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Inclusive Recreation: The Malleability of Attitudes Toward Disability Through Peer Interaction

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Inclusive Recreation: The Malleability of Attitudes Toward Disability Through Peer Interaction

Megan Fort

A thesis submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of Master of Science

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ABSTRACT

Inclusive Recreation: The Malleability of Attitudes Toward Disability Through Peer Interaction

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Master of Science

This study explored the malleability of attitudes with the goal of improving social inclusion for a stigmatized group, specifically individuals with developmental disabilities. Contact Theory was used as an intentional structure for meaningful intergroup contact to assess, understand, and improve meanings applied to individuals with disabilities at an inclusive summer day camp. Adolescent volunteers were administered quantitative questionnaires utilizing the Contact with Disabled Persons Scale (CDP) and the Multi-Dimensional Attitude Scale (MAS). Collected data were used to determine the efficacy of involvement in an inclusive recreation program on adolescent participants’ attitudes toward disability. After a covariate-adjusted regression analysis, contact with individuals with disabilities was found to significantly predict change in attitudes toward disability. Dyadic interviews were held after camp participation to provide additional sources of data with potential for deeper understanding of the camp experience for the volunteers. The data suggested participants perceived camp as a setting for the development of reciprocal relationships with peers who have developmental disabilities. These relationships further framed participants’ understanding of the experience as fun, difficult, and resulting in perceived personal change. Implications for future research are discussed.

Keywords: Contact theory, attitudes, disability, adolescents, inclusive recreation
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Inclusive Recreation: The Malleability of Attitudes Toward Disability Through Peer Interaction

One of the foremost barriers to the inclusion and social acceptance of individuals with disabilities is the stigmatizing attitude held by their typically developing peers (Jahoda & Markova, 2004; McDougall, DeWit, King, Miller, & Killip, 2004; Pratt, 2008; Siperstein, Norins, Corbin, & Shriver, 2003; Siperstein, Parker, Norins, & Widaman, 2011). Individuals without disabilities may be confused, frightened, or even repulsed because they do not understand why individuals with disabilities appear or behave in manners different from normative social expectation (Hughes & McDonald, 2009). Adherence to the use of dominant societal achievements as a benchmark for inclusion, however, may lead to greater stigmatization of disability (Cobigo, Ouellette-Kunz, Lysaght, and Martin, 2012). Consequently, individuals without disabilities may feel uncomfortable interacting socially and building social relationships with their peers with disabilities (Devine, 2004; Kennedy & Horn, 2004).

While there is a vast amount of literature discussing the existence of and methods for achieving meaningful social inclusion, relatively few studies have investigated an inclusive contact experience as perceived by individuals without disabilities. To address this lack of research, the current study utilized a mixed methods research design to examine typically developing adolescents’ perceptions of participation in an inclusive recreation experience.

**Review of Literature**

Notwithstanding changes in practices in education, employment, health care, and leisure services for individuals with disabilities, these individuals continue to perceive social barriers and feel excluded by their typically developing peers (Devine, 2004; Hogan, McLellan, & Bauman, 2000; Rizvi & Lingard, 1996). Observed social disparity may produce feelings of social politeness, sometimes even protection, toward individuals with disabilities (Brown,
Some explicit attitude surveys demonstrated persistence of interaction despite the presence of stigmatizing attitudes and beliefs of social superiority (Holden, 2010). This may be what Fichten, Amsel, Robillard, Sabourin, and Wright (1997) called the “kindness norm” or “sympathy effect” (p. 223), the result of social norms dictating an obligation to pity those perceived as less fortunate. Condescension cannot, however, be considered inclusion. Meaningful social acceptance begins with the reduction of stigmatizing attitudes.

The lack of intentional programming may be one cause for the social isolation commonly experienced by individuals with disabilities. Without programs and research grounded in theory, an understanding of the process of and contributing factors to attitude change may be severely limited. Researchers have appealed for further study to increase understanding of attitudes toward disability and recognition of the types of contact capable of producing improvement in attitudes, feelings, and inclusion for socially excluded individuals (e.g., Kalymon et al., 2010; Siperstein, Parker, Bardon, & Widamam, 2007).

**Attitudes**

Crano and Prislin (2006) described an attitude as “an evaluative integration of cognitions and affects experienced in relation to an object” (p. 347). Cohen (1966) suggested attitudes are malleable, though not perfectly so, and can be used to explain social action. The normative beliefs and attitudes held by an individual’s *in-group* reflect the perceived desirability of social contact with members of the *out-group* (Ajzen & Fishbein, 1980). Social attitudes then are a reflection of social training and translate into an individual’s social interaction. Sanction from the in-group on attitudes and beliefs becomes paramount, especially when considering individuals outside of the group, such as individuals with disabilities. Increasing favorable social
judgments of an individual with a disability, for example, may lead to greater social acceptance of that individual (Kalymon et al., 2010). For this very reason, examining the formation and malleability of attitudes has been extensively studied, including studies of race (Joy-Gaba & Nosek, 2010), gender (Lenton, Bruder, & Sedikides, 2009), and disability (Rillotta & Nettelbeck, 2007).

Shapiro (1999) stated “attitude changes and empathy development can bridge the gap between persons with disabilities and those without them” (p. 31). Inclusive experiences can reduce negative attitudes toward peers with disabilities and also benefit individuals without disabilities (Brookman et al., 2003; Fisher, 1999; Helmstetter, Peck, & Giangreco, 1994, York & Tundidor, 1995). Attitude continues to be studied as researchers seek to find an efficacious treatment to conceptualize, measure, and effect attitude change and inclusion.

**Adolescents**

Most research on peer interaction with disability has focused primarily on elementary-age children (e.g., Campbell, Ferguson, & Herzinger, 2005; Fisher, Pumpian, & Sax, 1998; Gifford-Smith & Brownell, 2003; Kalymon et al., 2010; McManus, Feyes, & Saucier, 2011). Yet Magiati, Dockrell, and Logotheti (2002) suggested young children are incapable of differentiating between types of disabilities and classify peers as normal or abnormal. According to Horne (1985), even very young children demonstrate negative attitudes toward individuals with disabilities. As individuals reach adolescence, they understand disability in both positive and negative ways (Devine & Wilhite, 2000) and are highly receptive to peer influence (Brown, 2004; Kandel, 1978). Once in adulthood, however, individuals lose much of their sensitivity to peer influence and malleability (Brown, 2004). It is therefore possible and appealing to shape
change in typically developing adolescents’ attitudes toward their peers with developmental disabilities, making them of particular interest for inclusion research.

During adolescent years, individuals develop a deeper understanding of others’ needs and grow in awareness of their society (Selman, 1991). Thurber, Scanlin, Scheuler, and Henderson (2007) suggested inclusive experiences could promote social development for adolescents without disabilities. Carter, Hughes, Copeland, and Breen (2001), for example, compared high school students who did and who did not participate in a peer buddy program. After one semester in the program, willingness to socially interact with buddies with disabilities and frequency of contact increased significantly for the volunteers but did not change significantly for non-volunteers.

**Contact Theory**

Allport (1954) hypothesized episodes of contact between groups could be used to decrease prejudicial tendencies and foster attitude change. In general, people who had contact with an individual with a disability were found to have more positive attitudes towards individuals with an intellectual disability (Scior, 2011). Yet contact alone is not enough to create attitude change (Allenby, 2009; Morrison & Burgman, 2009; Lindsay & McPherson, 2012). Vignes et al. (2009) distinguished between knowing an individual with a disability and having a friend with a disability. Positive attitudes toward individuals with disabilities were found only in children with a friend who had a disability and not in children who experienced other types of contact with disability (Bossaert, Colpin, Pijl, & Petry, 2011). Contact Theory (Allport, 1954) can be used as a framework to improve societal cohesion as well as reduce prejudice and encourage the development of more favorable attitudes through four conditions: equal status, intergroup cooperation, institutional support, and intimate contact.
**Equal status.** Individuals with disabilities have historically been viewed as distinctly different. Brown et al. (2011) stated:

It is clear that much of the resistance to interacting with individuals with disabilities is due to discomfort that is strong enough to outweigh the tendency to provide socially acceptable responses, and that this discomfort is explained by a perceived dissimilarity between people with and without disabilities. (p. 330)

Some individuals with disabilities require mobility, communication, or personal care facilitation, absolutely necessitating unilateral assistance. Intentional programming designed to encourage social equality may ameliorate this hierarchal structure and lead to reciprocal interaction by allowing for perception of similarities (McClendon, 1974), though these similarities may not be identifiable prior to the experience (Pettigrew, 1998).

