how much of the variance in the total score was a result of the sub-scores, a multiple regression analysis was used, which analyzed the effects of each subscale domain individually while controlling for the effects of the other three domains. As depicted in Table 10, the coefficients of alienation determined the percent of the variance unaccounted for by the domain criterion to analyze the subscale's effect on the total score. Social willingness had the most influence on total score (.05) and the knowledge had the least amount of influence (.03). In analyzing the proportion of variance, the highest level of variance was found in the domain of knowledge and the lowest level in social willingness; the variances for affect and contact were in the middle of the values for the other two domains. Therefore, it was determined that the level of knowledge between the participants in the study was slightly more variable than the other three domains, but that the responses and level of social willingness demonstrated more consistency when compared with the overall score.

Analysis of Open-ended Question Responses

The qualitative questions were analyzed by a theme analysis of the first twenty-two submitted surveys. The responses to each question were analyzed and categorized

into response categories by grouping similar answers together. Each of the respective response categories was quantified and a qualitative coding key was developed (Appendix H). After all surveys had been coded, the response categories were grouped into themes. First, the data reduction process for open-ended questions is discussed. Then, frequency distributions for each respective domain are presented below for both answer categories and themes. Finally, a chart was developed comparing the open-ended response question results with the previously described quantitative results.

Data Reduction

The data from the exploratory analysis was converted into response categories by taking the content of the response and assigning it to the highest valued response category. For example, if on the knowledge question, a respondent wrote “physical signs and level of cognition,” it would be categorized as “5: cognitive characteristics/content of conversation” rather than “4: physical characteristics.” After all surveys had been coded, the response categories were grouped into themes (Appendix H). Detailed descriptions of the coding process for each of the five respective-open-ended questions follows below.

Knowledge. The first question analyzed the participant’s attitude in the domain of knowledge, “How do you know if someone with whom you are interacting has mental retardation?” Based on the exploratory analysis, five response categories were identified and then those responses were grouped into three themes. The themes identified were “no knowledge,” “some knowledge,” and “accurate knowledge.” Responses under answer category “1: don’t know person has MR / N/A” were categorized “no knowledge.” The theme of “some knowledge” contains response categories “2: speech difficulties,” “3: behavioral characteristics,” and “4: physical characteristics.” The theme

of “accurate knowledge” is commensurate with response category “5: cognitive characteristics/content of conversation.” Example responses from each of the respective response categories are discussed below.

Example responses that fit under the first category, “1: don’t know person has MR / N/A” included “I don’t know, it can be difficult to tell if someone has mental retardation” and “I usually feel somewhat sorry for the person.” Responses categorized under “2: speech difficulties” include “slow speech,” “by their voice,” and “speech impediments.” The next category is “3: behavioral characteristics,” which includes responses such as “actions,” “by their behavior,” and “mannerisms, the way they show affections etc.” The final category in the theme of “some knowledge” is “4: physical characteristics” where responses such as “facial features” and “by how they look” were categorized. The last category, “5: cognitive characteristics/content of conversation” covered several different responses, such as “vocabulary,” “comprehension,” “simplistic views on common issues; delayed reaction to commands,” “responses to questions,” “mental retardation has varying degrees of disability; milder forms may only be detected by trained pros; extreme cases can include the inability to talk and care for oneself,” “you don’t ‘know’ for sure; some may have overt physical characteristics such as with Down Syndrome; others may appear perfectly normal but have below average ability to understand or comprehend normally.”

Contact. The second question analyzed the participant’s attitude in the domain of contact, “Please describe any personal experience you have had with a person who has mental retardation.” Based on the exploratory analysis, five response categories were identified and then those responses were grouped into three themes. The themes

identified were “no contact,” “little contact,” and “personal contact.” Any participant responses categorized “1: no contact with MR” or “2: listed experience with mental illness” came under the theme of “no contact.” The next theme, “little contact” contains the response category “3: minimal contact/working as an officer contact.” Finally, the last two response categories, “4: worked/volunteer with disabilities” and “5: know someone (family, friend)” are grouped under the theme of “personal contact.” Example responses from each of the respective response categories are discussed below.

Example responses for the category “1: no contact with MR” include “none,” and “N/A.” The category “2: listed experience with mental illness” contains the response “people are not talking clearly, making bizarre statement, and seeing things that are not there or hearing voices.” Responses that fit under the category “3: minimal contact/working as an officer contact” include “I have investigated crimes with retarded victims” and “only at work, none personal.” The next category “4: worked/volunteer with disabilities” contains responses like “worked with Sunday School class of handicapped people.” The final category, “5: know someone (family, friend),” includes responses such as “cousin with moderate retardation,” “I have several friends who have Down Syndrome children,” “went to school with one; nicest guy; he would do anything for you,” and “aunt is mentally retarded.”

Affect. The third question analyzed the participant’s attitude in the domain of affect, “Under what conditions would you adopt a child with mental retardation?” Based on the exploratory analysis, five response categories were identified and then those responses were grouped into three themes. The themes identified were “negative personal affect,” “neutral personal affect,” and “positive personal affect.” The theme of

“negative personal affect” towards persons with mental retardation contains the response category “1: don’t know/no conditions would make me adopt MR.” The categories “2: no kids/adoption of any kind/too old to parent” and “3: necessity” are classified under the theme “neutral personal affect.” Finally, the theme of “positive personal affect” contains categories “4: circumstances” and “5: would adopt MR.” Example responses from each of the respective response categories are discussed below.

Responses under the category “1: don’t know/no conditions would make me adopt MR” include “I wouldn’t” and “None; It would require more time than my wife and I have to commit.” The category “2: no kids/adoption of any kind/too old to parent” includes responses such as “No conditions; don’t want children” and “probably wouldn’t; age is a factor (I am 50).” The next category of responses was “3: necessity” and includes things like “asylum seeking from warzone” and “If it was a family or a close friend’s child and they couldn’t keep it for some reason.” The next category “4: circumstances” includes responses like “It would depend on the severity of the retardation and my wife agrees” or “only if my salary allowed my wife to stay home/not work; I would imagine a child with disabilities would require a greater degree of attention than we could provide if both of us were working.” The final category was “5: would adopt MR” and included responses such as “I would.”

Social Willingness. The fourth question analyzed the participant’s attitude in the domain of social willingness, “If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.” Based on the exploratory analysis, four response categories were identified and then those responses were grouped into three

themes. The themes identified were “negative social willingness,” “minimal social willingness,” and “positive social willingness.” The response category “negative social willingness” contains the response category “1: none/not applicable.” The next theme, “minimal social willingness” contains the categories “2: specific events only” and “3: any, but would be uncomfortable.” The final theme “positive social willingness” contains the category “4: any events.” Example responses from each of the respective response categories are discussed below.

The first response category under social willingness was “1: none/not applicable” and included responses such as “can not really imagine.” The next category “2: specific events only” included responses like “going to the park, baseball game, movies” and “dinner.” The next category “3: any, but would be uncomfortable” included responses indicating that the person would attend any event but that they were not happy about it. The final category “4: any events” was most often answered with “any” or “any and all,” but other responses such as “I would have no problem attending any function with this friend” were also included under this category.

Training. The final open-ended question asked about the police officers prior disability training, “Please describe any previous disability training you have received.” Based on the exploratory analysis, six response categories were identified and then those responses were grouped into three themes. The themes identified were “no training,” “minimal training,” and “disability-specific training.” Those officers whose responses were classified under response categories “1: none” and “2: little/experience as training” were grouped under the theme “no training.” Responses in categories “3: named other trainings” and “4: police academy” fell under the theme “minimal training.” Finally, the

theme of “disability-specific training” contains response categories “5: disability training session” and “6: formal disability education.” Example responses from each of the respective response categories are discussed below.

The first response category, indicating that the officer had no prior disability training was “1: none,” including responses of the same, “none.” The next category, “2: little/experience as training” included responses like “not a great deal; mainly through instilled family values and personal experience,” “work experience only,” and “life.” The next category “3: named other trainings” included responses such as “crisis intervention-concerning dealings with the mentally ill.” The category “4: police academy” contains responses such as “academy,” “training of mentally retarded and physically disabled people during police academy; training covered how to identify and treat/interact.” Responses categorized under “5: disability training session” include “in-service training on dealing with mentally handicapped; very basic in its scope,” “I have received numerous hours at work on how to deal with mental retarded,” and “autism.” The final category “6: formal disability education” included those responses when participants indicated training beyond the department in a formal education setting, for example, “college classes learned about people with special needs” and “in early 1970s I studied in a college program specifically directed at working with the mentally retarded.”

Data Display

After the reduction of data, analysis of each question’s response categories and respective themes was completed through frequency distributions which are presented below for each respective domain for both answer categories and themes. Following the frequency distributions is a chart comparing the open-ended response question results

with the previously described quantitative results. The comparison between quantitative and open-ended response data is discussed in Chapter 5.

Knowledge Domain Frequency Distributions

Table 11

Frequency Distribution for Knowledge Domain by Answer Category

(K) How do you know if someone with whom you are interacting has mental retardation?

Response Category	n	%
don't know person has MR, N/A	36	19.1
speech difficulties	7	3.7
behavioral characteristics	42	22.3
physical characteristics	33	17.6
cognitive characteristics	61	32.4
Missing	9	4.8
Total	188	100.0

In Table 12, it is clear that the responses from most police officers (76.0%) studied fits into either some or accurate knowledge. This is commensurate with the quantitative data.

Table 12

Frequency Distribution for Knowledge Domain by Theme

Theme	n	%
no knowledge	36	19.1
some knowledge	82	43.6
accurate knowledge	61	32.4
Total	179	95.2

Contact Domain Frequency Distributions

Table 13

Frequency Distribution for Contact Domain by Answer Category

(C) Please describe any personal experience you have had with a person who has mental retardation.

Response Category	n	%
no contact with MR	47	25.0
listed experience with mental illness	1	.5
minimal contact/working as officer contact	70	37.2
worked/volunteer with disabilities	18	9.6
know someone (family, friend)	43	22.9
Missing	9	4.8
Total	188	100.0

In Table 14, it is clear that the majority of officer (62.9%) responses fit under the categories little or no contact with persons who have mental retardation. Only one in three officers has had personal contact with those who have mental retardation. These results are a little lower than the normal distribution described in the quantitative results for the Contact domain.

Table 14

Frequency Distribution for Contact Domain by Theme

Theme	n	%
no contact	48	25.5
little contact	70	37.2
personal contact	61	32.5
Total	179	95.2

Affect Domain Frequency Distributions

Table 15

Frequency Distribution for Affect Domain by Answer Category

(A) Under what conditions would you adopt a child with mental retardation?

Response Category	n	%
don't know/no conditions would make me adopt MR	81	43.1
no kids/adoption of any kind/too old to parent	35	18.6
necessity	31	16.5
circumstances (finances, time, lack of proper training)	29	15.4
would adopt MR	2	1.1
Missing	10	5.3
Total	188	100.0

In Table 16, the results show that the majority of police officers (78.2%) studied responded in ways that indicated neutral or negative affect towards persons with mental retardation. This is not commensurate with the normally distributed quantitative results.

Table 16

Frequency Distribution for Affect Domain by Theme

Theme	n	%
negative personal affect	81	43.1
neutral personal affect	66	35.1
positive personal affect	32	16.5
Total	178	94.7

Social Willingness Domain Frequency Distributions

Table 17

Frequency Distribution for Social Willingness Domain by Answer Category

(SW) If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.

Response Category	n	%
none, not applicable	21	11.2
specific events only	38	20.2
any, but would be uncomfortable	1	.5
any events	119	63.3
Missing	9	4.8
Total	188	100.0

In Table 18, the results reveal that the vast majority of police officers' survey responses were categorized (84.0%) as minimal or positive social willingness towards persons with mental retardation. This level of social willingness is commensurate with the results from the quantitative Social Willingness domain.

Table 18

Frequency Distribution for Social Willingness Domain by Theme

Theme	n	%
negative social willingness	21	11.2
minimal social willingness	39	20.7
positive social willingness	119	63.3
Total	179	95.2

Training Frequency Distributions

Table 19

Frequency Distribution for Description of Previous Disability Training by Answer Category

Q: Please describe any previous disability training you have received.

Response Category	n	%
none	72	38.3
little/experience as training	8	4.3
named other trainings (empathy, mental illness, etc)	60	31.9
police academy	18	9.6
disability training session	16	8.5
formal disability education (college, etc.)	4	2.1
Missing	10	5.3
Total	188	100.0

Despite the level of knowledge displayed in both the quantitative and open-ended question results, most police officers (84.1%) admit to having minimal or no training with regard to disability.

Table 20

Frequency Distribution for Training Domain by Theme

Theme	n	%
no training	80	42.6
minimal training	78	41.5
disability-specific training	20	7.8
Total	178	94.7

Comparison of Data between Quantitative and Open-ended Results

Table 21 is a comparison chart sorted by domain analyzing the relationships between the results from the quantitative SDQ results and the question responses from the open-ended data. Any discussion of midpoint of the scale refers to the middle of the respective Likert scale (2.5) or the middle theme of the open-ended responses (e.g. “Some knowledge”). Responses in the domains of knowledge and social willingness were commensurate. However, responses between the quantitative and open-ended question results were not consistent.

Table 21

Comparison between Quantitative Results and Open-ended Response Results

Domain	Quantitative	Open-ended	Comparison
Knowledge	Higher than midpoint	Higher than midpoint	Commensurate
Contact	Slightly higher	Lower than midpoint	Incongruous
Affect	Slightly higher	Lower than midpoint	Incongruous
Social Willingness	Somewhat higher	Higher than midpoint	Somewhat Commensurate

Summary of Findings

Three research questions were posed for investigation in this study. The first question investigated police officers’ perspectives regarding persons with mental retardation in the areas of knowledge, social willingness, contact, and affect. The descriptive statistics for subscales show that police officers have significantly higher-than-midpoint scores in knowledge, slightly higher-than-midpoint values in social willingness, and that the domains of affect and contact have a slightly higher distribution

than the normal distribution of scores. The responses to the open-ended questions supported the quantitative responses in both knowledge and to a degree in social willingness. In analysis of the responses to the knowledge question, the majority of officers had high levels of knowledge as indicated by the quantitative instrument and on the open-ended question as they showed that at least some knowledge of the characteristics of mental retardation with responses such as “comprehension” or “behavior.” Officers also scored highly in social willingness on both instruments as the majority of responses to the open-ended question analyzing the officer’s level of social willingness were that the officer was willing to attend “any” events to which his/her significant other planned to attend with a person who had mental retardation. However, the results between the two instruments were not commensurate in contact and affect where the officers’ open-ended responses reflected lower contact and less positive affect than what was represented in the quantitative data. Quantitative scores in contact were much higher than the open-ended responses where the majority of officers indicated that they had “no” personal interaction with persons who have mental retardation. The same is true for scores in affect where scores were higher in the quantitative data than the open-ended data as most officers indicated that they would not be willing to adopt a child with mental retardation under any circumstances.