**Intergroup cooperation.** Worchel, Wong, and Scheltema (1989) defined intergroup cooperation as “sharing both the labor and the fruits of the labor” (p. 213). A common goal or objective provides structure for exchange of information, specifically similarities between groups (Gaertner et al., 1999). According to Pettigrew (1998), individual adjustments to previously held beliefs at the onset of contact are crucial to the development of more accurate and favorable attitudes toward the out-group. Active contribution by all members in activities designed to engender equality may increase commonality between groups through the dissemination of positive peer information (Carter et al., 2001), so long as the goal is sufficiently worthwhile to motivate individual members to voluntarily participate.

**Institutional support.** As individuals begin to understand each other, there must be support from an external source (Brown et al., 2011). Equal and unbiased support facilitates relationship formation and allows inclusive contact to have positive, demonstrable effect on
attitudes (Kalymon et al., 2010). When an interaction is endorsed by an authority figure, or even by a peer (Carter, Sisco, Melekoglu, & Kurkowski, 2007), it mitigates the disinclination to participate in the situation and can provide an expectation of understanding.

**Intimate contact.** If contact is not sufficiently intimate, when a member of the out-group is seen, individuals may intentionally scrutinize and interpret observations to confirm the previously held beliefs (Paluck, 2006), thus reinforcing in-group prejudice as true. Recent research found the quality, not the quantity, of intergroup contact was associated with positive attitudes toward individuals with disabilities, favoring intimacy of contact over trivial or casual contact (Devine & O’Brien, 2007; McManus et al., 2011). This “friendship potential” (Pettigrew, 1998) is an essential facilitating factor in order for positive attitude change to generalize.

While previous research confirms the positive effect of contact on social attitudes toward disability (e.g., Allenby, 2009; Carter, Sisco, Chung, & Stanton-Chapman, 2011; McManus et al., 2011; Kalymon et al., 2010; Rosetti, 2011), the body of literature has failed to produce consistent results in determining the types and conditions of exposure capable of ameliorating attitudes toward disability. Consequently, the direct relationship between contact and social attitudes remains tenuous.

Allport (1954) suggested incomplete application of Contact Theory could lead to “deleterious unintended effects” (p. 265). Storey (2008) cited the Special Olympics as an example of the continuation of negative stereotypes toward individuals with disabilities, despite intentional contact. The huggers who wait at the end of races to offer hugs to all the athletes come into personal contact with many different individuals with disabilities and receive support from the organization for their position. Storey explained, however, “Not only does the presence
of the huggers reinforce the infantilization of adults with severe disabilities, they also reinforce
the belief that people with disabilities need to be ‘helped’ by nondisabled people” (p. 137).
Under such brief circumstances, social interaction will inevitably fail to dispel stereotypes,
because it will only allow for as much contact for the in-group to attribute fallacious attributes to
the out-group. If the interaction lacks sincerity, it will merely emphasize perceived differences
and substantiate previously held, erroneous beliefs.

Pettigrew and Tropp (2006) performed a meta-analysis of 515 studies utilizing Contact
Theory as a theoretical structure for reducing intergroup prejudice. Although their analysis
established that Contact Theory generally enhance the positive effects of intergroup contact to
the extent all four conditions for veritable contact were met, the authors also concluded that the
existence of Allport’s optimal conditions was not a guarantee of attitude change. Rather, they
suggested the concatenation of multiple lines of contemporary research to maximize the potential
of contact to reduce prejudice and promote positive outcomes. In particular, uncertainty and
intergroup anxiety reduction is an important mechanism for relationship formation (Pettigrew &
Tropp, 2006; Pettigrew & Tropp, 2011).

Stephan and Stephan (1985) drew attention to the role of intergroup anxiety, or feelings
of threat experienced in intergroup contexts, mediating associations between contact and
prejudice. Research inspired by their analysis has shown that previous contact can reduce
perceptions of threat and anxiety about future intergroup interactions (e.g., Blascovich, Mendes,
Hunter, Lickel, & Kowai-Bell, 2001; Paolini, Hewstone, Cairns, & Voci, 2004; Pettigrew, 1998;
Voci & Hewstone, 2003). As a result, greater positive outcomes can be achieved during
inclusive experiences to the extent feelings of intergroup anxiety diminish through prior contact
with members of the out-group (Brown & Hewstone, 2005). The confluence of anxiety
reduction through prior contact and positive knowledge formation stemming from inclusive experiences structured around Contact Theory may provide the greatest overall negative attitude reduction for individuals without disabilities toward their peers with developmental disabilities.

**Recreation**

Finding an appropriate setting for attitude change to occur may be difficult due to the complex and sensitive nature of research surrounding individuals with disabilities. To date, the majority of literature studying interaction between individuals with and without disabilities has been conducted in educational settings (e.g., Brown et al., 2011; Fichten, Schipper, & Cutler, 2005; Kalymon et al., 2010; McDougall et al., 2004; Rossetti, 2011). This research has demonstrated a body of mixed results (Morton & Campbell, 2008), possibly because educators have not been guided by theory as they developed programming.

The assumption that attitude change can occur merely by putting groups together in the same physical locale is not only false, but may actually worsen attitudes by substantiating ingroup dogma (Allport, 1954; Devine & O’Brien, 2007). McManus, Feyes, and Saucier (2011) noted the emphasis on studying attitudes within public education systems limits our understanding of how individuals with disabilities are perceived outside of public education. Adolescents have limited opportunities to interact with their peers who have disabilities in a non-academic setting (Kalymon et al., 2010). Additionally, Horne (1985) listed school as one of the contributing factors to the complexity of modifying peer attitudes, since “schools are a societal institution wherein students are socialized to the values of society” (p. 238). The familiar setting may reinforce established dogma toward disability. Van der Klift and Kunc (2002) expounded on this subject:
Friendship circles, school clubs, and special buddy systems have been implemented as formalized attempts to foster inclusion and develop relationships. While increased interaction may result from such efforts, friendship often remains elusive. Children may have successful buddy systems during school hours and still be isolated and friendless after three o'clock. (p. 1)

Recreation experiences, such as summer camps, may be uniquely efficacious in facilitating social inclusion (Brookman et al., 2003; Devine, 2004; Kleiber, 1999) as well as producing outcomes of positive youth development and not just negative outcome reduction (Thurber et al., 2007). Kelly (1996) substantiated the possibility of shaping identities and personal meanings within leisure experiences. Considering the relationship between social acceptance and leisure, Kelly asserted shaping long-term positive change in attitudes toward individuals with disabilities among individuals without developmental disabilities is possible through recreation.

Devine (2004) studied perceptions of individuals with disabilities on the role of leisure contexts in determining social acceptance while participating in inclusive recreation programs. Study participants reported that leisure activities facilitated social acceptance and also exposed traditional meanings of disability. Devine called for further investigation into the conditions under which inclusive leisure settings can promote social acceptance of individuals with disabilities.

Participation in recreational activities dilutes the separation between individuals with and without disabilities by creating opportunities for equality through play activities. Siperstein, Glick, and Parker (2009) found participants in an inclusive summer recreation program considered peers with and without disabilities equally when evaluating potential friends they
would spend time with. In fact, “almost all children attending the program were socially accepted and made new friends” (Siperstein et al, 2009, p. 104). The program was intentionally designed to ensure equal treatment of all participants in order to facilitate social development. Although some researchers have recently studied the possibility of inclusion in recreation settings (Devine, 2004; Devine & Parr, 2008; Hughes & McDonald, 2009; Schleien, Miller, & Shea, 2009; Siperstein et al., 2009), the study of inclusive interaction in recreation is, surprisingly, not commonly employed.

**Summary of Literature**

The malleability of attitudes and the process of attitude change have been explored with the goal of improving social inclusion for a stigmatized group. Despite efforts toward inclusion, individuals with disabilities remain socially isolated (Kennedy & Horn, 2004). Disabilities are often stereotyped by exaggerated and distorted attitudes held by individuals without disabilities who have little or no contact with individuals with disabilities. Contact Theory (Allport, 1954) offers an intentional structure for aggregate intergroup contact to assess, understand, and improve meanings applied to individuals with disabilities. Research grounded in Contact Theory, recognizing intergroup anxiety as a mediator between contact and prejudice, may advance our comprehension of the process of and contributing factors to attitude change.

Currently, there is a scarcity of research exploring the possibility of attitude change in natural settings, specifically within the context of recreation. Recreation activities mitigate the separation between individuals with and without disabilities by endorsing equality rather than comparison. Considering the particular proclivity of adolescents to be influenced by recreation participation and the overall lack of non-school interaction with their peers who have disabilities, this study sought to understand inclusive recreation participation through the perception of
typically developing adolescents. The purpose of this study, therefore, was to examine how participation in inclusive recreation influence attitudes and perceptions toward peers with disabilities.

**Methods**

In order to best examine the question of inclusive recreation participation and its role in shaping attitudes toward disability, a mixed methods approach was used. While both quantitative and qualitative methods have been employed in research surrounding attitudes toward disability, these studies have not sufficiently explored the lived meaning of the experience for participants. Understanding the meaning participants apply to the phenomenon may allow future researchers and policy makers to create more effective interventions and programs, beneficial to both individuals with and without disabilities. Quantitative questionnaires determined first the effect of prior contact on the reduction of negative attitudes toward disability. Dyadic interviews then sought to describe volunteers’ perceptions of the lived experience of camp. Equal weight was given to both methods to ensure data triangulated produced greater insight than a single method could. Through this method, the meaningfulness of inclusive recreation on participants’ understanding of disabilities was discovered.

**Research Setting and Participants**

Contact Theory (Allport, 1954) guided the selection of adolescent volunteers at an inclusive camp requiring participants to have a high degree of contact with campers with disabilities for this study. When choosing the setting for this study, considerations were taken to select an environment designed to foster joint participation and highlight similarities for adolescents with and without disabilities in all activities. The Arc of Tri-Cities manages Partners N Pals, a non-residential summer day camp in Washington State operating eight weeks during
the summer with locations in the cities of Richland and Pasco. Geographic area and number of campers served necessitated two camp locations. The camp has operated for over 50 years, providing local recreation for campers, ages 7 years to 21 years old, with a variety of physical, cognitive, behavioral, and developmental disabilities. At the time of the study, camp enrollment totaled 128 campers served in two camps, though weekly enrollment was varied. A wide range of disabilities was represented among the campers, such as minor intellectual disabilities, cerebral palsy, autism, Down syndrome, muscular dystrophy, and deaf-blindness. Door-to-door transportation was offered for all campers, and throughout the day campers, staff, and volunteers traveled to a wide variety of off-site recreation activities, such as swimming, bowling, craft-making, cooking projects, and outdoor games. On average, staff and volunteers were providing direct service for approximately six hours per day.

Partners N Pals volunteers were recruited, selected, and screened by The Arc of Tri-Cities management. As required, all volunteers committed to serving at least one full camp week (five days) and attending required camp training prior to camp service. Volunteers were assigned one to three campers and were responsible for facilitating campers’ full involvement in all activities and providing personal care assistance as necessary. Every volunteer additionally participated alongside his or her assigned clients in all activities, both formal and informal. All volunteers selected for camp service were invited to participate in the study by verbal and written invitation. Interested volunteers received a written request for demographic information and Participant Consent describing quantitative questionnaires and qualitative interviews, as well as audio recording. Participants under the age of 18 years old were required to submit signed Parental Permission forms and could request to be accompanied by a parent or guardian during testing and interviews.
Fifty-three of the eligible adolescent volunteers agreed to participate in the quantitative portion of the study, 58.5% female and 41.5% male. Ages ranged from 11 to 18 years old ($M = 14.2$ years, $SD = 2.2$ years). In the sample, there were 19 Leaders in Training (LITs) and 34 camp volunteers, with 32 participants from the Richland Camp and 21 participants from the Pasco Camp.

All 53 volunteers from the quantitative study were invited to participate in the qualitative interviews. While all but two of the volunteers consented to join the pool of interviewees, only 42 volunteers returned parental consent forms in order to participate in the interviews. From this pool of potential interviewees, 24 volunteers were available to meet with the primary researcher during the data collection phase. In the end, only nine adolescent volunteers were present for interviews, five female, four male. Ages ranged from 12 years old to 17 years old. In the sample, 3 volunteers were LITs and 6 were camp volunteers, with four from Richland Camp and five from Pasco Camp. Although the disabilities of campers served by volunteers were not tracked, it is clear from field notes and responses of interviewees that they were exposed to campers with a variety of disabilities, ranging from high-functioning and lucid campers to campers with extreme behaviors and physical aggression.

Quantitative Data

Data collection. Study participants completed a contact with disability questionnaire prior to camp training to prevent additional exposure bias. Immediately following their first week of camp, study participants were given two copies of a multidimensional attitude test with a pre-retrospective post design. Participants who completed quantitative testing received a gift card as an incentive for their participation.
**Instrumentation.** The modified Contact with Disabled Persons Scale (CDP) was used to measure pre-camp contact with disability. Originally developed by Yuker and Hurley (1987), the CDP is a multidimensional instrument inspired by Contact Theory (Allport, 1954) designed to measure previous contact an individual has with persons with disabilities. The CDP contains 20 items on a 5-point time-frequency Likert scale \((1 = \text{never}, 5 = \text{very often})\). Cronbach’s alpha coefficients of equivalence typically range in value from 0 to 1 and may be used to describe the reliability of factors extracted from multi-point formatted questionnaires. Many studies accept that \(\alpha > .70\) is adequate as a reliability score, though internal consistency estimates may be relatively invariant due to the dimensionality of items (Cortina, 1993). Generally speaking, however, in the use of psychometric instruments, higher coefficients estimate an increase in the correlations between items. Yuker and Hurley (1987) reported Cronbach’s alpha coefficients at .92 for the original CDP. A modified version of the CDP reported a Cronbach’s alpha coefficient of .87 (Wang, 1998). Pruett and Chan (2006) also tested the internal consistency and found a .89 Cronbach’s alpha coefficient and a Pearson product–moment correlation of .16 for a modified CDP. In this study, the modified CDP proposed by Pruett, Lee, Chan, Wang, and Lane (2008) was used to predict degree of change in the dependent variable, attitude toward disability. The Cronbach’s alpha coefficient for the CDP variable was .89 in this study.

The Multidimensional Attitudes Scale toward Persons with Disabilities (MAS) was used as an indirect pre- and retrospective post-test to measure attitudes toward disability. To obviate any dangers to the validity of data, Livneh and Antonak (1994) recommended the use of indirect attitude measurement methods. The MAS measures individuals’ reactions to a social scenario vignette illustrating an interaction between “Joseph” or “Michelle” and an individual in a wheelchair, though the nature of the individual’s disability is left undefined. Respondents read
the vignette and rate items according to their beliefs of the accuracy of each item in signifying Joseph or Michelle’s reaction to the situation.