The second research question inquired about the relationships among group membership (age, race, and gender) and the police officers’ perspective towards persons with mental retardation. The results showed that female police officers’ scores were higher in positive affect toward persons with mental retardation. In the testing for differences among race, statistically significant differences were found for the domain of

social willingness. Pair-wise comparison testing showed that Black/African American officers have higher scores in social willingness and overall attitudinal scores than Hispanic/Latino officers. With regard to age and experience, the results showed no correlation with their respective age or level of experience.

Finally, the third research question analyzed the strength of the relationships among the domains of knowledge, social willingness, contact, and affect. The results of the correlation matrix showed that every domain has a significant relationship with each of the other domains. The strongest relationship existed between the domains of affect and social willingness and the weakest relationship (though still significant) existed between the domains of knowledge and contact. Social willingness had the most influence on overall attitudinal score.

CHAPTER 5: DISCUSSION

Introduction

Chapter five summarizes the methods and procedures used in this study. It also includes a discussion of major findings, implications, and recommendations for future research. The study set out to investigate the perspectives of police officers with regard to persons with mental retardation in the domains of knowledge, social willingness, contact, and affect. The study also compared the strength of the association among factors such as years of experience, age, gender, and race with regard to knowledge, social willingness, contact, and affect as they pertain to the participant's perspective about persons with mental retardation. Finally, this study investigated relationships among the domains of knowledge, social willingness, contact, and affect among the police officers with regard to their perspectives of persons with mental retardation.

Procedures

The study design included a sample of 188 police officers from five different bureaus in a Western Central Florida county. Officers completed three questionnaires: the Demographics Questionnaire, an open-ended set of five questions (qualitative section), and a modified Social Distance Questionnaire (SDQ). Three research questions were investigated. Descriptive statistical analysis, inferential statistics, including t-tests, correlation testing, and pair-wise testing, and qualitative theme analysis were utilized.

Summary of the Findings

Results from the Demographics Questionnaire revealed that about sixty percent of the submitted surveys came from patrolling police officers with the remaining forty percent self-identifying as "Police Officer: Other" where the majority were either

detectives or administrative officers. Nearly ninety percent of the police officers who completed the survey self-identified as White/Caucasian males. Years of experience and age averaged out within the researcher's expectations based on the demographics of the police force as a whole.

Three research questions were posed to guide this study's investigation. The first question investigated police officers' perspectives regarding persons with mental retardation in the areas of knowledge, social willingness, contact, and affect. The descriptive statistics for subscales show that police officers are already educated about mental retardation, are socially willing to interact with persons who have mental retardation, and that the domains of affect and contact are slightly above the midpoint score point. The responses to the open-ended questions supported the quantitative responses in knowledge and somewhat in social willingness, but were not commensurate with the responses in contact and affect where the officers' responses reflected lower contact and less positive affect than what was represented in the quantitative data.

The second research question inquired about the relationships among group membership (age, race, and gender) and the police officers' perspective towards persons with mental retardation. The results showed that female police officers have a more positive affect toward persons with mental retardation but that there were no significant differences in any of the other domains or the overall attitudinal score. In the testing for differences among race, statistically significant differences were found in the domain of social willingness. Pair-wise comparison tests showed that Black/African American officers have more positive attitudes than Hispanic/Latino officers in social willingness. Analysis of the descriptive statistics showed that Black/African American officers tended

to score slightly higher than White/Caucasian officers in all domains and that both groups had higher mean scores than officers who identified themselves as Hispanic/Latino. With regard to age, the results showed that the police officers' attitudes were not correlated with their respective age or even their level of experience.

Finally, the third research question analyzed the strength of the relationships among the domains of knowledge, social willingness, contact, and affect. The results of the correlation matrix showed that every domain has a significant relationship with each of the other domains. The level of knowledge between the participants in the study was highly variable, but that the responses and level of social willingness demonstrated more consistency when compared with the overall score.

Discussion of the Findings

Demographic Analysis

The participants in the study strongly reflected the demographics of local police departments as white males dominate the workforce. Eighty-eight percent of the studied population was male and ninety percent identified themselves as White and/or Caucasian. The average age of persons in the study is near the median of average starting age for new recruits (early twenties) and workforce retirement age (early sixties). The mean for years of experience, 11.8 years, is also reflective of a twenty-year retirement program as is offered by the districts studied.

Attitudinal Domain Findings

The results of this study support that police officers hold generally positive attitudes towards persons with mental retardation. The attitude is measured through the four attitudinal factors of knowledge, social willingness, contact, and affect. These

definitions for the attitudinal factors emanate from the construction of the Social Distance Questionnaire (Carter, Hughes, Copeland & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson & Gaylord-Ross, 1983). Knowledge is defined as awareness of disability in tandem with an understanding of the characteristics of individual disabilities, such as mental retardation. The second factor is social willingness, which refers to a person's proclivity to interact with persons who have disabilities, in particular mental retardation. The next attitudinal factor is contact, referring to the actual encounters an individual has experienced with persons who have mental retardation. Affect is the fourth factor, which examined an individual's feelings toward persons with disabilities, especially mental retardation. The two factors of knowledge and contact are classified as objective domains while affect and social willingness fall into the subjective realm. The results showed that the total score for attitude toward persons with mental retardation reflects the domain sub scores as it is slightly skewed to the higher end, but clearly due to the high responses in the knowledge and social domains.

Measurement of Social Distance

Social distance was to be measured through the comparison of the objective domains of knowledge and contact with the subjective domains of affect and social willingness. The quantitative results showed that the objective and subjective domains were comparable as knowledge and social willingness were both skewed higher whereas contact and affect were only slightly skewed higher than the midpoint score range. The literature supports that higher scores in the domain of contact should correlate with knowledge and that high scores in knowledge should be commensurate with high scores in contact. However, the findings of this study do not support the literature's prediction

as the scores in knowledge and contact are not commensurate in both the quantitative data and the open-ended response data.

Knowledge

The results of the study showed that police officers are knowledgeable about persons with mental retardation. There is much research that shows that even at a young age, students are beginning to understand the fundamentals of disability (Contant & Budoff, 1983; Dyson, 2005; Smith & Williams, 2001). Roper Starch Worldwide's (1995) telephone survey of adults regarding their knowledge of learning disabilities found that the general public knows some things about disability, specifically learning disability, but that the knowledge was limited. The questions in the SDQ focused on more general knowledge items, e.g. "People with mental retardation always end up in institutions," and had only a few items that tested specific knowledge, e.g. "People with mental retardation have a higher sex drive." Interestingly, the latter item was the question that was most frequently skipped by participants whilst the average score for that participant in the other six knowledge domain questions had to be substituted for each blank response. According to the open-ended question response data, it is clear that most police officers (76.0%) studied have at least somewhat of a grasp of what to look for to see if a person has mental retardation. This is commensurate with the quantitative data that showed most police officers self-report being knowledgeable about mental retardation.

However, in deeper analysis of the open-ended item responses, it should be noted that only 32% of the participant responses were classified as "accurate knowledge" since their response referred to the cognitive characteristics that define mental retardation.

Questions arise in analysis of the data with regard to how much knowledge is deemed acceptable for police officers to have regarding what defines mental retardation. Is it okay that they expect to identify a person with mental retardation just by behavioral characteristics or do the officers need to know understand what characterizes mental retardation at a deeper level?

Social Willingness

The total scores in social willingness showed that police officers are socially willing to interact with persons who have mental retardation. The results from the open-ended response data reveal that the vast majority of police officers (84.0%) are socially willing to do at least some leisure activities with a person who has mental retardation. This level of social willingness is commensurate with the results from the quantitative social willingness domain. The social pressure to exhibit positive attitudes toward disability may play a role in the skewing of these scores. Similar to the results of this study, Moon, Hart, Komissar, and Friedlander (1991) administered a peer interest survey to assess the recreational habits of 619 youth and found that the majority of the students they surveyed were open to same-age disabled peers being included in their recreational activities.

Similar to the questions that arose in the analysis of the knowledge data, the question of the levels of social willingness comes into play. For example, there is a huge difference between a person who is socially willing to be seen in public with someone who has mental retardation and a person who truly befriends someone who has mental retardation, talking to them on the phone, including them in private activities, etc. Is it

enough that a police officer is willing to socialize with a person who has mental retardation or does it need to be a true relationship?

Contact

The quantitative results showed that police officers have slightly more contact with persons who have mental retardation than the midpoint scale value. Despite the research showing that contact is a very influential domain as direct experiences with those who carry the label of disabled will simply increase the individual's knowledge of disability and social willingness to befriend those with disabilities, these relationships between domains are not demonstrated in the current study (Carter, Hughes, Copeland & Breen, 2001; Clemenz, 2002; Dyson, 2005; Esses, Beaufoy, & Philipp, 1993; Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983; Krahe & Altwasser, 2006). In fact, the domains of knowledge and social willingness were higher in both the quantitative and open-ended results than the results in contact. Contact nearly followed the normal distribution in the quantitative results whereas lower scores were discovered in the open-ended response investigation. In analysis of the open-ended results, it became clear that the majority of officers (62.9%) have minimal to no contact with persons who have mental retardation. In fact, only one in three officers has had personal contact with those who have mental retardation. These results are a little lower than the slightly higher than a normal distribution described in the quantitative results for the contact domain.

The reason for the differences between quantitative and open-ended results again goes back the question content since the level of contact is measured differently between the two instruments. The SDQ items measured informal contact, e.g. "I have seen a person with mental retardation at the beach or park," whereas the open-ended instrument

measured personal contact in asking the person to describe personal contact with a person who had mental retardation. The same question must be asked as to what level of contact is needed to make the police officer effective in handling persons with mental retardation on a day-to-day basis. Do they truly need personal experience to have a positive attitude and to display appropriate behaviors with this population?

Affect

In accordance with the Social Distance theory, attitudes are more positive in the social context of work rather than in dating or marriage (Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983; Hergenrather & Rhodes, 2007). The comparison between the quantitative and qualitative affective results in the current study of police officers reflects this difference. The open-ended response results show that the majority of police officers (78.2%) displayed a less-than-positive affect towards persons with mental retardation. This is not commensurate with the slightly higher than a normal distribution quantitative results. One possible reason for this difference has to do with the level of affect measured by the questions. The affective items in the SDQ were more superficial, such as “It can be rewarding for me to talk with or help people with mental retardation,” whereas, the question measuring affect in the qualitative measured a terminal affect as it was asking about adopting a child with mental retardation. Again, questions arise as to the level of affect needed by a police officer to be effective in his or her every day dealings with persons who have mental retardation.

Age and Years of Experience Findings

As people grow from early childhood into adulthood, the overall positive attitudes toward disability held by kindergartners may or may not maintain themselves as the

children grow older (Carter, Hughes, Conant & Budoff, 1983; Copeland & Breen, 2001; Clemenz, 2002; Krajewski and Flaherty 2000; Moon, Hart, Komissar, & Friedlander, 1991). The data gathered in this study showed that the police officers' attitudes were not correlated with their respective age or level of experience. The subscales were, however, strongly positively correlated, as would be expected. The findings in this study show that neither age nor years of experience play a factor in determining police officers' attitudes towards persons with mental retardation.

Gender Findings

Despite the inequity in the sample sizes for the independent sample t-test as the study's respondents included 166 male police officers and only 22 female officers (159 and 21 after the eight surveys were removed for non-response), the results were still significant. The results showed that female police officers have a more positive affect toward persons with mental retardation than male police officers. This is commensurate with the research regarding male versus female attitudes toward disability, even though it only refers to one aspect of attitudinal score, affect. In validating the Multidimensional Attitudes Scale Towards Persons with Disabilities (MAS), Findler, Vilchinsky, and Werner (2007) found that women held more positive behavioral attitudes than the men in their study.

Ethnicity Findings

In the testing for differences among race, statistically significant differences were found for the domain of social willingness. Of the three groups whose results were analyzed, there were 162 respondents classified as White/Caucasian but only 10 in the category of Black/African American and six in the Hispanic/Latino group. Though the

results are significant, they should also be taken with the understanding that the study was dominated by officers who identified themselves as White/Caucasian, leaving the groups for comparison between ethnicity highly inequitable in number.

Nevertheless, pair-wise comparison tests showed that Black/African American officers scored significantly higher than those who self-identified as Hispanic/Latino officers. Analysis of the descriptive statistics showed that Black/African American officers tended to score slightly higher than White/Caucasian officers in all domains and that both groups had higher mean scores than officers who identified themselves as Hispanic/Latino, except in the domain of knowledge where Hispanic/Latino officers' scores were higher than White/Caucasian officers' scores. The results are supported by the literature regarding race and disability.

The ability to provide for the family is of primary importance in the Hispanic/Latino culture. If a man loses his ability to earn, especially through disability, then he is personally devastated (Dell Orto & Power, 2007). Dell Orto and Power also discuss that some Latino/Hispanics view disability as a punishment from God, meaning the person is afflicted with a disability as a result of personal or family disgrace.

Studies regarding African-American perspectives towards disability show that African-Americans tend to have more positive attitudes than European-Americans (Pickett, Vraniale, Cook, & Cohler, 1993). Dell Orto and Power explain that African-American culture places a high value on viewing every individual as a child of God, including persons with disabilities. Alston, McCowen, and Turner (1994) discuss the flexibility in family roles within the African-American community as a resource for

improving attitudes towards disability given that grandparents and other family members can adjust their respective roles to ease the care-taking of an individual with a disability.