In the current study, participants were asked to complete two copies of the questionnaire. On the first copy they rated their answers as if Joseph or Michelle had not been to camp, and on the second copy they responded as if the volunteer had been to camp for at least one week. The MAS is based on the original 34-item scale developed by Findler et al. (2007) and comprised of 12 affective, 5 cognitive, and 5 behavioral items, rated on a 5-point Likert scale (1 = not at all, 5 = very much). The modified vignette is designed to apply to a variety of situations and other disabilities. Vilchinsky, Werner, and Findler (2010) reported the modified MAS scale explained 65.99% of the total variance in their study on the effect of gender on attitudes toward individuals using wheelchairs due to a physical disability. The Cronbach’s alpha coefficients for the five factors of the modified MAS (Negative Affect, Interpersonal Stress, Calm, Positive Cognitions, and Distancing Behaviors) were .68, .79, .93, .90, and .82, respectively (Vilchinsky et al., 2010). The Cronbach’s alpha coefficients in this study were .83 for the MAS pre-test and .89 for the post-test.

Data analysis. Data were analyzed using JMP software to examine descriptive statistics and hypothesis testing. Scores from the CDP were analyzed as raw scores, computing a CDP score for each individual. Scores from the MAS were analyzed as raw scores, computing MAS pre-test and post-test scores. An overall MAS change score was then calculated for each subject. Baseline differences in study variables were tested using t-tests. Results showed no significant differences between CDP scores of participants from Pasco Camp versus Richland Camp ($t = -.521, p = .955$), male or female participants ($t = -1.899, p = .650$), or participants who served as camp volunteers versus LITs ($t = -.282, p = .101$). The results also showed no
significant differences in MAS change scores between participants who served in Pasco Camp versus Richland Camp with a different individual as the Site Director ($t = 2.770, p = .098$), male or female participants ($t = -.665, p = .269$), or participants who served as camp volunteers versus LITs ($t = -.494, p = .981$). Since no significant group differences existed, the groups were assumed to be homogenous and between-group analyses are not presented. Simple correlations found no relationship between CDP scores and age ($F = 1.029, p = .342$) or MAS change scores and age ($F = .791, p = .582$). A paired-samples $t$-test was performed to examine MAS scores from retrospective pre-tests and post-tests. Next, a covariate-adjusted regression was used to analyze the MAS change (pre-test minus post-test) and CDP scores, adjusted for the initial difference in pre-test scores among participants.

**Qualitative Data**

**Data collection.** After the conclusion of the summer camp, dyadic interviews were conducted to examine participants’ perceptions of their individual camp experiences. Interviewees received a second gift card for their involvement. Field notes, observations, and detailed memos were recorded additionally to add further sources of information. Only nine of the original 52 study participants consented to join in interviews. These interviews were conducted in the camp office, chosen for its familiarity to participants and quiet setting, and lasted between 45 minutes and one and a half hours. Qualitative methods were selected to conduct informal, dyadic interviews to encourage thick description of participants’ reflections on their volunteer service and first-hand perceptions of the camp experience. General questions and prompts were given to illicit different perspectives of the camp experience. More detailed responses were sought through specific follow-up questions, such as “can you give me an example of a time when you” or “what do you mean when you say you felt that way…” This
open design allowed for flexibility and variation to explore topics not covered by the interview guide. Interview questions were evaluated according to Flick’s (2008) criteria, identifying situation narratives, repisodes, examples, subjective definitions, and argumentative-theoretical statements.

Audio data were collected on a personal electronic device carried by the interviewer and later transcribed for analysis. Subsequent to each interview, field notes were composed on overall perceptions of the interview and additional notes on observed behavior during interviews as explained by Glaser (1978). These memos were additionally used to validate trustworthiness of interview transcriptions (Lincoln & Guba, 1985). These notes were added to field notes and memos written during camp service, though only memos detailing information from the nine dyadic interviewees were included in this portion of the analysis. Transcriptions of field notes and participants’ insights were combined to connect data capable of developing a textural description of the essence of the common experience among the participants with ideas being formulated. Member checks were performed within the following month.

**Phenomenology.** To examine participants’ experiences in camp and then arrange those experiences into their intended meanings, research must begin by recognizing the relationship between knowledge and the acts of living the experience. Familiar experiences can then be categorized, interpreted, and applied to the individuals’ specific experiences (Holstein & Gubrium, 2000). Schutz (1967) warned, however, against assuming all-encompassing parallelism with the observed, noting instead how identifying one’s own lived experiences with those being observed allows the researcher to forego projective empathy. A phenomenological approach was, therefore, employed to examine “embodied, experiential meanings aiming for a fresh, complex, rich description of a phenomenon as it is concretely lived” (Finlay, 2009,
Phenomenological research is ideal for gaining deeper understanding of the essence of the phenomenon, generating policy, and developing practices (Creswell, 2003).

The researcher’s personal experience was bracketed out prior to data collection. Before interviewing, the researcher wrote a full description of her own camp experience in order to clarify her own preconceptions of the camp phenomenon. Identifying potential assumptions allowed the researcher and external auditor to focus on the examination of the volunteers’ descriptions of the phenomenon. The data were then labeled and grouped into common categories among interview participants. This research proposes these identified categories as features typifying the meaningfulness of the experience for adolescent volunteer participation in inclusive recreation programs.

**Data analysis.** Data from interviews were analyzed through qualitative data analysis (Corbin & Strauss, 2008). Analysis began during initial first data collection when the researcher reflected on participants’ statements and context. All aspects of data were then transcribed, including audio recordings, notes on expression and body position, memos during field observation, and post-interview notes. Data were scrubbed in order to detect and remove any errors found through eye-ball ing and logic checks.

The data were coded using open, axial, and selective coding (Corbin & Strauss, 2008). As recommended by Glaser and Strauss (1967), a constant comparative method was used to clarify emerging relationships within and between themes. Once an initial codebook was developed, it was tested for inter-coder reliability using Cohen’s kappa (Cantor, 1996). Two law students at Brigham Young University served as reliability coders. Each coded the same interview, with 42 and 44 agreements, resulting in reliability coefficients of .56 and .69,
respectively. Because the focus of this study was on participants’ perceptions of a specific inclusive recreation experience, no generalizations were sought during analysis.

Trustworthiness in empirical research establishes the researcher’s ability to convince the audience the inquiry and its findings are valid and true until proven otherwise, insofar as research methods are consistent and appropriate to gather evidence to support findings (Newman, Ridenour, Newman, & DeMarco, 2003). According to Corbin and Strauss (2008), credibility “indicates that findings are trustworthy and believable in that they reflect participants’, researchers’, and readers’ experiences with a phenomenon” (p. 302). Credibility was established using member checks and peer debriefing. Four of the nine participants agreed to review the coded interview transcripts and the accompanying analysis. All four of these participants agreed with the interpretations made by the researcher.

Additionally, an external auditor, a graduate student in the Linguistics Department at Brigham Young University, who was not part of the data collection process offered weekly feedback throughout analysis, such as pointing vague descriptions or assumptions made by the researcher. According to Erlandson, Harris, Skipper, and Allen (1993), dependability is evidence that a study’s findings can be repeated if another study were to employ the same or similar subjects, setting, and methods. The external auditor assessed the data analysis process by independently examining data, codes, and categories produced. This triangulation examined multiple different perspectives on the data (Flick, 2008) and verified the resulting analysis.

Results

Quantitative Data

A first analysis was conducted to determine the efficacy of volunteer participation in Partners N Pals in improving attitudes toward disability. Results from the paired-samples $t$-test
demonstrated a significant difference between pre-camp ($M = 3.22, SD = 0.605$) and post-camp MAS ($M = 1.89, SD = 0.473$) scores $t(52) = 13.60, p < .0001$. Thus, the data established that participation in the inclusive summer day camp was significantly associated with reduction in stigmatizing attitudes toward individuals with disabilities.