Subscale Domain Relationship Analysis

To analyze the strength of the relationships among the domains of knowledge, social willingness, contact, and affect, a four-by-four correlation matrix was paired with a multiple regression analysis since the combination of the four domains offers a measurement of the person's attitude toward disability. The results of the correlation matrix showed that every domain has a significant relationship with each of the other domains. The strongest relationship existed between the domains of affect and social willingness. Not far behind, the relationship between contact and social willingness was also strong. Next was the relationship between affect and contact, then knowledge and affect. Finally, the relationship between contact and knowledge, though still significant, was the weakest of all identified relationships. According to social distance theory, the strongest relationships should have existed between knowledge and contact, but this was the weakest relationship identified in this study. In analyzing the domains identified as subjective (affect and social willingness) and objective (knowledge and contact), it was noted that the subjective domains displayed the strongest relationship but the objective domains displayed the weakest relationship, though it was still significant. Clearly experiences and feelings in each of the domains impact responses in the other domains, especially in the subjective domains of affect and social willingness. For example, if an officer thinks and feels positively about persons with mental retardation (affect), then he or she is more willing to interact with such persons socially (social willingness).

The relationships between each domain and the overall score were analyzed using correlation and multiple regression analyses. The results of the correlation analyses simply identified stronger relationships as existing for items that had more questions (social willingness and contact) which is not an accurate representation of the question asked. In order to get accurate correlation values, the number of items per domain would have to be equitable for a fair analysis of subscale to whole relationships using that test. In order to analyze subscale to whole relationships, a multiple regression analysis was used in order to suspend the influence of the other domains on total score. The researcher analyzed the coefficients of determination and alienation to look at variance and part-whole relationships between each of the respective domains and the overall attitudinal score. The highest level of variability was found in the domain of knowledge and the lowest level in social willingness; the level of variability for affect and contact was in the middle the variability values for the other two domains. Therefore, it was determined that the level of knowledge between the participants in the study was more variable, but that the responses and level of social willingness demonstrated more consistency when compared with the overall score. The domain of social willingness had the most influence on total attitudinal score, meaning that an officer's willingness to interact with persons who have mental retardation in a social setting plays the largest role in shaping the police officer's attitude toward such persons.

Summary of Discussion

In analyzing the demographics of respondents, it was noted that eighty-eight percent of the studied population was male and ninety percent identified themselves as White and/or Caucasian. With regard to group membership, it does play a role in the

shaping of police officer perceptions towards mental retardation. Females have higher positive affect towards persons with mental retardation. Race also plays a significant role in the domains of affect, contact, and social willingness seeing that Hispanic/Latino are the lowest scoring group in all three domains. Officers who identified as Black/African American are significantly more socially willing to interact with persons who have mental retardation than those officers who identified themselves as Hispanic/Latino. The findings in this study find that neither age nor years of experience play a factor in determining police officers' attitudes towards persons with mental retardation.

The results of this study support that police officers hold generally positive attitudes towards persons with mental retardation. The results of the study showed that police officers are knowledgeable about persons with mental retardation. The total scores in social willingness showed that police officers are socially willing to interact with persons who have mental retardation. With regard to the domain of contact, the quantitative results showed that police officers have a little more contact with persons who have mental retardation than the midpoint scale value, but the open-ended results showed that only one in three officers has had personal contact with those who have mental retardation. The level of contact is measured differently between the two instruments which may account for the difference in responses. The SDQ measured informal contact whereas the open-ended instrument measured personal contact. In the domain of affect, the results were also incongruous between the quantitative data and the open-ended response results given that the open-ended results showed that the majority of police officers displayed a less-than-positive affect towards persons with mental retardation. This is not commensurate with the quantitative results where the SDQ

showed a slightly positive affect towards such persons. The level of affect measured by the questions in the two different instruments was significantly different where the affective items in the SDQ were more superficial and the item on the open-ended response measured a very personal level of affect.

Finally, the analysis of the relationships between the domains of knowledge, contact, affect, and social willingness showed that every domain has a significant relationship with each of the other domains. The strongest relationship existed between the domains of affect and social willingness and the weakest relationship (though still significant) existed between the domains of knowledge and contact. Social willingness had the most influence on overall attitudinal score.

Implications for Policy and Practice

Attitudes toward mental retardation can be modified through training. Bailey, Barr, and Bunting (2001) examined the effects of intellectual disability awareness training of police officers in the United Kingdom and found that their overall attitude toward those with disabilities became more positive and less reflective of the eugenic thoughts they displayed prior to the training. From the results of this study, it was noted that, despite the level of knowledge displayed in both the quantitative and qualitative results, most police officers (84.1%) admit to having little training with regard to disability. As the content of the questions revealed, many officers have been trained in partner areas, such as mental illness, but formal disability training for police officers is still lacking.

Implications for policy and practice exist in other areas such as undergraduate education curriculum development. Questions arise within the degree program of

criminal justice as to the need for built-in coursework on disability within the system. Mass media curriculum also has room for improvement with regard to the addition of curriculum introducing the characteristics of different disabilities, how to best report on persons who have disabilities (covering subjects such as person-first language, etc.), and experiential learning by increasing contact between mass media undergraduate students and persons with disabilities. Additionally, this study opens questions regarding teacher education programs. The researcher conducting this study is employed in the area of teacher education. Teachers influence future generations, including those persons who have mental retardation and the children who will become part of the police force as they grow up. If teacher training in all degree programs focuses more on giving the teachers themselves awareness and knowledge of disability paired with the tools to teach their students such attributes, then it will have a domino affect on the future police force and all other professions as well. Additionally, as more and more students interact with persons who have mental retardation and other disabilities in school due to the increase of inclusionary practices, their attitudes toward disability will become more positive. Many studies have been conducted analyzing the differences in attitudes between students who participate in a peer group with persons who have disabilities and those who do not and the results have universally shown that increased interaction improves both knowledge and attitude toward such populations. The original development of the SDQ instrument was for this very purpose (Carter, Hughes, Copeland & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson, & Gaylord-Ross, 1983).

Limitations

A significant limitation of the study is that the solicitation of surveys had to be stopped early, at which time, the power was lowered from .95 to .80 and the effect size was increased from small to medium, adjusting the required sample size from 290 to 150. These limitations came about after an incident happened in the middle of the study in a neighboring county regarding a police officer's mistreatment of an individual with a disability. In arresting the man who used a wheelchair, the officer did not believe that he could not walk and dumped him out of his chair onto the ground. The incident was caught on videotape and made international news (Appendix I). This incident happened during the week when the largest individual department was convening to decide whether or not to let the researcher study police officer's perceptions of mental retardation. Shortly after the incident made the news, the researcher was informed via e-mail that she would not be allowed to utilize that department. The majority of other departments behaved similarly after the incident so the researcher requested permission to stop soliciting surveys, lower the power, and increase the effect size. If the researcher had been able to get all 290 surveys, the results would have had more power, especially since it would have increased the participant size of many of the smaller membership groups such as females and minorities. However, if the collection of surveys had continued, it is likely that there would have been a dramatic amount of bias in the survey responses which may have convoluted the results of the study.

One significant limitation in the results was noted after the survey had been administered which will affect the results of the research question regarding the influence of years of experience in influencing perceptions of mental retardation. It was not noted

in the pilot administration, only in the final administration. The wording of the question on the demographics form “Years of Experience in current position” yielded results such as a newly appointed detective answering “3 months” even though he or she has worked for the police department for 25 years. The question should have been worded “Years of Experience in Law Enforcement” to get accurate results for this question.

Recommendations for Further Research

Based on the results of this study paired with the investigation of literature relating law enforcement and mental retardation, the link between mental retardation and delinquency must be further explored through reliable, valid and accurate research studies. Additionally, the repercussions of the “special consideration” for persons who are suspected to have mental retardation must be further explored as to its effect on non-MR offenders. It would also be interesting to research issues of accurate and appropriate assessment of individuals with mental retardation and the differences in treatment between the levels of severity (mild/moderate/profound or educable/trainable/severe and profound).

With regard to training needs, researchers must start by investigating the needs of the department by surveying the public and police administration. They could also investigate the need for various kinds of training among the different kinds of police officers, such as the need for intensive interrogation training for detectives. This study proves the lack of training, but does not yield the detailed information needed to develop a training program that will truly impact citizens who have mental retardation.

The need for future research is most apparent in the comparison of the results between the responses to the quantitative questions and the content of the open-ended

questions. The researcher should look at those items that demonstrate superficial, sociologically acceptable questions versus those questions that measure a deep level of the domain. For example, the researcher could adjust the quantitative instrument so that the statements to which respondents rated themselves measured deeper knowledge, such as a specific question about adaptive behavior to measure knowledge of mental retardation, rather than the superficial items found on the SDQ such as “Mental retardation is contagious.” Different qualitative methodology such as in-depth interviews and even ride-along patrol analysis would add depth to the topic that is needed to truly analyze how a police officer’s personal interactions with those who have disabilities impacts his or her every day police work with such persons. Additionally, future research is warranted to investigate the perspectives of other public servants, such as mass media reporters.

Another highly pertinent area for future study, based on both the analysis of literature and the circumstances that happened during this study’s administration, is the power of media influence on the perceptions of disability. Had the study continued to survey officers after the incident when police officers’ perceptions of persons with disabilities were being questioned internationally, the responses and corresponding results would have changed due to the media coverage’s influence on police attitude toward disability. Media’s power on the perceptions of disability should be investigated among the target population and the public at large.

This study’s analysis has opened the door to more questions and need for multiple versions of analyses to truly learn more about perceptions of disability. There is a tremendous amount of room and need for in-depth research to continue the discussion on

the topic. Precise and accurate research will enable us to better serve true justice in our courtrooms and in larger society across the nation to all persons, no matter their disabilities.

Conclusion

Several factors are involved in shaping a police officer's perceptions toward persons with mental retardation. According to the results of this study, the most significant influence is a person's social willingness to interact with persons who have that disability. Also, if the officer is female, they are more likely to have a more positive affect towards those with mental retardation. If he/she is Hispanic/Latino, the officer is more likely to have less positive attitudes than other officers in the domains of affect, social willingness, and contact.

Also playing a role in the shaping of an officer's perception towards mental retardation within each respective domain is the level of analysis for the domain in question. If the researcher investigates deep relationships and completely accurate knowledge, the results are not the same when the researcher looks at only the superficial results. The need for future research is most apparent in the comparison of the results between the responses to the quantitative questions and the content of the open-ended questions. The researcher should look at those items that demonstrate superficial, sociologically acceptable questions versus those questions that measure a deep level of the domain. In conclusion, the results of this study are significant but they have simply started the process of opening the door of investigation of police officers' perceptions of mental retardation and disability in general.

REFERENCES

- Air Carriers Access Act (ACAA), 49 U.S.C. § 41705 (2004).
- Albrecht, G.L., Seelman, K.D., Bury, M. (2001). *Handbook of Disability Studies*, Thousand Oaks, CA: Sage Publications, Inc.
Articles cited from this text:
Brown, S.C. Methodological Paradigms That Shape Disability Research, Pages 145-170.
Braddock, D.L. & Parish, S.L. An Institutional History of Disability, Pages 11-68.
Fujiura, G. & Rutkowski-Kmitta, V. Counting Disability, Pages 69-96.
- Alston, R., McCowen, C.J., and Turner, W.I. (1994). Family Functioning as a correlate of disability, adjustment for African Americans. *Rehabilitation Counseling Bulletin*, 37, 277-289.
- American Association on Mental Retardation. (2001). *The Death Penalty* [Fact sheet]. Washington, D.C.: AAMR. Retrieved April 2003, from:
http://www.aamr.org/Policies/faq_death_penalty.shtml
- American Association on Mental Retardation. (2002). *The Definition of Mental Retardation* [Fact sheet/handout]. Washington, D.C.: AAMR.
- American Association on Mental Retardation. (2003). *The Definition of Mental Retardation* [Website]. Washington, D.C.: AAMR. Retrieved April 2003, from:
http://www.aamr.org/Policies/faq_mental_retardation.shtml
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2005). *Standards for educational and psychological testing*. Technical Working Group on Large-Scale Assessments for Special Education. Washington, DC: American Educational Research Association, p. 101.
- The American Heritage Dictionary of the English Language, 4th ed. (2000) Houghton Mifflin Company. Retrieved July 14, 2003, from
<http://dictionary.reference.com/search?q=disability> and March 9, 2007, from
<http://dictionary.reference.com/browse/training>
- The American Heritage Stedman's Medical Dictionary. (2002). "Affect." Retrieved March 29, 2007, from Answers.com Web site:
<http://www.answers.com/topic/affect>
- Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101-12213 (2000).

- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (4th Ed.) Washington D.C.: American Psychiatric Association.
- Analysis: Disabled move up the agenda. (2003, Nov 27). *Marketing*, 16. Retrieved April 2005, from InfoTrac OneFile database.
- Associated Press (2008, Feb 14). *Deputies Suspended for Wheelchair Dump*. Retrieved April 18, 2008, from LexisNexis Academic Database.
- Atherton, R., & Robertson, N. (2006). Psychological adjustment to lower limb amputation amongst prosthesis users, *Disability & Rehabilitation*, 28(19), 1201-1209.
- Aunos, M., & Feldman, M. (2002). Attitudes towards Sexuality, Sterilization and Parenting Rights of Persons with Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities*, 15(4), 285. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Auslander, G. K., & Gold, N. (1999, Sep). Media reports on disability: A binational comparison of types and causes of disability as reported in major newspapers. *Disability and Rehabilitation*, 21(9), 420-431. Retrieved April 2005, from Ingenta database.
- Auslander, G. K., & Gold, N. (1999). Disability terminology in the media: A comparison of newspaper reports in Canada and Israel. *Social Science & Medicine*, 48, 1395-1405.
- Autism Society of America (ASA). (2005). Organizations Partner to Improve Services for Crime.
- Victims with Autism. Retrieved December 10, 2005, from <http://www.autism-society.org/site/News2?page=NewsArticle&id=8155>
- Bailey, A., Barr, O., & Bunting, B. (2001, August). Police attitudes toward people with intellectual disability: an evaluation of awareness training. *Journal of Intellectual Disability Research*, 45(4), 344-350. Retrieved March 27, 2008, doi:10.1046/j.1365-2788.2001.00339.x
- Bailey, D.B. & McWilliam, R.A. (1990, Summer). Normalizing early intervention. *Topics in Early Childhood Special Education*, 10(2), 33-48. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Barnhart, J.A.B. (2005) *Social Security Online: Disability Service Improvement*. Retrieved February 13, 2007, from <http://www.ssa.gov/disability-new-approach/message1.htm>

- Barrett, K. E. & Pullo, R. E. (1993). Attitudinal change in undergraduate rehabilitation students as measured by the Attitudes Toward Disabled Persons scale. *Rehabilitation Education*, 7, 119-126.
- Bartley, J.J. (2006). Law, Ethics, and Gender: An Update on Autism: Science, Gender, and the Law. *Gender Medicine*, 3(2), 73-78.
- Beirne-Smith, M., Ittenbach, R. F., & Patton, J. R. (2002). *Mental Retardation* (6th ed). Upper Saddle River, NJ: Pearson Education, Inc.
- Bernet, M. (1996, August). *Emotional Intelligence: Components and Correlates*. Paper presented at the Annual Meeting of the American Psychological Association in Toronto, Ontario, Canada.
- Beyond the AP stylebook: Language and usage guide for reporters and editors. (1992). *The Ragged Edge*, The Avocado Press, Inc. Retrieved April 2005, from <http://www.raggededgemagazine.com/mediacircus/styleguide.htm>
- Blackorby, J., Chorost, M., Garza, N., & Guzman, A. (2003) The Academic Performance of Secondary School Students with Disabilities. Retrieved October 2007, from the National Center for Special Education Research at: http://www.nlts2.org/reports/2003_11/nlts2_report_2003_11_ch4.pdf
- Bong, M. (2002, April). *Stability and Structure of Self-Efficacy, Task-Value, and Achievement Goals and Consistency of Their Relations across Specific and General Academic Contexts and across the School Year*. Paper presented at the Annual Meeting of the American Educational Research Association in New Orleans, LA.
- Bovè, R. (1987). Bookshelf. *Training and Development Journal*, 41(10) 18-23.
- Bowker, A. (July 1994). Handle with Care: dealing with offenders who are mentally retarded. *The FBI Law Enforcement Bulletin*, 63(7), 12(5).
- Brennan, W.J. (1987). School Board of Nassau County v. Arline, 480 U.S. 273, 284.
- Bridges, I. (Ed.) (2006). *Blackstone's Police Operational Handbook*. Police National Legal Database. New York: Oxford University Press.
- Brodin, R.E. (2005). Remedying a particularized form of discrimination: why disabled plaintiffs can and should bring claims for police misconduct under the Americans with Disabilities Act. *University of Pennsylvania Law Review*, 154, 157-199.
- Brown, S. (December 2001) Editorial: What is Disability Culture? *Disability Culture-Institute on Independent Living Newsletter*. Retrieved July 14, 2003, from

<http://www.independentliving.org/newsletter/12-01.html>

- Buell, M., & McCormick, M. (1999). Inclusion in a Childcare Context: Experiences and Attitudes of Family Childcare Providers. *Topics in Early Childhood Special Education, 19*(4), 217. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Burgstahler, S. (1994, July). *Improving Campus Attitudes about Students with Disabilities*. Paper presented at the Annual Conference of the Association for Higher Education and Disability, Columbus, OH.
- Butler, S. (2001, July 30). Really Special, *ADWEEK Eastern Edition*. Retrieved April 2005, from InfoTrac OneFile
- Calloway v. Boro of Glassboro Dept. of Police, et. al., 89 F. Supp.2d 543, 554 (D.N.J. 2000).
- Carroll, A., Forlin, C., & Jobling, A. (2003, Summer). The Impact of Teacher Training in Special Education on the Attitudes of Australian Preservice General Educators towards People with Disabilities. *Teacher Education Quarterly, 30*(3), 65-79. Retrieved May 25, 2007, from the WilsonWeb Database.
- Carter, E.W., Hughes, C., Copeland, S.R., & Breen, C. (2001). Differences Between High School Students Who Do and Do Not Volunteer to Participate in a Peer Interaction Program. *The Journal of the Association for Persons with Severe Handicaps, 26*(4), 229-239.
- Carter, M. & Parmenter, T.R. (1996, Sep). National, metropolitan and local newsprint coverage of Developmental Disability. *Journal of Intellectual & Developmental Disability, 21*(3), 173-199. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Castañeto, M., & Willemsen, E. (2006). SOCIAL PERCEPTION OF THE PERSONALITY OF THE DISABLED. *Social Behavior & Personality: An International Journal, 34*(10), 1217-1231. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Chrzanowski, L. J. (2000). Media miss importance of disability issues. *The Quill (Chicago), 88*(9), 38-39.
- Clemenz, S.E. (2002). *The Effects of Peer Tutoring on the Attitudes of Nondisabled Peers*. Unpublished manuscript, Indiana University South Bend.
- Cochran, J. K., Boots, D. P., & Heide, K. M. (March 2003). Attribution Styles and Attitudes Toward Capital Punishment for Juveniles, the Mentally Incompetent, and the Mentally Retarded. *Justice Quarterly, 20*(1), 65-93.

- Cohen, J. (1992). Quantitative Methods in Psychology: A Power Primer. *Psychological Bulletin*, 112(1), 155-159.
- Colbridge, T. (October 2000). Defining Disability Under the Americans with Disabilities Act. *The FBI Law Enforcement Bulletin*, 69 (10). Pages 28-. Retrieved from the Gale group.
- Coleman, D. (1999, July/Aug). What we say, what they hear: A beginning discussion. *Ragged Edge*. Retrieved April 2005, from <http://www.ragged-edge-mag.com/0799/a0799ft1-1.htm>
- Conant, S. & Budoff, M. (1983) Patterns of awareness in children's understanding of disabilities. *Mental Retardation*, 21, 119-125.
- Crocker v. Lewiston Police Department, et. al., No. 00-13-P-C (February 16, 2007). Retrieved September 23, 2007, from <http://www.usdoj.gov/crt/ada/briefs/crockr2br.doc>
- Crowder v. Kitagawa, 81 F .3d 1480 (9th Cir. 1996).
- Curran, J.M. (1998, August). *College Students' Attitudes towards Mental Retardation: A Pilot Study*. Poster session presented at the Annual Meeting of the American Psychological Association, San Francisco, CA.
- DeBellis, V.A. & Goldin, G.A. (2006, October). Affect and Meta-Affect in Mathematical Problem Solving: A Representational Perspective. *Educational Studies in Mathematics*, 62(2), 131-147.
- Dell Orto, A.E., & Power, P.W. (2007). *The Psychological & Social Impact of Illness and Disability* (5th ed.) New York, NY: Springer Publishing Co.
- Denhardt, R.B. & Denhardt, J.V. (2000, Nov/Dec). The New Public Service: Serving Rather than Steering. *Public Administration Review*, 60(6), 549-559.
- Department of Justice. (2006, October). A Report from the Department of Justice on Enforcement of the American with Disabilities Act. Retrieved September 23, 2007, from <http://www.usdoj.gov/crt/ada/5yearadarpt/fiveyearada1.htm>
- Diamond, K. E. & Hestenes, L. L. (1994). Pre-school children's understanding of disability: Experiences leading to the elaboration of the concept of hearing loss. *Early Education and Development*, 5, 301-309.
- Diamond, K. E., Hestenes, L. L., Carpenter, E. & Innes, F. K. (1997) Relationships between enrollment in an inclusive class and pre-school children's ideas about

people with disabilities. *Topics in Early Childhood Special Education*, 17, 520–536.

- Dyson, L. (2005). Kindergarten Children's Understanding of and Attitudes Toward People With Disabilities. *Topics in Early Childhood Special Education*, 25(2), 95-105. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Eraclides, G. (2001, March). *Teachers' Needs in Supporting Students with a Disability in the Classroom: A Research Report*. Paper presented at Australian Vocational Education and Training Research Association (AVETRA) Conference, Adelaide, Australia. Retrieved May 25, 2007, from the WilsonWeb Database.
- Essess, V.M., Beaufoy, S.L., & Philipp, F.H. (1993, August). *Determinants of Attitudes toward People with Disabilities*. Paper presented at the 1993 Annual Meeting of the American Psychological Association, Toronto, Ontario, Canada.
- Farnall, O., & Smith, K. A. (1999, Winter). Reactions to people with disabilities: Personal contact versus viewing of specific media portrayals. *Journalism and Mass Communication Quarterly*, 76(4), 659-672. Retrieved April 2005, from ECO database.
- Findler, L., Vilchinsky, N., & Werner, S. (2007, Spring). The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS): Construction and Validation. *Rehabilitation Counseling Bulletin*, 50(3), 166-176. Retrieved March 27, 2008, from Academic Search Complete database.
- Florida Department of Education. (2005). Educator Accomplished Practices: Professional Competencies for Teachers of the Twenty-First Century. Retrieved April 3, 2007, from <http://www.firn.edu/doe/dpe/publications/professional4-99.pdf>
- Florida Department of Law Enforcement (FDLE). (2006) Form: CJSTC74: Mandatory Retraining Report (document.). Retrieved September 28, 2007, from <http://www.fdle.state.fl.us/cjst/rulesandforms/CJSTC-074DTD080306.pdf>.
- Florida Department of Law Enforcement (FDLE). (2006, April 1). Instructor Guide: Unit 10: Physical Disabilities. *Law Enforcement Basic Recruit Curriculum*.
- Fitzsimons-Cova, N. & Rothbart Seidman, R. (2001). *Disability awareness for law enforcement: A curriculum for law enforcement professionals and police social workers*. Chicago, IL: University of Illinois at Chicago, Department of Disability and Human Development.
- Fraenkel, R.J. & Wallen, E.N. (2000). *How to design and evaluate research in education* (4th ed.). San Francisco, CA: McGraw Hill.

- Fujiura, G., Park, H., & Rutkowski-Kmitta, V. (2005). Disability Statistics in the Developing World: A Reflection on the Meanings in our Numbers. *Journal of Applied Research in Intellectual Disabilities*, 18(4), 295-304. Retrieved Thursday, February 08, 2007, from the Academic Search Premier database.
- Gartner, A. (2001) What to do with difference: the ADA, special education, and disability. *Ohio State Law Journal*, 62(1). Pages 555-567.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. New York: Simon & Schuster, Inc.
- Gorman v. Bartch, 152 F .3d 907, 913 (8th Cir. 1998).
- Grand, S.A., Bernier, J.E., & Strohmer, D.C. (1982). Attitudes toward disabled persons as a function of social context and specific disability. *Rehabilitation Psychology*, 27(3), 165-173.
- Gray, D., & Denicolo, P. (1998). Research in Special Needs Education: Objectivity or Ideology?. *British Journal of Special Education*, 25(3), 140. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Green, S.B., Salkind, N.J., & Akey, T.M. (2000). *Using SPSS for Windows: Analyzing and Understanding Data*. Upper Saddle River, NJ: Prentice Hall.
- Greene, R. S. (1991). R. S. Greene (Ed)., *Mainstreaming Retardation Delinquency*. Lancaster, PA: Technomic Publishing Co., Inc.
- Articles cited from this text:
 Greene, R. S. PL 94-142 and the Retarded Delinquent, 113-134.
 Kandel, E. An Examination of the Relationship between IQ and Delinquency, 35-42.
 Krishef, C. Historical Overview of the Mentally Retarded Offender, 3-18.
 Wallace, M. & Billick, S. Mental Retardation and Delinquency, 19-34.
- Green, S., Davis, C., Karshmer, E., Marsh, P., & Straight, B. (2005) Living stigma: The impact of labeling, stereotyping, separation, status loss and discrimination in the lives of individuals with disabilities and their families. *Sociological Inquiry*.
- Green, S. E. (2002). Mothering Amanda: Musings on the experience of raising a child with cerebral palsy. *Journal of Loss and Trauma*, 7, 21-34.
- Guba, E.G., (Ed.) (1990). *The Paradigm Dialog*. Sage Publications: Newbury Park, CA.
- Hahn, H. & Hegamin, A. (2001, Fall) Assessing Scientific Measures of Disability. *Journal of Disability Policy Studies*, 12(2). Pages 114-121.

- Haller, B. (2003, March). *Covering Disability Issues*. Towson University. Retrieved April 2005, from <http://www.towson.edu/~bhalle/coverdis.htm>
- Hannula, M., Evans, J., Philippou, G., & Zan, R. (2004, July). Affect in Mathematics Education – Exploring Theoretical Frameworks. In *Proceedings of the 28th Conference of the International Group for the Psychology of Mathematics Education: Vol. I.* (pp. 107-136).
- Hanson, R.J. (1996, October). *Metacognition: Strategies for 'Fourthought.'* Paper presented at the Annual Conference and Exhibit of the National Middle School Association, Baltimore, MD.
- Hardin, M., & Preston, A. (2001, Summer). Inclusion of disability issues in news reporting textbooks. *Journalism and Mass Communication Educator*, 56(2), 43-54. Retrieved April 2005, from ECO database.
- Haring, T.G., Breen, C., Pitts-Conway, V., Wilson, R. & Gaylord-Ross, R. (1983). A social distance questionnaire for the attitudes of high school students toward handicapped peers. In R. Gaylord-Ross, T. Haring, C. Breen & V. Pitts-Conway (Eds.), *The social integration of autistic and severely handicapped students* (pp.1-12). (Monograph from the U.S. Department of Education Grant No. G008104154) San Francisco: San Francisco State University, Special Education Department.
- Harris County Housing Authority (2007). *Frequently Asked Questions*. Retrieved March 27, 2007, from http://www.hchatexas.org/fann_faq.htm
- Harper, D. (2000) Handicap. *Online Etymology Dictionary*. Retrieved July 14, 2003, from <http://www.etymonline.com/h1etym.htm>
- Henry, L. A., & Gudjonsson, G. H. (1999). Eyewitness memory and suggestibility in children with mental retardation. *American Journal on Mental Retardation*, 104(6), 491-508.
- Hergenrather, K., & Rhodes, S. (2007). Exploring Undergraduate Student Attitudes Toward Persons With Disabilities: Application of the Disability Social Relationship Scale. *Rehabilitation Counseling Bulletin*, 50(2), 66-75. Retrieved Thursday, January 25, 2007, from the Academic Search Premier Database.
- How does the press view and report on disability topics? (2004). *The Research Exchange Newsletter*, 7(3). National Center for the Dissemination of Disability Research: Southwest Educational Development Laboratory. Retrieved April 2005, from http://www.necddr.org/du/researchexchange/v07n03/3_how.html
- Individuals With Disabilities Education Improvement Act of 2004 (IDEA), Pub. L. No. 108-446, 118 Stat. 2647 (2004).