A second analysis examined the relationship between contact with disability prior to camp participation and degree of attitude change. MAS pre-test scores were found to correlate highly with overall change scores. Results from the covariate-adjusted regression indicated an overall significant prediction $F(2, 50) = 45.732, p < .0001$ explaining 63% of the variance change in the response (see Table 1). The Cronbach’s alpha coefficients for CDP, MAS-post, and MAS-pre variables were 0.8861, 0.8308, and 0.8864, respectively, demonstrating acceptable internal consistency similar to previous tests (Yuker and Hurley, 1987; Pruett & Chan, 2006; Vilchinsky, Werner, & Findler, 2010). The model had a significant main effect of CDP score $p = .0017$, significant main effect of MAS pre-test score $p < .0001$, and significant CDP by MAS pre-test score $p < .0001$. Thus, adolescent volunteers with greater contact with disability prior to camp reported significantly higher MAS change scores, after accounting for differences in initial attitude scores.

**Qualitative Data**

This study was sensitive to data lending insights into benefits adolescent volunteers perceived as a direct result of inclusive summer camp participation, although the primary purpose of this study was to examine the lived experiences of volunteers as related to their camp experience. General observations consistently pointed to the reciprocal relationships volunteers built with campers and the importance those relationships had on volunteers’ comprehension of their camp experience.
Reciprocal relationships. Volunteers described reciprocal interaction with others as the key to enjoying and otherwise emotionally connecting to the camp experience in a positive way. When questioned about what made their experience meaningful, all interviewed volunteers but one offered responses such as “building stronger relationships with people around me.” Volunteers built social relationships with many of the staff, volunteers, and campers within camp and felt this unique combination of individuals was an important component of how they enjoyed the experience. A female volunteer, 12 years old, described the collective group attending camp as “the PNP family.”

The most meaningful relationships volunteers discussed, however, were those created with campers. The frequency, heightened excitement, and animation expressed by volunteers when talking about campers, noted during dyadic interviews and researcher field memos, were indicators of the importance of relationships with campers in the meaningfulness of the experience. Seven of the eight volunteers who commented on positive relationships with campers explicitly described them as “friendships.” One female volunteer, 13 years old, stated, “I did make a lot of friends at that camp, and it wasn’t just my other volunteers, it wasn’t the LITs, it wasn’t all the staff, it was a lot of the time the campers.” The results suggest these relationships involved personal interaction, as a 16 year-old female described, “in such a way that you’re taking care of them, but you’re also being a friend to them.” In response to the question, “How do you think the campers viewed you?” Another 16 year-old female volunteer responded:

I honestly hope they view us as friends, because that’s what I want to be viewed as. I don’t want to be viewed as a caretaker. I want to be a buddy to my buddy.
It was evident from comments such as this that volunteers desired a reciprocal friendship with campers. Volunteers described “getting to know them personally” through camp participation as the impetus for building “connections” and mutual friendships with campers as a 12 year-old female volunteer explained:

I feel like I really got to know them as people, and they got to know me, and I’m just glad that I made a friend, and I know that she made a friend in me, too.

Volunteers felt the reciprocity to their desires for friendship as campers “let you be their friend that makes you feel accepted,” as stated by a 13 year-old female. In describing the process of getting to know campers, volunteers offered explanations such as these made by 13 year-old and 17 year-old male volunteers, respectively, “The more you spend time with them, the more they’re friends,” and “You’re with them all day, every day. You really gain deeper friendships.”

While all volunteers articulated enjoying unconditional friendships with campers, it is important to note many felt this kind of friendship was “maybe a slightly different category” from those they held with their typically developing peers. One male volunteer, 17 years old, explained he considered someone an especially good friend once they shared a serious, personal conversation. He added, “I don’t really think I’d be able to do that with somebody with a disability.”

**Fun.** Volunteers unanimously labeled camp as “fun,” with 100% of respondents describing camp as “fun,” “exciting,” or “awesome!” Part of the perception of fun came from the variety of camp activities, since volunteers felt “there were a lot of different things we got to do, like bowling, movies, park, food was nice, and just hang out,” as stated by a 16 year-old male volunteer. The perception of fun applied to every person at camp. “I definitely liked that all the
kids could find something that they could do and that the volunteers could do stuff, too, so everyone had fun all around,” said a 13 year-old boy.

A female volunteer, 17 years old, shared it was not merely the activities themselves, but “it was being around people, being around people that liked you.” Volunteers specifically identified campers as fun. Comments such as, “Doing all those different activities with the kids was fun,” and “He just did everything, and it made me think that I wanted to do everything,” illustrated volunteers’ perceptions of fun as a shared experience with campers. One male volunteer, 12 years old, stated it this way, “It’s kind of like they help you have fun, and then you help them have fun.”

The necessity of building relationships in order to experience fun with campers was elucidated by a 16 year-old male volunteer:

I think the funnest thing that happened probably when I started getting to know the kids, because my kid didn’t really want to do activities. But when I started to get to know them, I actually got to participate with what they were doing. The first couple of days were kind of awkward between us, because I didn’t know them at all, but as I got to know them, it got better.

Six volunteers elaborated on participating with campers as most fun to them personally because “you’re with friends, people that you like.” Without friendships with campers, volunteers felt camp “wouldn’t be as much fun.” In discussing the impact of friendships on fun in camp, one volunteer commented, “I think the interaction is really important, especially when you’re interacting with special needs kids. They want to have friends. They want to meet new people and have fun.”
**Hard Work.** Another identified perception of camp noted by 89% of respondents was the difficulty in volunteering. As a 12 year-old female volunteer explained, “It’s basically a job when you get to PNP. Even if you’re a volunteer, it’s a job.” Volunteers often used negative language in describing their first impressions of camp, stating they were overwhelmed, did not know what to do, and felt the camp environment was chaotic. A female volunteer, 16 years old, commented on the intimidation of the first day, “I just thought, ‘I’m not going to be very good at this. I’m going to be terrible at this! I’m not going to be able to handle it!’”

When asked about the experience overall, however, volunteers accepted the level of work as an inherent component of camp participation. “There’s no way around it once you’re in that situation; it’s a lot easier to just accept,” said a 12 year-old female. Volunteers were asked to describe what the experience would be like without the responsibilities of their position. Responses included, “It would be a little tiny bit boring, and it wouldn’t be so interesting,” “Without having to feed them and change them, you wouldn’t gain as much experience with it,” and “If I didn’t have to work as hard, I think it would be a lot easier, but I don’t think would appreciate the experience as much.”

Volunteers not only valued the difficulty, but they felt the hard work was “all worth it.” Most volunteers reflected positively on the experience overall. One female volunteer, 16 years old, stated, “It was fun hard work, and I enjoyed the hard work! I think the difficulty of the experience kind of added to it in a weird way.” One of the male volunteers, 16 years old, explained this appreciation arose through friendship with a camper. “He didn’t really like me very much the first day or so. I’m so glad he started liking me, because it was hard!” Many of the volunteers recognized the hard work allowed them to “see a different side of these kids.”
Another male volunteer, 17 years old, offered the following explanation for appreciating the difficulty in serving campers:

Since I have to actually be engaged and work with the kids, I get to spend time with them and get to know them better. If I was just supervising them from a distance, I wouldn’t really get to know them.

Closeness with campers through intimate and challenging interaction made the experience meaningful for several of the volunteers. A 16 year-old male volunteer mentioned, “The responsibility makes it so much more important. You grow stronger feelings for the kids.”

When asked to describe what it was like to work with demanding campers, a female volunteer, 13 years old, shared a long story of working with a one-on-one camper who was crying and scratching and hitting:

And it was really meaningful, because it made me feel really close to her, since I was the only one there. I felt like I had this sense of understanding. That was the most meaningful for me.

**Personal change.** All nine volunteers made several comments concerning personal changes they perceived as a direct result of volunteering in camp. One female volunteer, 16 years old, described the change as follows:

I think in the end I was overall more changed as a person. It’s just something that people who haven’t done it can never really appreciate until they step into that environment. It just really changes you. I don’t really know how to describe it, but it just does something to you that, it’s like, irreversible.

Volunteers described this change as “positive” and “a good thing.” One 12 year-old female volunteer commented, “I feel like I grew a lot as a person.” A male volunteer, 17 years
old, felt the change did not have as great an impact on his personal life. “I mean, I have that
experience. So now whatever I do, that’s always with me, but I don’t think it’s drastically
changed me that much.” Most volunteers felt those changes would increase through increased
participation, as one male volunteer, 13 years old, explained, “Because I’d get to know people
better, and I’d understand.”

All nine volunteers agreed the development of relationships with campers was
fundamental to the changes they perceived and felt the skills and attributes they gained came
from their unique interaction with campers. Six volunteers felt they were “overall a happier
person” since camp. Seven felt their confidence had increased when “interacting with other
people.” One 16 year-old female volunteer stated this was because “you have to be fun and
outgoing to be with the kids,” since “outgoing” people were more likely to get along with
campers.

All nine volunteers commented at least twice on an increase on their patience and how
they “learned how to deal with people, even if they’re really hard to deal with,” as a 13 year-old
male described. A female volunteer, 13 years old, shared an example of working with another
student at school and feeling more patient with him as a result of volunteering in camp. “But this
year I’m like, you don’t know what’s going through his head. Maybe there are other things on
his mind.” Four other volunteers agreed with this increased awareness as one 12 year-old male
volunteer shared, “I realize you don’t know everyone’s situation. You don’t know what people
are going through.” Interacting with individuals who had communication problems or
individuals who were difficult to serve taught volunteers how to “relate to everyone else.” A 16
year-old female volunteer explained:
I realize since I met these kids that people have things going on in their lives that we don’t understand, and that we don’t know about, so it’s not right to just go ahead, and you know, judge them on the spot I guess.

### Discussion

The study at hand examined how participation in inclusive recreation influence attitudes and perceptions toward peers with disabilities. Utilizing a mixed methods approach, typically developing adolescents’ attitudes toward peers with disabilities and their descriptions of their camp experience were researched thru both descriptive and phenomenological design. Results support Allport’s contention concerning the relationship between attitude change and structured contact in reducing stigmatizing attitudes.

### Attitude Change

Participation in inclusive recreation with peers who have developmental disabilities was associated with more positive attitudes toward disability, and this was true regardless of gender, position in camp, and camp location. Beyond negative attitude reduction, all but one participant of the qualitative study felt they formed positive social relationships with campers with developmental disabilities. This volunteer also reported the lowest overall attitude change score and, in consonance with the quantitative results of this study, the lowest CDP score among the nine volunteers interviewed. It is important to note, however, adolescents may have self-selected their participation as volunteers and no direct evidence of a causal link between camp participation and attitude change can be inferred from the data.

These results are consistent with prior research suggesting that inclusive recreation may increase social acceptance among individuals without disabilities toward their peers with disabilities (e.g., Brookman et al., 2003; Devine & Lashua, 2002; Devine & Parr, 2008; Mannel
The data suggest the lived experience of adolescent volunteers at camp is built upon reciprocal relationships with peers who have disabilities due to the unique circumstances of the interaction. Adolescent volunteers and campers participated in daily joint recreation activities designed to foster equality and intimacy, with continuous administrative support throughout the interaction. As Allport (1954) discussed, contact must “…reach below the surface in order to be effective in altering prejudice. Only the type of contact that leads people to do things is likely to result in changed attitudes” (p. 264). The intentional structure of the camp provided ground for distinctive, personal interaction with peers who have disabilities.

**Relationship Development**

Rossetti (2011) describes the unique interaction between peers with and without disabilities as one “recognizing and negotiating specific difficulties with social interaction” resulting in “mutually desired social outcomes” (p. 31). Purposeful interaction of this kind distinguishes between the role of helper and friend and allows for redefinition of roles for both individuals. As stated in the results, seven of the nine interviewed volunteers described their relationships with campers as friendships.

Although quantitative data demonstrated variation in the degree of attitude change toward disability through camp participation, interviewed volunteers unanimously considered their participation a positive experience and observed these changes influencing their lives beyond the camp environment. “If you relate to people who are really easy to relate to, because they’re open, you learn how to know how to relate to other people,” was a 12 year-old male volunteer’s response when asked, “What was it that helped you become patient?” These results support previous research asserting the effects of structured intergroup contact were generalizable to
members of the out-group who did not participate in the observed contact experience (Pettigrew, 1998; Pettigrew & Tropp, 2006). Inclusive relationships were not only beneficial, but were also of great worth to volunteers. They talked about the most meaningful aspects of camp. “The kids I looked after, they had built a connection with me. And I built a connection with them.” “You change their lives, but at the same time they kind of change your life.” It is clear from these descriptions that friendships and changes such as these can occur through intentionally structured intimate contact experiences.

Friendship with campers was not considered the same as friendship with individuals without disabilities, however, confirming findings reported by Brown et al. (2011). In their study on the behavioral intentions of high school students toward their peers with disabilities, several respondents raised concerns in pursuing friendship with a peer who had a disability, highlighting perceived differences rather than similarities. Additionally, fewer respondents considered potential friendship with a peer with a disability the same as with any other friend, suggesting possible misrepresentation of the sample of volunteers who took part in this study. Considering results from the analysis of variance, a larger sample of interviewees might demonstrate a pattern of responses concerning friendship with disability similar to the findings reported by Brown et al. and shed further light on this potential barrier to reciprocal friendship.

**Reduction of Intergroup Anxiety**

Results further corroborate earlier research utilizing Contact Theory suggesting intergroup anxiety may be a salient contextual factor in predicting contact effects or attitude change toward individuals with disabilities (Pettigrew & Tropp, 2006). A significant relationship was found between contact prior to their camp experience and cumulative attitude change. Although in general camp participation led to significant attitude change, higher
frequency of contact with individuals who have disabilities preceding camp significantly predicted the degree of attitude change as a result of the camp experience, regardless of whether prior contact experiences were perceived as general, positive, or negative.

Prior contact with disability may also explain volunteers’ complex perceptions of their experience as both “fun” and “hard work.” Overcoming the perceived difficulty of the camp experience was framed and facilitated by relationships with campers. For example, volunteers elaborated on this connection with comments such as, “If your kids aren’t having fun, it’s kind of hard to have fun,” and “When you’re surrounded by kids with disabilities, it’s not going to be easy, at all. It’s just something you kind of have to get used to.” As feelings of anxiety diminish, the likelihood of positive attitude formation and possibility of friendship increase.

These findings support Pettigrew and Tropp’s (2006) recommendations for the integration of prior contact as a mediator of contact experiences. The data also indicate that reducing intergroup anxiety through prior contact (Brown & Hewstone, 2005) and concurrently introducing positive knowledge formation while participating in inclusive recreation may provide the greatest overall attitude change toward individuals with developmental disabilities.

Improving Attitudes Toward Disability

Reviewing the quantitative and qualitative findings concurrently offers important insights regarding the role of Contact Theory in reducing prejudice through intergroup contact (Allport, 1954). Participation in inclusive recreation produced a variety of positive outcomes for individuals without disabilities, including positive attitude change, reciprocal relationship development, and personal growth. Although the body of literature generally supports Contact Theory’s potential for achieving positive outcomes from contact, Pettigrew and Tropp’s (2008) meta-analysis found the presence of Allport’s conditions was not a guarantee of positive contact
effects. The authors posited that the ideal conditions for contact are most effective when functioning collectively rather than as entirely separate factors. The uniqueness of Partners N Pals’ intentional structure may approximate the preferred confluence of Allport’s optimal conditions by promoting equality through cooperative play activities, the expectation of joint participation from camp leadership, and daily opportunities for intimate and personal contact.