- Institute on Disability. (n.d). Resources *for reporters* (adapted from the research and training center on independent living's *Guidelines for reporting and writing about people with disabilities*). Retrieved April 2005, from <http://iod.unh.edu/reporters-room.html>
- Johnson, M. (n.d). Media miss the disability rights issue: "courageous cripples" instead of access activists. *Extra!*. FAIR (Fairness & Accuracy in Reporting). Retrieved April 2005, from <http://www.fair.org/index.php?page=1500>
- Jones, C. (2003). Retrospective on NIDRR research and the media. *The Research Exchange*, 7(3). National Center for the Dissemination of Disability Research: Southwest Educational Development Laboratory. Retrieved April 2005, from http://www.ncddr.org/du/researchexchange/v07n03/2_retrospective.html
- Kewley, G. (2001) ADHD and Youth Justice. Presented at the LD Offenders Conference. Retrieved October 2007, from <http://www.ldoffenders.co.uk/conferences/1stCon2001/1stConDocuments/01partFIVEsn.doc>
- Koch, T. (December 2001) Disability and difference: balancing social and physical constructions (Equality and disability symposium). *Journal of Medical Ethics*, 27(6). Pages 370-377.
- Kupermintz, H. & Roser, R.W. (2001, April). *Another Look at Cognitive Abilities and Motivational Processes in Science Achievement*. Paper presented at the Annual Meeting of the American Educational Research Association in Seattle, WA.
- Kraayenoord, C. V. (2002). The media's portrayal of mothers with disabilities. *International Journal of Disability, Development and Education*, 49(3), 221-224.
- Krahé, B., & Altwasser, C. (2006). Changing negative attitudes towards persons with physical disabilities: an experimental intervention. *Journal of Community & Applied Social Psychology*, 16(1), 59-69. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Krajewski, J., & Flaherty, T. (2000). Attitudes of High School Students Toward Individuals With Mental Retardation. *Mental Retardation*, 38(2), 154. Retrieved Friday, February 23, 2007, from the Academic Search Premier database.
- LaHaie, E. (March 2003) *Largo Police Department Citizen's Academy – Citizen's Manual*. St. Petersburg, FL: Florida Regional Community Policing Institute.
- Lamorey, S. (May/June 2002) The Effects of Culture on Special Education Services. *Teaching Exceptional Children*, 34(5). Pages 67-71.

- Larsen, R., & Haller, B. (2002, Winter). Public reception of real disability: The case of freaks. *Journal of Popular Film and Television*, 29(4), 164-172. Retrieved April 2005, from Wilson database.
- Larson, R. W., Richards, M. H., Moneta, G. B., Holmbeck, G., & Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement versus transformation. *Developmental Psychology*, 32, 744-754.
- Lathrop, D. (1995). Challenging perceptions. *The Quill (Chicago, Ill.)*, 83, 36-38.
- Leo, J. (1990, April 16). Our hypersensitive minorities. *U.S. News & World Report*, 108(15), 17.
- Levine, S. C. (1998). *Reporting on disability*. Retrieved April 2005, from <http://www.media-alliance.org/article.php?story=20040514022634591>
- Lewis v. Truitt, et. al., 960 F.Supp. 175, 178 (S.D. Ind. 1997).
- Link, B. & Phelan, J. (2001) Conceptualizing Stigma. *Annual Review of Sociology*. Pages 363-.385.
- Longoria, L., & Marini, I. (2006). Perceptions of Children's Attitudes towards Peers with a Severe Physical Disability. *Journal of Rehabilitation*, 72(3), 19-25. Retrieved Thursday, January 25, 2007, from the Academic Search Premier database.
- Martin, B.L. & Reigeluth, C.M. (1999). In Reigeluth, C.M. *Instructional-design theories and models Volume II*. (pp.485-509), Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Mastropieri, M.A. & Scruggs, T.E. (2007). *The Inclusive Classroom: Strategies for Effective Instruction*. (3rd Ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Mayhew, L. (2003). Disability--Global Trends and International Perspectives. *Innovation: The European Journal of Social Sciences*, 16(1), 3-28. Retrieved Thursday, February 08, 2007, from the Academic Search Premier database.
- McAfee, J.K., Cockram, J., & Wolfe, P.S. (2001). Police Reactions to Crimes Involving People with Mental Retardation: A Cross-Cultural Experimental Study. *Education and Training in Mental Retardation and Developmental Disabilities*, 36(2), 160-171.
- McClimens, A. (2003). Disability on the box: With a few noteworthy exceptions, popular TV programmes ignore the existence of people with disabilities. It's time to get real. (2nd opinion). *Learning Disability Practice*, 6(6), 27. Retrieved April 2005, from <http://www.fair.org/index.php?page=1500>

- McCrary, N.E. (2000, October). *Expanding a Model for Affective Development: Implications for an Activity Component*. In Annual Proceedings of Selected Research and Development Papers Presented at the National Convention of the Association for Educational Communications and Technology in Denver, CO. Volumes 1-2.
- McCullagh, C. & Froyen, G. (Ed.s). (1998). Iowa Journal of School Social Work. Cedar Falls, IA: Iowa School Social Workers' Association.
- McKinlay, A. (2005) *Attributions*. [Presentation-Website] Department of Psychology. University of Edinbaugh. Retrieved April 2005 from <http://psy-www-old.psy.ed.ac.uk/Local/Lectures/SocPsy2/attributions.pdf>.
- McLemee, S. (2004). Think Postpositive. *Chronicle of Higher Education*, 50(23), A12-A14. Retrieved Friday, March 09, 2007, from the Academic Search Premier database.
- McNamara, M. (1998, Sep 10). Picture this. *Community Care*, (1239), 10. Retrieved April 2005, from InfoTrac OneFile database.
- Medvin, M.B. & Mele, R.M. (2003, April). *Preschoolers' Perceptions of Physical and Developmental Disabilities in Playmate Selection*. Paper presented at the 2003 Biennial Meeting of the Society for Research in Child Development, Tampa, FL.
- Moneta, G., Schneider, B., & Csikszentmihalyi, M. (2001). A Longitudinal Study of the Self-Concept and Experiential Components of Self-Worth and Affect Across Adolescence. *Applied Developmental Science*, 5(3), 125-142. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Moon, M.S., Hart, D., Komissar, C., & Friedlander, R. (1991). *Having Fun: What's In and What's Not*. (Report number H086U00030). Boston, MA: Training and Research Institute for People with Disabilities. (ERIC Document Reproduction Service No. ED369202).
- Mostert, M. (Fall 2002). Useless Eaters: Disability as a Genocidal Marker in Nazi Germany. *The Journal of Special Education*, 36(3). Pages 155-168.
- Mostert, M. (2004). *Useless Eaters* [Flash Presentation-Website] Department of Education: Regent University. Retrieved October 2007, from <http://www.regent.edu/acad/schedu/uselesseaters/>
- Neufeldt, A. (2001, Feb). A Quarter Century of Normalization and Social Role Valorization: Evolution and Impact. *Canadian Psychology*, 42(1), 83-86. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Newton, R.R., & Rudestam, K.E. (1999). *Your Statistical Consultant: Answers to Your*

Data Analysis Questions. Thousand Oaks, CA: Sage Publications.

- Nikolarazi, M., Kumar, P., Favazza, P., Sideridis, G., Koulousiou, D., & Riall, A. (2005). A cross - cultural examination of typically developing children's attitudes toward individuals with special needs. *International Journal of Disability, Development & Education*, 52(2), 101-119. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Okoro, C.A., Balluz, L.S., Campbell, V.A., Holt, J.B., & Mokdad, A.H. (2005) State and Metropolitan-Area Estimates of Disability in the United States, 2001. *American Journal of Public Health*, 95(11). Pages 1964-1969. Retrieved February 19, 2007, from the Wilson Web Database.
- Onwuegbuzie, A.J., & Teddlie (2003). A Framework for Anlysizing Data in Mixed Methods Research in Tashakkori, A. & Teddlie, C. (2003). Handbook of Mized Methods in Social & Behavioral Research. Thousand Oaks, CA: Sage Publications.
- O'Shea, T. (1999, January). COMMUNITY POLICING IN SMALL TOWN RURAL AMERICA: A COMPARISON OF POLICE OFFICER ATTITUDES IN CHICAGO AND BALDWIN COUNTY, ALABAMA. *Policing & Society*, 9(1), 59. Retrieved October 29, 2007, from Academic Search Premier database.
- Paul, J.L. (2004). *Introduction to the Philosophies of Research and Criticism in Education and the Social Sciences*. Upper Saddle River, NJ: Pearson Education, Inc.
- Paul, J.L. (2002). *Rethinking Professional Issues in Special Education: Contemporary Studies in Social and Policy Issues in Education*. Westport, CT: Greenwood Publishing Group.
- Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania (1971, 1972). 334 F. Supp. 1257, 343 F. Supp. 279.
- Pennsylvania Dept. of Corrections, et. al. v. Yeskey, 524 U.S. 206 (1998).
- Perske, R. (1990). *Unequal Justice? What Can Happen When Persons with Retardation or Other Developmental Disabilities Encounter the Criminal Justice System*. Nashville: Abingdon Press.
- Perske, R. (1995). *Deadly Innocence?* Nashville; Abingdon Press.
- Pickett, S.A., Vraniale, D.A., Cook, J.A. & Cohler, B.J. (1993). Strength in adversity: Blacks bear burden better than Whites. *Professionals Psychology: Research and Practice*, 24, 460-467.

- Plotnik, R. (1996). *Introduction to Psychology*. (4th ed.). Pacific Grove: Brooks/Cole.
- Priestly, M. (2003). *Disability: A life course approach*. Malden, MA: Polity Press.
- Ray, J. (1983). RACIAL ATTITUDES AND THE CONTACT HYPOTHESIS. *Journal of Social Psychology*, 119(1), 3. Retrieved Tuesday, February 13, 2007, from the Academic Search Premier database.
- Richardson, J. G. (1999). *Common, Delinquent, and Special: The Institutional Shape of Special Education: Vol. 9/1446. Studies in the History of Education/Garland Reference Library of the Humanities*. New York: Falmer Press.
- Roberts, C., & Smith, P. (1999). Attitudes and Behaviour of Children Toward Peers with Disabilities. *International Journal of Disability, Development & Education*, 46(1), 0. Retrieved Thursday, March 01, 2007, from the Academic Search Premier database.
- Rodden-Nord, K., & Shinn, R. (1992). Effects of the classroom performance data on general education teachers' attitudes toward reintegrating students with learning disabilities. *School Psychology Review*, 21(1), 138–155.
- Roper Starch Worldwide Inc. (1995, March). *Learning Disabilities and the American Public: A Look at American's Awareness and Knowledge*. Hartford, CT: Emily Hall Tremain Foundation, Inc.
- Ross, K. (1997, Oct). But where's me in it? Disability, broadcasting and the audience. *Media, Culture & Society*, 19(4), 669-778. Retrieved April 2005, from InfoTrac OneFile database.
- Ross, K. (1998). Disability and the media: A suitable case for treatment? *Media Development*, 45(2), 14-20. Retrieved April 2005, from the FirstSearch database.
- Ross, K. (2001). All ears: radio, reception and discourses of disability. *Media, Culture & Society*, 23(4), 419-437.
- Ross, S. (2002, February). *Teachers' Feelings of Competency in Educating Children with Special Needs in the General Education Setting*. Master's Thesis, Touro College, New York, New York. Retrieved March 29, 2007, from the ERIC database.
- Sacks, P. (1999). *Standardized Minds: The High Price of America's Testing Culture and What We Can Do to Change It*. Cambridge: Perseus Publishing.
- Saketkoo, L., Anderson, D., Rice, J., Rogan, A. & Lazarus, C.J. (2004). Effects of a Disability Awareness and Skills Training Workshop on Senior Medical Students as Assessed with Self Ratings and Performance on a Standardized Patient Case.

Teaching and Learning in Medicine, 16(4), 345-354. Retrieved February 13, 2006, from Academic Search Premier Database.

Santamour, M. B., & Watson, P. S. (Eds).. (1982). *The Retarded Offender*. New York: Praeger Publishers.

Article cited from this text:

Moschella, A. The Mentally Retarded Offender: Law Enforcement and Court Proceedings.

Sattler, J. (2001) *Assessment of Children: Cognitive Applications*, 4th ed. San Diego: Jerome M. Sattler, Publisher, Inc.

Schweinle, A., Turner, J.C., & Meyer, D.K. (2002, August). *Motivational and Affective Quality of Students' Experiences in Mathematics Classrooms*. Paper presented at the Annual Meeting of the American Psychological Association in Chicago, IL.

Seligman, M., & Darling, R. B. (1997). *Ordinary families, special children*. New York: The Guilford Press.

Seltzer, M., & Kraus, M. (2001). Quality of life of adults with mental retardation/developmental disabilities who live with family. *Mental Retardation & Developmental Disabilities Research Reviews*, 7(2), 105-114.

Sewell, J. D. (1999). *Controversial Issues in Law Enforcement* (ed.). Boston: Allyn and Bacon.

Simpson, M.K. (1998). The roots of normalization: a reappraisal. *Journal of Intellectual Disability Research*, 42(1), 1-7. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.

Singh, D.K. (2001, April 20). *Are General Educators Prepared To Teach Students with Physical Disabilities?* Paper presented at the Annual Convention of the Council for Exceptional Children in Kansas City, MO.