Moreover, the results of this mixed methods study further endorse the inclusion of negative factors capable of deterring intergroup contact from diminishing prejudice (Pettigrew & Tropp, 2008). In the study at hand, the relationship between contact and attitude change was mediated by anxiety reduction through prior contact. Volunteers who reported the highest levels of contact prior to camp experienced the greatest degree of attitude change, and the only volunteer who did not expressly talk about reciprocal relationships with campers and felt the least personal change reported the lowest amount of prior contact. Thus, salient positive contact outcomes may be achieved to the extent intergroup anxiety is reduced through prior contact. Reducing negative feelings represents an important mechanism underlying the process by which intergroup contact diminishes prejudice and veritably produces reciprocal relationships.

Limitations

The utility of the results is limited by a few considerations. First, campers ranged in ages from 7 years old to 21 years old, whereas volunteer participants were 11 years old to 18 years old. Interaction with young children with disabilities may have mitigated some of the peer-level interaction effect expected and noted, although no data were kept on the age, disability classification, or gender of campers. Initial statistical analysis, however, demonstrated no relationship between age of volunteers and previous exposure to disability, nor with age and
stigma reduction. Consequently, during hypothesis testing statistical models were reduced to eliminate age as a construct model effect.

Second, the qualitative findings were based on volunteers’ perceptions of the camp experience four months following camp participation. No direct measurement of any post-camp attitude or behavior changes was taken. It is important to note this was not a causal study. Although implications are offered below for how the data could be used and what the findings could mean, no predictive value for these results is claimed.

Third, since the majority of volunteers in the sample self-selected to participate, the results may have been initially skewed due to volunteers’ preliminary desire to interact with peers who have disabilities. Additionally, camp management had exclusive control over volunteer selection, possibly eliminating all but the most malleable adolescents predisposed to hold positive attitudes toward people with disabilities. In fact, Rosetti (2011) asserted that volunteering in service-based groups may be detrimental to the foundation of genuine friendship. “The choice to join the group mitigates the choice to be friends by equating help with friendship and preventing the natural development of such a relationship” (Rosetti, 2011, p. 32). The present analysis responded to this concern by accounting for the possibility of initial attitudes leading to differential contact, asserting a clearer image of the relationship between intergroup contact and attitudes.

Fourth, many more mediators and moderators may exist within the complex relationship between intergroup contact and attitudes toward disability beyond intergroup anxiety and prior contact with disability tested in this research. This study was delimited to a single factor, although the use of varied intergroup contact effects has been recommended (Pettigrew & Tropp, 2006). The current study only offers a simple examination of the contact/attitude interaction.
Finally, the methods employed in this study are not a surrogate for randomization in true experimental designs, and causal influences cannot be proven from these findings. Still prior research shows the path from contact to prejudicial attitudes is generally stronger than the path from prejudicial attitudes to contact (e.g., Eller & Abrams, 2004; Pettigrew, 1997; Powers & Ellison, 1995; Van Dick et al., 2004), demonstrating a non-recursive path within the complex relationship between intergroup contact and attitude change.

**Recommendations**

It is evident from the body of literature and this study that attitude change is possible through participation in highly structured recreation programs. Siperstein, Norins, and Mohler (2007) summarize the ongoing struggle of research in this field of study, questioning why contact has positive effect in some circumstances and in others, a negative effect on attitudes toward disability. The results at hand, along with others, support the necessity of intentionally structured inclusive programming and complex models featuring mediating effects. Not only would such lines of research promote recreational programs offering an opportunity for individuals without disabilities to counter preconceptions about disability with interpretations of equality and similarity, but such an emphasis might allow for a more comprehensive understanding of the specific conditions limiting or enhancing contact’s ability to produce positive outcomes.

Programs supporting mutual involvement by adolescents with and without disabilities in recreation activities may be able to adapt structure to create an inclusive environment without additional cost. Program managers might consider the use of adolescent volunteers to provide the majority of service, thus increasing the number of individuals with disabilities served, rather than relying on professional staff alone. Training and supervision by trained staff would
necessarily increase, as would potential liability, but the success and scale of the summer day camp examined in this study demonstrate opportunities for other programs to utilize a similar structure. Mulvihill, Cotton, and Gyaben (2004) noted inclusive programs serving individuals with moderate to severe developmental disabilities might necessitate adaptations and accommodations in order to fully participate in recreational activities (Kennedy & Horn, 2004), as in the community program addressed in this study. Community recreation administrators might consider offering inclusive programs through their parks and recreation department. After-school and summertime programs could offer cooperatively structured activities, such as inclusive sports leagues, inclusive swim times at the public pool, or drop-in day camps. These programs could utilize volunteer buddies to provide support for participants with disabilities.

Although the results of this study are most applicable to inclusive recreational programs, these data could also contribute to academic settings, since the majority of peer interactions between adolescents with and without disabilities occur at school (Kalymon et al., 2010). Teachers might create opportunities for typically developing students to interact with special education students in non-academic activities, such as holiday celebrations, gross-motor play time, lunch parties, or basic socialization during craft-making, cooking, or game-playing. So long as play and fun are the basis of interactions, adolescents can interact cooperatively and contribute to social relationships equally.

The program utilized in this study was unique in structure and design. The results suggest emphasizing reciprocal interchanges and allowing personal experience during inclusive play to teach about disability and dispel prejudice may produce meaningful contact and positive outcomes of critical self-perceptions. Future research into attitudes toward disability and the
social inclusion of individuals with disabilities might consider a longitudinal structure, measuring attitudes toward disability recurrently throughout the length of the study.

These findings further demonstrate contact’s general ability to lessen prejudice. Results from both quantitative and qualitative analyses conclusively validate previous research indicating that intergroup contact, when structured purposefully around Allport’s conditions, can improve attitudes toward disability among typically developing adolescents. Quantitative findings demonstrate that attitude change cannot be expected to occur during a single event. Contact’s capacity to reduce intergroup prejudice is increased as individuals with and without disabilities take advantage of opportunities to interact with each other and form reciprocal relationships. Moreover, qualitative findings demonstrate the formation of these relationships as the salient factor in inclusive experiences. Special events and isolated volunteerism cannot be expected to create meaningful change. As practitioners understand and implement findings such as these, the living practice of inclusive recreation will be greatly enhanced.
References


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Table 1

Summary of Quantitative Results ($n = 53$)

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*Note: $p < .05$*
Appendix A – Prospectus
Chapter 1

Introduction

Most people can relate to the need to belong. John Donne (1975) is often quoted in putting this idea to words when he wrote, “No man is an island” (p. 108). Evidence exists of the universal desire to form enduring and caring social attachments (Baumeister & Leary, 1995). According to Deci and Ryan (1985), this need to belong, connected to others, or relatedness, is one of three basic psychological needs creating the basis of self-motivation and personality formation. The need to belong, or to be socially accepted, can persuasively motivate individuals to interact with others. At the same time, the need for social acceptance can produce negative outcomes when an individual feels socially excluded or rejected by others (McDougall et al., 2004). Social exclusion may be reinforced by negative social attitudes from others (Kurzban & Leary, 2001).

Social attitudes are a reflection of social training. Peer attitudes can influence social development as well as the reception and dispersion of feelings of social inclusion. This is especially true for adolescents. Adolescents are highly susceptible to the influence of their peers and are likely to emulate the attitudes of those peers closest to them (Kandel, 1978). Attitudes toward individuals outside of an adolescent’s social group are, therefore, learned within social context, whether positive or negative.

Individuals with disabilities experience a lack of social acceptance due to stigmatizing attitudes held by individuals without disabilities (Devine, 2004). The negative consequences of stigmatizing attitudes do not affect only individuals with disabilities, but may have undesirable
outcomes for individuals without disabilities as well. As demographic and societal trends in America continue to move toward greater and greater diversity, individuals and organizations without cultural dexterity, or the ability to collaborate with others along various dimensions of diversity, will face challenges interacting with others and barriers to future economic success (Berger & Berger, 2004). Historically, political and educational administrators have focused on creating opportunities for meaningful peer interaction and relationship formation.