Smith, J.D. (May/June 1999) Thoughts on the changing meaning of disability: new eugenics or new wholeness?. *Remedial and Special Education*, 20(3). Pages 131-133.

Smith, L., & Williams, J. (2001). Children's understanding of the physical, cognitive and social consequences of impairments. *Child: Care, Health & Development*, 27(6), 603-617. Retrieved Thursday, March 01, 2007, from the Academic Search Premier Database.

Swanson, C.R., Territo, L., & Taylor, R.W. (2001). *Police Administration: Structures, Processes, and Behavior*. (5th Ed.) Upper Saddle River, NJ: Prentice Hall, Inc.

- Swartz, S. (June 28, 2004) Criminal Practice Retardation and the Death Penalty in Pa.; House moves bill setting procedure for Atkins cases. *Pennsylvania Law Weekly*, 27(26), 1.
- Tebo, C.W. (2007, June 19). Ticking Time Bombs. *Best of New Orleans News Feature*. Retrieved from http://www.gambitweekly.com/dispatch/2007-06-19/news_feat2.php
- Territo, L. & Sewell, J. D. (1999). *Stress Management in Law Enforcement*. Durham, NC: Carolina Academic Press.
- Thompson, A., & Bethea, L. (1997). Faculty knowledge of disability laws in higher education: A survey. *Rehabilitation Counseling Bulletin*, 40(3), 166. Retrieved Thursday, February 22, 2007, from the Academic Search Premier database.
- Tonry, M., Ohlin, L., & Farrington, D. P. (1991). *Human Development and Criminal Behavior: New Ways of Advancing Knowledge*. New York: Springer-Verlag.
- Trent, J.W. (July/August 1998). Defectives as the World's Fair: constructing disability in 1904. *Remedial and Special Education*, 19(4). Pages 201-211.
- Turnbull, A., Turnbull, R. & Wehmeyer, M.L. (2007). *Exceptional Lives: Special Education in Today's Schools*. (5th Ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- United States Holocaust Memorial Museum (USHMM). (n.d.) *People with Disabilities*. Retrieved October 2007, from http://www.ushmm.org/research/library/bibliography/index.php?content=people_with_disabilities
- US Census Bureau. (2003). Anniversary of Americans with Disabilities Act (July 26). *Press Releases: Facts for Features & Special Edition*. Retrieved February 20, 2007, from http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/001616.html
- US Census Bureau. (2004). Anniversary of Americans with Disabilities Act (July 26). *Press Releases: Facts for Features & Special Edition*. Retrieved February 20, 2007, http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/001823.html
- US Census Bureau. (2005). Anniversary of Americans with Disabilities Act (July 26). *Press Releases: Facts for Features & Special Edition*. Retrieved February 20, 2007, from http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/004998.html

- US Census Bureau. (2006). Anniversary of Americans with Disabilities Act (July 26). *Press Releases: Facts for Features & Special Edition*. Retrieved February 20, 2007, from http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/006841.html
- U.S. Department of Labor: Office of Disability Employment Policy. *Frequently Asked Questions*. Retrieved February 8, 2007, from <http://www.dol.gov/odep/faqs/people.htm>
- Waldrop, J. & Stern, S.M. (2003, March). *Disability Status: Census 2000 Brief*. Retrieved February 8, 2007, from <http://www.census.gov/prod/2003pubs/c2kbr-17.pdf>
- Wells-Jensen, S., Wells-Jensen, J. & Belknap, G. (Mar 2005). *Changing the Public's Attitude Toward Braille: A Grassroots Approach*, *Journal of Visual Impairment and Blindness*, 99(3), 133-140.
- Wilson, C.S. & Bartak, L. (1997). Staff Understanding of Normalisation and Social Role Valorisation: Anstey and Gaskin (1985) Revisited. *Journal of Intellectual & Developmental Disability*, 22(3), 213-220. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Winzer, A. (1993). *The History of Special Education: From Isolation to Integration*. Washington, DC: Gallaudet University Press.
- Young, I.P., & Fox, J.A. (2002). Asian, Hispanic, and Native American Job Candidates: Prescreened or Screened within the Selection Process. *Educational Administration Quarterly*, 38(4), 530. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.
- Young, L. (2003). Residential and Lifestyle Changes for Adults with an Intellectual Disability in Queensland 1960-2001. *International Journal of Disability, Development & Education*, 50(1), 93. Retrieved Friday, March 30, 2007, from the Academic Search Premier database.

APPENDICES

Appendix A: Participant Pilot Study Survey Packet

I. Informed Consent



Informed Consent to Participate in Research Information to Consider Before Taking Part in this Research Study

Dear Research Participant:

Your participation in a research project is requested by Danielle Eadens, a student in the Interdisciplinary Education department at the University of South Florida who is seeking information that will be useful in the field of disability. The aim of the research is to describe and explain the attitudes toward disabilities held by police officers, specifically toward the disability of mental retardation. In accordance with this aim, the following procedures will be used: police officers across police officers across the Tampa Bay area will answer demographic and survey questionnaires. I anticipate the number of participants to be 290.

If you decide to participate in this research, you will be asked to answer demographic and survey questionnaires. These forms can be completed in 20 minutes and will be anonymously submitted before the end of your shift.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your employment. There are no risks to you if you decide to participate in this study. Although there are no direct benefits to you, your participation in this study will help our understanding of police officers' attitudes towards disability. Participants will not be financially compensated, but will be offered the opportunity to participate in a raffle administered by their department.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to group averages only and no names will be collected or used in the study. Data will be kept in a locked file in the researcher's office. The researcher may publish what is learned from the study, but if so, it will not identify names, departments, or anything else that would let people know who you are.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you decide not to take part in this study.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Danielle Eadens, at (727) 504-1980 or my supervisor, Dr. Ann Cranston-Gingras, at (813) 974-1387. If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-9343.

Completion of the demographic questionnaire and survey questions will constitute consent to participate in the study. By completing the forms, you agree with the statement: "**I freely give my consent to take part in this study.** I understand that by completing this form I am agreeing to take part in research. I have received a copy of this form to take with me."

Sincerely,

Danielle M. Eadens
Doctoral Candidate
University of South Florida

Appendix A (Continued)

II. Demographics

Demographics

Today's Date: _____

1. *Please circle your job description:*

Police officer (Patrol)

Police officer (Other): _____

2. *Years of Experience in current position:* _____

3. *Gender (Circle):* Male Female

4. *In what year were you born?* _____

5. *Please circle your ethnic origin:*

Black/African American

White/Caucasian

Hispanic/Latino

Other: _____

Appendix A (Continued)
III. Qualitative Questions (Participant Version)

1. *How do you know if someone with whom you are interacting has mental retardation?*

2. *Please describe any personal experience you have had with a person who has mental retardation:*

3. *Under what conditions would you adopt a child with mental retardation?*

4. *If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.*

5. *Please describe any previous disability training you have received.*

Appendix A (Continued)
IV. Pilot Study Quantitative Questionnaire (Participant version)

Directions: Please rate your level of agreement with the statements below by circling the number representing your opinion of the given statements.

Please respond to every statement.

KEY

1: I disagree strongly. 3: I agree a little.
2: I disagree a little. 4: I agree strongly.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	1. People with mental retardation usually act crazy.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	2. I would talk to a person with mental retardation during a break at work.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	3. I avoid looking at or walking by people with mental retardation when I see them in the street.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	4. I have been a teaching assistant or volunteer in a program for people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	5. I have seen people with mental retardation shopping at a store.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	6. I have a brother or sister with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	7. People with mental retardation will always act like children.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	8. I would stand next to a person with mental retardation while I was talking to my friends or coworkers.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	9. I feel afraid of people with mental retardation or other disabilities.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	10. I would not mind working alongside a person with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	11. I would like to be a teaching assistant in a special education class for students with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	12. I was scared by a person with mental retardation who bothered me.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	13. Someone in my family has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	14. Some people with mental retardation get married.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	15. I think that people with mental retardation should accompany regular social groups on outings.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	16. I just feel sorry for people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	17. I have spoken with a person who has mental retardation during the last month.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	18. I have given money to a person with mental retardation on the street
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	19. I have a neighbor who has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	20. People usually become mentally retarded from head injuries that occurred in accidents.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	21. I would say "Hi" to a person with mental retardation if I knew who he/she was.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	22. It can be rewarding for me to talk with or help people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	23. I would go to a movie with a person with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	24. During the last year, I have helped people with mental retardation who needed assistance.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	25. People with mental retardation are better off being taken care of in some place like a nursing home than they would be at home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	26. I have seen television shows about people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	27. Poor people are more likely to have children with severe mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	28. I would invite a person with mental retardation to visit my home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	29. I think you can learn a lot about people in general by being with people who have mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	30. I would sit next to a person with mental retardation in a social situation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	31. I have had an unpleasant experience with people who have mental retardation; for example, being yelled at or bothered during the past year.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	32. When I have seen a person with mental retardation needing help, I did what I could to help.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	33. People with mental retardation have a greater sex drive than normal people.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	34. I would eat lunch with a person who has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	35. It makes me feel a little sick being around people who are significantly disabled or have severe mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	36. I have been warned to stay away from people with mental retardation because they do weird things.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	37. I would help a person with mental retardation if we were in a leisure setting together.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	38. I like having people with mental retardation participate in the same leisure activities I do.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	39. I have seen people with mental retardation working at jobs.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	40. When I was a child, I saw my parents spend time with people who have mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	41. People with mental retardation are always happy.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	42. I would invite a person with mental retardation to eat dinner with my family.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	43. If single, I would go on a date with a person with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	44. I have seen people with mental retardation playing or interacting with nondisabled people in leisure activities.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	45. I have seen a person with mental retardation on a public bus.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	46. When the subject comes up, I have heard people in my family say good things about people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	47. People with mental retardation always end up in institutions.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	48. I would take a person with mental retardation out with me on a Friday or Saturday night when I was doing something with a group of friends.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	49. I have been involved in a leisure activity where a person with mental retardation also came in.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	50. Mental retardation is contagious.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	51. I would invite a person with mental retardation to spend the weekend with my family.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	52. When watching telethons about people with mental retardation, I have felt like giving money.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	53. I have seen people with mental retardation being ridiculed or made fun of by other people in social situations.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	54. I have seen a person with mental retardation at the beach or park.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	55. I think I know enough about how to help a person with mental retardation do something like find something in a store.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	56. I would eat dinner with a person who has mental retardation who invited me to dinner in his/her home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	57. I have seen or heard about people with mental retardation in social settings.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	58. I have talked to a person with mental retardation around town.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	59. I would give a person with mental retardation a ride home in my personal vehicle.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	60. When the subject comes up, I have heard people say bad things about people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	61. I would be friends with a person who has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	62. We had a person with mental retardation visit our home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	63. I would like voluntarily to spend time once a week with a child who has mental retardation.

Appendix A (Continued)
V. Pilot Study Feedback Form

Directions: In order to narrow down the questions that will be used in the final study, please offer your feedback on the survey items.

1. Please offer the question numbers of any items you found difficult to understand:

2. Please offer the question numbers of any items you found offensive:

3. Is there anything you thought I should have asked that I did not?

4. General feedback on survey instrument:

Appendix B: Survey Questions Sorted by Domain

Domain codes: Knowledge ~ Social Willingness ~ Contact ~ Affect

I. Pilot Study Quantitative Questionnaire Sorted by Domain

*Based on original Haring, Breen, Pitts-Conway, Wilson & Gaylord-Ross' Social Distance Questionnaire as discussed in Chapter 3

Knowledge

1. People with mental retardation usually act crazy.
7. People with mental retardation will always act like children.
14. Some people with mental retardation get married.
20. People usually become mentally retarded from head injuries that occurred in accidents.
25. People with mental retardation are better off being taken care of in some place like a nursing home than they would be at home.
27. Poor people are more likely to have children with severe mental retardation.
33. People with mental retardation have a greater sex drive than normal people.
41. People with mental retardation are always happy.
47. People with mental retardation always end up in institutions.
50. Mental retardation is contagious.

Social Willingness

2. I would talk to a person with mental retardation during a break at work.
8. I would stand next to a person with mental retardation while I was talking to my friends or coworkers.

Appendix B (Continued)

10. I would not mind working alongside a person with mental retardation.
11. I would like to be a teaching assistant in a special education class for students with mental retardation.
15. I think that people with mental retardation should accompany regular social groups on outings.
21. I would say "Hi" to a person with mental retardation if I knew who he/she was.
23. I would go to a movie with a person with mental retardation.
28. I would invite a person with mental retardation to visit my home.
30. I would sit next to a person with mental retardation in a social situation.
34. I would eat lunch with a person who has mental retardation.
37. I would help a person with mental retardation if we were in a leisure setting together.
42. I would invite a person with mental retardation to eat dinner with my family.
43. If single, I would go on a date with a person with mental retardation.
48. I would take a person with mental retardation out with me on a Friday or Saturday night when I was doing something with a group of friends.
51. I would invite a person with mental retardation to spend the weekend with my family.
55. I think I know enough about how to help a person with a mental retardation do something like find something in a store.
56. I would eat dinner with a person who has mental retardation who invited me to dinner in his/her home.
59. I would give a person with mental retardation a ride home in my personal vehicle.
61. I would be friends with a person who has mental retardation.

Appendix B (Continued)

63. I would like voluntarily to spend time once a week with a child who has mental retardation.

Contact

3. I avoid looking at or walking by people with mental retardation when I see them in the street

4. I have been a teaching assistant or volunteer in a program for people with mental retardation.

5. I have seen people with mental retardation shopping at a store.

6. I have a brother or sister with mental retardation.

13. Someone in my family has mental retardation.

17. I have spoken with a person who has mental retardation during the last month.

18. I have given money to a person with mental retardation on the street

19. I have a neighbor who has mental retardation.

24. During the last year, I have helped people with mental retardation who needed assistance.

26. I have seen television shows about people with mental retardation.

31. I have had an unpleasant experience with people who have mental retardation; for example, being yelled at or bothered during the past year.

32. When I have seen a person with mental retardation needing help, I did what I could to help.

36. I have been warned to stay away from people with mental retardation because they do weird things.

Appendix B (Continued)

- 39. I have seen people with mental retardation working at jobs.
- 40. When I was a child, I saw my parents spend time with people who have mental retardation.
- 44. I have seen people with mental retardation playing or interacting with nondisabled people in leisure activities.
- 45. I have seen a person with mental retardation on a public bus.
- 46. When the subject comes up, I have heard people in my family say good things about people with mental retardation.
- 49. I have been involved in a leisure activity where a person with mental retardation also came in.
- 53. I have seen people with mental retardation being ridiculed or made fun of by other people in social situations.
- 54. I have seen a person with mental retardation at the beach or park.
- 57. I have seen or heard about people with mental retardation in social settings.
- 58. I have talked to a person with mental retardation around town.
- 60. When the subject comes up, I have heard people say bad things about people with mental retardation.
- 62. We had a person with mental retardation visit our home.

Affect

- 9. I feel afraid of people with mental retardation or other disabilities.
- 12. I was scared by a person with mental retardation who bothered me.
- 16. I just feel sorry for people with mental retardation.

Appendix B (Continued)

22. It can be rewarding for me to talk with or help people with mental retardation.

29. I think you can learn a lot about people in general by being with people who have mental retardation.

35. It makes me feel a little sick being around people who are significantly disabled or have severe mental retardation.

38. I like having people with mental retardation participate in the same leisure activities I do.

52. When watching telethons about people with mental retardation, I have felt like giving money.

Appendix B (Continued)

II. Pilot Study Qualitative Questions Sorted by Domain

Domain codes: **Knowledge** ~ **Social Willingness** ~ **Contact** ~ **Affect**

Knowledge

1. How do you know if someone with whom you are interacting has mental retardation?

Contact

2. Please describe any personal experience you have had with a person who has mental retardation:

Affect

3. Under what conditions would you adopt a child with mental retardation?

Social Willingness

4. If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.

Training Question (Not affiliated with a domain)

5. Please describe any previous disability training you have received.

Appendix C: Qualitative Validation Letter and Documents

January 10, 2008

Dear Respected Researcher in the field of Special Education,

My name is Danielle Eadens and I am a doctoral candidate in Interdisciplinary Education at the University of South Florida. As an expert in the field, I am asking for your assistance in validating the qualitative portion of my mixed method survey instrument.

My study will examine the attitudes held by those in the police force towards persons with mental retardation with regard to the domains of knowledge, social willingness, affect and contact.

Please respond to me directly via email at danielle.eadens@gmail.com with your response to these questions:

1. Do each of the qualitative questions reflect the domains as defined in the operational definitions and the quantitative instrument (modified SDQ)?

On the following pages, you will see:

- ④ Relevant **operational definitions**
- ④ The **qualitative questions for which I need validation** grouped by domain
- ④ **Modified SDQ** (Quantitative) questions grouped by domain

Sincerely,

Danielle M. Eadens, ABD

Relevant Operational Definitions copied below:

Attitude is defined by Plotnik (1996) as “any belief or opinion that includes a positive or negative evaluation of some target (an object, person, or event) and that predisposes us to act in a certain way toward the target” (p.540). Longoria and Marini (2006) point out the possibility of vast differences between a one’s behavior towards a person with a disability in societal context and that individual’s affect toward those with disabilities. Even though the individual may assist the person with a disability in a public situation, one “may have strong negative feelings toward this population (affect)” (p.20). Attitude and perspective are used interchangeably throughout the study.

For the purposes of this study, the **attitudinal factors are knowledge, social willingness, contact, and affect**. The definitions for the attitudinal factors emanate from the construction of the Social Distance Questionnaire (Carter, Hughes, Copeland & Breen, 2001; Haring, Breen, Pitts-Conway, Wilson & Gaylord-Ross, 1983). **Knowledge** is defined as awareness of disability in tandem with an understanding of the characteristics of individual disabilities, such as mental retardation. The second factor is **social willingness**, which refers to a person’s proclivity to interact with persons who have disabilities. The next attitudinal factor is **contact**, referring to the actual encounters an individual has experienced with persons who are disabled. **Affect** is the fourth factor, which is an individual’s feelings toward persons with disabilities. The two factors of knowledge and contact are classified as objective domains while affect and social willingness fall into the subjective realm.

Appendix C (Continued)

Pilot Study Qualitative Questions Sorted by Domain:

Domain codes: Knowledge ~ Social Willingness ~ Contact ~ Affect

Knowledge

6. *How do you know if someone with whom you are interacting has mental retardation?*

Contact

7. *Please describe any personal experience you have had with a person who has mental retardation:*

Affect

8. *Under what conditions would you adopt a child with mental retardation?*

Social Willingness

9. *If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.*

Training Question (Not affiliated with a domain)

10. *Please describe any previous disability training you have received.*

Appendix C (Continued)

Pilot Study Quantitative Questionnaire Sorted by Domain

*Based on original Haring, Breen, Pitts-Conway, Wilson & Gaylord-Ross' Social Distance Questionnaire (SDQ)

Domain codes: Knowledge ~ Social Willingness ~ Contact ~ Affect

Knowledge

1. People with mental retardation usually act crazy.
7. People with mental retardation will always act like children.
14. Some people with mental retardation get married.
20. People usually become mentally retarded from head injuries that occurred in accidents.
25. People with mental retardation are better off being taken care of in some place like a nursing home than they would be at home.
27. Poor people are more likely to have children with severe mental retardation.
33. People with mental retardation have a greater sex drive than normal people.
41. People with mental retardation are always happy.
47. People with mental retardation always end up in institutions.
50. Mental retardation is contagious.

Social Willingness

2. I would talk to a person with mental retardation during a break at work.
8. I would stand next to a person with mental retardation while I was talking to my friends or coworkers.
10. I would not mind working alongside a person with mental retardation.

Appendix C (Continued)

11. I would like to be a teaching assistant in a special education class for students with mental retardation.
15. I think that people with mental retardation should accompany regular social groups on outings.
21. I would say "Hi" to a person with mental retardation if I knew who he/she was.
23. I would go to a movie with a person with mental retardation.
28. I would invite a person with mental retardation to visit my home.
30. I would sit next to a person with mental retardation in a social situation.
34. I would eat lunch with a person who has mental retardation.
37. I would help a person with mental retardation if we were in a leisure setting together.
42. I would invite a person with mental retardation to eat dinner with my family.
43. If single, I would go on a date with a person with mental retardation.
48. I would take a person with mental retardation out with me on a Friday or Saturday night when I was doing something with a group of friends.
51. I would invite a person with mental retardation to spend the weekend with my family.
55. I think I know enough about how to help a person with a mental retardation do something like find something in a store.
56. I would eat dinner with a person who has mental retardation who invited me to dinner in his/her home.
59. I would give a person with mental retardation a ride home in my personal vehicle.
61. I would be friends with a person who has mental retardation.

Appendix C (Continued)

63. I would like voluntarily to spend time once a week with a child who has mental retardation.

Contact

3. I avoid looking at or walking by people with mental retardation when I see them in the street

4. I have been a teaching assistant or volunteer in a program for people with mental retardation.

5. I have seen people with mental retardation shopping at a store.

6. I have a brother or sister with mental retardation.

13. Someone in my family has mental retardation.

17. I have spoken with a person who has mental retardation during the last month.

18. I have given money to a person with mental retardation on the street

19. I have a neighbor who has mental retardation.

24. During the last year, I have helped people with mental retardation who needed assistance.

26. I have seen television shows about people with mental retardation.

31. I have had an unpleasant experience with people who have mental retardation; for example, being yelled at or bothered during the past year.

32. When I have seen a person with mental retardation needing help, I did what I could to help.

36. I have been warned to stay away from people with mental retardation because they do weird things.

Appendix C (Continued)

- 39. I have seen people with mental retardation working at jobs.
- 40. When I was a child, I saw my parents spend time with people who have mental retardation.
- 44. I have seen people with mental retardation playing or interacting with nondisabled people in leisure activities.
- 45. I have seen a person with mental retardation on a public bus.
- 46. When the subject comes up, I have heard people in my family say good things about people with mental retardation.
- 49. I have been involved in a leisure activity where a person with mental retardation also came in.
- 53. I have seen people with mental retardation being ridiculed or made fun of by other people in social situations.
- 54. I have seen a person with mental retardation at the beach or park.
- 57. I have seen or heard about people with mental retardation in social settings.
- 58. I have talked to a person with mental retardation around town.
- 60. When the subject comes up, I have heard people say bad things about people with mental retardation.
- 62. We had a person with mental retardation visit our home.

Affect

- 9. I feel afraid of people with mental retardation or other disabilities.
- 12. I was scared by a person with mental retardation who bothered me.
- 16. I just feel sorry for people with mental retardation.

Appendix C (Continued)

22. It can be rewarding for me to talk with or help people with mental retardation.

29. I think you can learn a lot about people in general by being with people who have mental retardation.

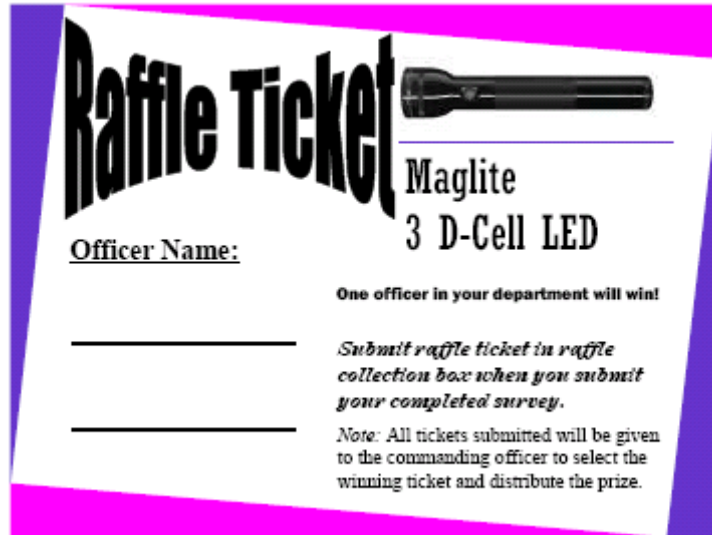
35. It makes me feel a little sick being around people who are significantly disabled or have severe mental retardation.

38. I like having people with mental retardation participate in the same leisure activities I do.

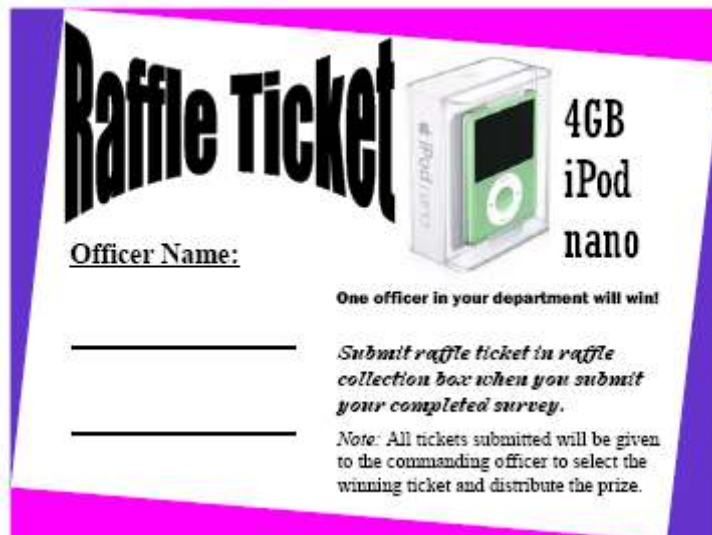
52. When watching telethons about people with mental retardation, I have felt like giving money.

Appendix D: Raffle Tickets

Pilot Study Raffle & Final Study Smaller Department Raffle Ticket



Larger Department Raffle Ticket



Appendix E: E-mail Sign-Up Sheet

E-mail List for Results of Police Officers' Perceptions of Disability Study					
<p>If you would like to receive the results of the study (available in approximately May), please write your email address below.</p> <p>Note: results will be emailed from the email address danielle.eadens@gmail.com</p>					
E-Mail address			E-Mail address		
1.	@		20.	@	
2.	@		21.	@	
3.	@		22.	@	
4.	@		23.	@	
5.	@		24.	@	
6.	@		25.	@	
7.	@		26.	@	
8.	@		27.	@	
9.	@		28.	@	
10.	@		29.	@	
11.	@		30.	@	
12.	@		31.	@	
13.	@		32.	@	
14.	@		33.	@	
15.	@		34.	@	
16.	@		35.	@	
17.	@		36.	@	
18.	@		37.	@	
19.	@		38.	@	

Appendix F: Pilot Study Results in Removal of Questions

Questions Removed From Survey Packet Sorted by Domain

Domain codes: Knowledge ~ Social Willingness ~ Contact ~ Affect

Knowledge

- (K) Some people with mental retardation get married.
- (K) People with mental retardation are better off being taken care of in some place like a nursing home than they would be at home.
- (K) People with mental retardation are always happy.

Social Willingness

- (SW) I would say "Hi" to a person with mental retardation if I knew who he/she was.
- (SW) I would stand next to a person with mental retardation while I was talking to my friends or coworkers.
- (SW) I would not mind working alongside a person with mental retardation.
- (SW) If single, I would go on a date with a person with mental retardation.

Contact

- (C) I have seen people with mental retardation working at jobs.
- (C) I have seen people with mental retardation shopping at a store..
- (C) I have been a teaching assistant or volunteer in a program for people with mental retardation.
- (C) I have a brother or sister with mental retardation.
- (C) Someone in my family has mental retardation.
- (C) I have a neighbor who has mental retardation.

Appendix F (Continued)

(C) During the last year, I have helped people with mental retardation who needed assistance.

(C) I have seen television shows about people with mental retardation.

Affect

(A) I feel afraid of people with mental retardation or other disabilities.

Appendix G: Final Study Survey Packet

Cover Sheet Directions

Dear Officer,

My name is Danielle Eadens and I am asking for your assistance in researching the perspectives of police officers toward disability. This research will be used to improve the field and in the curriculum writing of an advanced course on disability. Your voluntary completion of this survey has been authorized by your Police Chief. The survey must be submitted by the end of your shift as the raffle tickets will be collected at that time. If you would like to receive the results at the end of the study, please put your e-mail address on the sign-up sheet located by the survey return and raffle boxes.

Inside this envelope, you will find:

- **Gold Raffle Ticket:** Submit in raffle box when you return your completed survey. One of the officers in your department will win an iPod nano/MagLite. Your commanding officer will draw from all tickets returned and distribute the prize.
- **Informed Consent Letter:** This letter is your copy to keep.
- **Survey Packet:** Please complete and put back in envelope. Then, submit in survey collection box.

Thanking you in advance for your assistance,

Danielle M. Eadens, ABD
Doctoral Candidate
University of South Florida

Appendix G (Continued)

Informed Consent Document



Informed Consent to Participate in Research

Information to Consider Before Taking Part in this Research Study

Dear Research Participant:

Your participation in a research project is requested by Danielle Eadens, a student in the Interdisciplinary Education department at the University of South Florida who is seeking information that will be useful in the field of disability. The aim of the research is to describe and explain the attitudes toward disabilities held by police officers, specifically toward the disability of mental retardation. In accordance with this aim, the following procedures will be used: police officers across the Tampa Bay area will answer demographic and survey questionnaires. I anticipate the number of participants to be 290.

If you decide to participate in this research, you will be asked to answer demographic and survey questionnaires. These forms can be completed in 15 minutes and will be anonymously submitted before the end of your shift.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your employment. There are no risks to you if you decide to participate in this study. Although there are no direct benefits to you, your participation in this study will help our understanding of officers' attitudes towards disability. Participants will not be financially compensated, but will be offered the opportunity to participate in a raffle administered by their department.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to group averages only and no names will be collected or used in the study. Data will be kept in a locked file in the researcher's office. The researcher may publish what is learned from the study, but if so, it will not identify names, departments, or anything else that would let people know who you are.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you decide not to take part in this study.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Danielle Eadens, at (727) 504-1980 or my supervisor, Dr. Ann Cranston-Gingras, at (813) 974-1387. If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-9343.

Completion of the demographic questionnaire and survey questions will constitute consent to participate in the study. By completing the forms, you agree with the statement: "**I freely give my consent to take part in this study.** I understand that by completing this form I am agreeing to take part in research. I have received a copy of this form to take with me."

Sincerely,

Danielle M. Eadens
Doctoral Candidate
University of South Florida

Appendix G (Continued)
Demographics Collection Form

Demographics

Today's Date: _____

6. Please circle your job description:

Police officer (Patrol)

Police officer (Other): _____

7. Years of Experience in current position: _____

8. Gender (Circle): Male Female

9. In what year were you born? _____

10. Please circle your ethnic origin:

Black/African American

White/Caucasian

Hispanic/Latino

Other: _____

Appendix G (Continued)

Qualitative Data Collection Instrument

Survey – Part I

1. *How do you know if someone with whom you are interacting has mental retardation?*

2. *Please describe any personal experience you have had with a person who has mental retardation:*

3. *Under what conditions would you adopt a child with mental retardation?*

4. *If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.*

5. *Please describe any previous disability training you have received.*

Appendix G (Continued)
Quantitative Data Collection Instrument (SDQ)

Survey – Part II

Directions: Please rate your level of agreement with the statements below by circling the number representing your opinion of the given statements. Please respond to every

KEY	
1: I disagree strongly.	3: I agree a little.
2: I disagree a little.	4: I agree strongly.

statement.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	1. People with mental retardation usually act crazy.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	2. I would talk to a person with mental retardation during a break at work.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	3. I avoid looking at or walking by people with mental retardation when I see them in the street.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	4. People with mental retardation will always act like children.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	5. I would like to be a teaching assistant in a special education class for students with mental retardation.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	6. I was scared by a person with mental retardation who bothered me.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	7. I think that people with mental retardation should accompany regular social groups on outings.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	8. I just feel sorry for people with mental retardation.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	9. I have spoken with a person who has mental retardation during the last month.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	10. I have given money to a person with mental retardation on the street
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	11. People usually become mentally retarded from head injuries that occurred in accidents.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	12. It can be rewarding for me to talk with or help people with mental retardation.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	13. I would go to a movie with a person with mental retardation.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	14. Poor people are more likely to have children with severe mental retardation.
<hr/>						
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	15. I would invite a person with mental retardation to visit my home.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	16. I think you can learn a lot about people in general by being with people who have mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	17. I would sit next to a person with mental retardation in a social situation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	18. I have had an unpleasant experience with people who have mental retardation; for example, being yelled at or bothered during the past year.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	19. When I have seen a person with mental retardation needing help, I did what I could to help.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	20. People with mental retardation have a greater sex drive than normal people.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	21. I would eat lunch with a person who has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	22. It makes me feel a little sick being around people who are significantly disabled or have severe mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	23. I have been warned to stay away from people with mental retardation because they do weird things.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	24. I would help a person with mental retardation if we were in a leisure setting together.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	25. I like having people with mental retardation participate in the same leisure activities I do.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	26. When I was a child, I saw my parents spend time with people who have mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	27. I would invite a person with mental retardation to eat dinner with my family.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	28. I have seen people with mental retardation playing or interacting with nondisabled people in leisure activities.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	29. I have seen a person with mental retardation on a public bus.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	30. When the subject comes up, I have heard people in my family say good things about people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	31. People with mental retardation always end up in institutions.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	32. I would take a person with mental retardation out with me on a Friday or Saturday night when I was doing something with a group of friends.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	33. I have been involved in a leisure activity where a person with mental retardation also came in.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	34. Mental retardation is contagious.

<i>Disagree</i>	1	2	3	4	<i>Agree</i>	35. I would invite a person with mental retardation to spend the weekend with my family.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	36. When watching telethons about people with mental retardation, I have felt like giving money.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	37. I have seen people with mental retardation being ridiculed or made fun of by other people in social situations.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	38. I have seen a person with mental retardation at the beach or park.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	39. I think I know enough about how to help a person with mental retardation do something like find something in a store.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	40. I would eat dinner with a person who has mental retardation who invited me to dinner in his/her home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	41. I have seen or heard about people with mental retardation in social settings.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	42. I have talked to a person with mental retardation around town.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	43. I would give a person with mental retardation a ride home in my personal vehicle.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	44. When the subject comes up, I have heard people say bad things about people with mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	45. I would be friends with a person who has mental retardation.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	46. We had a person with mental retardation visit our home.
<i>Disagree</i>	1	2	3	4	<i>Agree</i>	47. I would like voluntarily to spend time once a week with a child who has mental retardation.

Appendix H: Qualitative Coding Key

Coding By Response Category and By Theme

Question 1 – knowledge

How do you know if someone with whom you are interacting has mental retardation?

Knowledge by Response Category:

- 1- don't know person has MR, N/A
- 2- speech difficulties
- 3- behavioral characteristics
- 4- physical characteristics
- 5- cognitive characteristics/ content of conversation

Knowledge By Theme:

- no knowledge (response category 1)
- some knowledge (response categories 2,3,4)
- accurate knowledge (response category 5)

Question 2 – contact

Please describe any personal experience you have had with a person who has mental retardation:

Contact by Response Category:

- 1- no contact with MR
- 2- listed experience w/ mental illness
- 3- minimal contact/working as officer contact
- 4- worked/volunteer with disabilities
- 5- know someone (family, friend)

Contact by Theme:

- no contact (response categories 1,2)
- little contact (response categories 3)
- personal contact (response categories 4,5)

Question 3 – affect

Under what conditions would you adopt a child with mental retardation?

Affect by Response Category:

- 1- don't know/no conditions would make me adopt MR
- 2- no kids/adoption of any kind/too old to parent
- 3- necessity
- 4- circumstances (finances, time, lack of proper training to raise MR)
- 5- would adopt MR

Appendix H (Continued)

Affect by Theme:

negative personal affect (response category 1)

neutral personal affect (response categories 2,3)

positive personal affect (response categories 4,5)

Question 4 – social willingness

If your significant other befriended a person with mental retardation, describe the kind of social events you would be willing to attend with your significant other and his/her new friend.

Social Willingness by Response Category:

1- none/not applicable

2- specific events only

3- any, but would be uncomfortable

4- any events

Social Willingness by Theme:

negative social willingness (response category 1)

minimal social willingness (response categories 2,3)

positive social willingness (response categories 4,5)

Question 5 – training

Please describe any previous disability training you have received.

Training by Response Category:

1- none

2- little/experience as training

3- named other trainings (empathy, mental illness, etc)

4- police academy

5- disability training session

6- formal disability education (college, etc.)

Training by Theme:

no training (response categories 1,2)

minimal training (response categories 3,4)

disability-specific training (response categories 4,5)

Deputies Suspended for Wheelchair Dump

Four sheriff's deputies have been suspended after purposely tipping a paralyzed man out of his wheelchair onto a jailhouse floor, authorities said.

Surveillance footage from Jan. 29 shows Hillsborough County deputy Charlette Marshall-Jones, 44, dumping Brian Sterner out of his wheelchair and searching him on the floor after he was brought in on a warrant after a traffic violation.

Sterner, 32, said when he was taken into a booking room and told to stand up, Jones grew agitated when he told her that he could not.

"She was irked that I wasn't complying to what she was telling me to do," he told The Tampa Tribune in Tuesday's edition. "It didn't register with her that she was asking me to do something I can't do."

Sterner can drive a car but has not been able to walk since a 1994 wrestling accident. He has no feeling below his sternum and has partial use of his arms.

Jones has been suspended without pay, and Sgt. Gary Hinson, 51, Cpl. Steven Dickey, 45 and Cpl. Deondra Williams, 36 have also been placed on administrative leave pending an investigation, sheriff's spokeswoman Debbie Carter said.

"The actions are indefensible at every level," Chief Deputy Jose Docobo said. "Based on what I saw, anything short of dismissal would be inappropriate."

A woman who answered Jones' telephone said Jones was unavailable. A message left at a telephone number listed for a Steven Dickey in Tampa was not immediately returned Tuesday night. Listings for Hinson and Williams could not be located.

Sterner was arrested at his Riverview home and taken to the Orient Road Jail on a charge of fleeing and attempting to elude a police officer, according to records. He posted \$2,000 bond and was released Feb 3.

A warrant for Sterner's arrest was issued after an Oct. 25 incident, in which police stopped him while driving a car fitted with hand pedals and cited him for blocking an intersection.

"My client was stopped that night and was given a traffic citation, so how could he be fleeing and eluding?" Sterner's lawyer John Trevena said. "We're very skeptical about the basis for the charge itself."

Trevena said he hopes authorities investigate the deputies for criminal charges. He said he was "mortified" when he watched the footage.

"I couldn't believe that a detention deputy would be so callous toward an individual, whether they were disabled or not," he said. (Associated Press, February 14, 2008).

Appendix J: Permission to utilize SDQ Instrument

Letter Requesting Permission to utilize SDQ

January 25, 2008

Catherine Breen
Santa Barbara Education Office: Special Education Support Services-South
4400 Cathedral Oaks Road; P.O. Box 6307; Santa Barbara, CA 93160-6307

Dear Ms. Breen:

Thank you for sending me the original manuscript of the development of the Social Distance Questionnaire. I am completing a doctoral dissertation at the University of South Florida entitled "Police Officers' Perceptions of Persons with Mental Retardation." I would like your permission to modify your Social Distance Questionnaire for the purposes of my study, taken from the following:

Haring, T.G., Breen, C., Pitts-Conway, V., Wilson, R. & Gaylord-Ross, R. (1983). A social distance questionnaire for the attitudes of high school students toward handicapped peers. In R. Gaylord-Ross, T. Haring, C. Breen & V. Pitts-Conway (Eds.), *The social integration of autistic and severely handicapped students* (pp.1-12). (Monograph from the U.S. Department of Education Grant No. G008104154) San Francisco: San Francisco State University, Special Education Department.

The requested permission extends to any future revisions and editions of my dissertation, including non-exclusive world rights in all languages, and to the prospective publication of my dissertation by the University. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you.

If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope. Thank you very much.

Sincerely,

Danielle M. Eadens
Doctoral Candidate
University of South Florida

PERMISSION GRANTED FOR THE
USE REQUESTED ABOVE:

Signed by: Catherine Breen

Date Signed

Signed Permission to utilize SDQ from Catherine Breen

01/28/2008 16:29 Special Education South County

(FAX)805 683 2482

P.002/002

01/25/2008 14:38 8859226543

DESS-N

PAGE 03/03

01/25/2008 05:28 17272388257

DANIELLE EADENS

PAGE 02/02

Danielle M. Eadens, ABD
1000 Bluffs Circle: Dunedin, FL 34698
Cell (727) 504-1980; Fax (727) 341-4691

January 25, 2008

Catherine Breen
Santa Barbara Education Office: Special Education Support Services-South
4400 Cathedral Oaks Road; P.O. Box 6307; Santa Barbara, CA 93160-6307

Dear Ms. Breen:

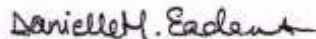
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Sincerely,



Danielle M. Eadens
Doctoral Candidate
University of South Florida

PERMISSION GRANTED FOR THE
USE REQUESTED ABOVE:


Signed by: Catherine Breen

1/28/08
Date Signed

ABOUT THE AUTHOR

Danielle Eadens earned a Bachelor's degree in Mass Communications in 2001 and a Master's in Special Education in 2003 from the University of South Florida. While in the Master's program, Danielle worked as a teacher of exceptional students, primarily in inclusionary settings and with students with moderate mental handicaps. During this time, she was a Special Olympics Coach, technology trainer, Council for Exceptional Students (CEC) member, journalism teacher, and multiple-year grant winner.

In 2003, Danielle entered the Interdisciplinary Education Ph.D. program at the University of South Florida. In 2005, Danielle started as an Assistant Professor in Exceptional Student Education at St. Petersburg College and served on a committee for the Florida Department of Law Enforcement rewriting advanced course police curriculum. In 2006, Danielle presented at the Teacher Education Division of CEC conference. While in the Ph.D. program, Danielle volunteered in schools, including serving as a surrogate parent for exceptional students.