Prior to the introduction of the Education for All Handicapped Children Act (EAHCA) in 1975, which required all public schools receiving federal funds to provide students with disabilities equal access to education, the social integration of individuals with disabilities within public education was rare. Subsequently, public schools were required to educate students with disabilities in the least restrictive environment possible, namely one allowing the maximum opportunity to interact with students without disabilities (Education for All Handicapped Children Act, 1975). Some 15 years later, in response to a lengthy investigation into disability demographics and discriminatory practices, the United States Congress passed the Americans with Disabilities Act in 1990 and reauthorized the EAHCA, renaming it the Individuals with Disabilities Education Act (IDEA). During this time disability status became a matter of civil rights and was protected and treated comparable to a cultural minority group. The purpose of these laws was to establish a distinct and comprehensive ban on discrimination based on disability status (Americans with Disabilities Act, 1990). In response, public schools across the nation combined special education and general education programs, facilitating opportunities for increased social interaction between children and adolescents with and without disabilities (Lipsky & Gartner, 1996).
Despite these changes in programming, individuals with disabilities may continue to be frustrated in achieving full social inclusion and fail to realize positive peer relationships (Kennedy & Horn, 2004). Individuals without disabilities might also continue to be uncomfortable with interacting socially and building social relationships with their peers with disabilities (Devine, 2004). Much of this discomfort may be due to social stereotypes. Public school administrators, teachers, and parents may all hold the aspiration to reduce negative attitudes among adolescents, but programming and methods of accomplishing this ideal have yielded mixed results.

Often, the goal of inclusive programming is the development of meaningful social relationships, though the process by which attitude change occurs has not been definitively substantiated. This may be due to the complex and sensitive nature of research surrounding individuals with disabilities. Locating a suitable setting with adequate supports for individuals with disabilities can sometimes limit the ability of researchers to study social interaction without over-manipulating the interaction. To date, the majority of literature studying interaction between individuals with and without disabilities has been conducted in educational settings (e.g., Brown et al., 2011; Fichten, Schipper, & Cutler, 2005; Kalymon, Gettinger, & Hanley-Maxwell, 2010; McDougall et al., 2004; Rossetti, 2011).

Although a good deal of interaction is possible in public schools, such as the kind found in integrated classrooms, students may simply observe peers with disabilities at school with mild indifference and may never experience the opportunity to build friendships through mere contact with each other. McManus, Feyes, and Saucier (2011) noted the emphasis on studying attitudes within public education systems limits our understanding of how individuals with disabilities are perceived outside of public education. Additionally, Horne (1985) listed school as one of the
contributing factors to the complexity of modifying peer attitudes, since “schools are a societal institution wherein students are socialized to the values of society” (p. 238). The familiar settings may reinforce established dogma toward disability.

An attractive venue where adolescents choose to build genuine relationships may be leisure or recreation activities. Individuals typically volunteer to participate in these activities, without direct control from parents or school administration. Recreation experiences, such as summer camps, may be especially successful in producing outcomes of positive youth development (Thurber, Scanlin, Scheuler, & Henderson, 2007) as well as facilitating social inclusion (Brookman et al., 2003). Although some researchers have recently studied the possibility of inclusion in recreation settings (Devine & Parr, 2008; Hughes & McDonald, 2009; Schleien, Miller, & Shea, 2009; Siperstein et al., 2009), the study of inclusive interaction in recreation is, surprisingly, not commonly employed.

Social acceptance of peers with disabilities cannot be satisfied with a casual estimation of hypothetical situations or characters. Social acceptance requires first-hand contact with real individuals in a natural setting in order for significant attitude change to occur (The Council for Exceptional Children, 1993). Given stigmatizing attitudes toward disabilities and the need to utilize natural settings to develop meaningful attitude change, it was hypothesized non-school social settings are an underused but powerful mechanism for manipulation of attitudes (Kalymon et al., 2010; Siperstein et al., 2009).

**Problem Statement**

This study will measure the malleability of attitudes toward disability among typically developing adolescents through volunteer participation in an inclusive summer day camp.
Further, this study will seek to understand and describe typically developing adolescent participants’ perceptions of camp participation on their attitudes and behaviors toward disability.

**Purpose of the Study**

The purpose of the study is to examine how participation in inclusive recreation influence attitudes and perceptions toward peers with disabilities.

**Significance of the Study**

The detrimental effects of social exclusion are not experienced by individuals with disabilities alone, but by the whole of society. Members of a society who experience a lack of contact with their peers with disabilities due to prejudicial attitudes are impacted as well. Contact Theory may be used to improve societal cohesion as well as reduce prejudice and encourage the development of more favorable attitudes (Allport, 1954). Shapiro (1999) stated “attitude changes and empathy development can bridge the gap between persons with disabilities and those without them” (p. 31). Finding an appropriate setting for attitude change to occur, however, may be difficult.

Kleiber (1999) advocated the use of recreation as one such setting, “Voluntary and enjoyable social activities - scouting, clubs, youth sports, festivals, or cultural rituals, for example - promote social integration” (p. 65). Recreation offers a setting where all individuals in the interaction are pulled away from established value systems. Previous researchers have called for more inclusive recreation programs (e.g. Hughes & McDonald, 2009; Schleien, Miller, & Shea, 2009). Thurber et al. (2007) recognized the benefits of camp in positive youth development and not merely negative outcome reduction. The aim of this investigation is to examine inclusive recreation as a practice capable of breaking down barriers based on disability status. If such practices are identified, they will lead to reciprocal, meaningful relationships.
Up to this point, attitude research has focused on college students, employment practice, and young children (Krajewski & Flaherty, 2000). According to Horne (1985), even very young children demonstrate negative attitudes toward individuals with disabilities. If no intervention occurs, we can assume these negative attitudes will remain through adolescence. Adolescents are of particular interest in the current study due to their susceptibility to influence in attitude formation. Once individuals reach adulthood, they lose much of their sensitivity to peer influence (Brown, 2004). Adolescents may also be a crucial factor in the formation of social acceptance and cohesion. Krajewski and Flaherty stated, “High school students represent a population of future citizens who will interact with and impact the lives of individuals who have mental retardation in a far broader context than as service or care providers” (p. 155). The results of the proposed study may assist in the development of purposeful interventions designed to increase social acceptance of disability and facilitate peer relationships between individuals with and without disabilities.

**Delimitations**

The scope of the study will be delimited to the following:

1. Participants in The Arc of Tri-Cities Partners N Pals summer day camp who are:
   a. Either selected to serve as Leaders in Training (assigned to no more than three clients with disabilities) or registered volunteers (assigned to one client with a disability)
   b. 11 years to 18 years old
   c. First-time volunteers
   d. Present for a minimum of one week (five days) of camp service

2. A data collection period throughout the summer (June, July, August) of 2012.
Limitations

The study will be limited to the following:

1. The researcher is also a camp director and will have daily contact with approximately half of the study participants and, therefore, may have influence on perception of the camp experience. A second group of participants, however, will have alternative camp administration for the entirety of their camp experience. Results of attitude change will be compared between groups in order to define any effect of direct contact with the researcher.

2. Participants self-select to register for camp. Participants from the pool of potential volunteers are then accepted by The Arc of Tri-Cities management. Generalizability is, therefore, limited.

3. Participants may be predisposed to hold positive attitudes toward disability.

4. Clients registered for summer camp accepted at the discretion of The Arc of Tri-Cities. Representation of disability types or classifications, age range, and gender of camp clients is therefore beyond the researcher’s control.

Assumptions

The assumptions of this study are:

1. Attitudes are malleable.

2. Negative attitudes dominate the discourse about developmental disabilities in our culture.

3. Participants have previously formed attitudes toward disability. The development of their attitudes is affected by the reigning social stigmatization of disability.
4. Participants are self-selected to participate in summer camp.

5. Client interaction will be perceived as interaction with disability by the participants, regardless of the nature or diagnosis of the disability.

**Hypotheses**

The study will test the following hypotheses:

**H₀₁:** Participant attitude scores on the Multi-Dimensional Attitude Scale (MAS) will demonstrate no significant difference between self-ratings \((p < .05)\) after summer camp participation.

**H₀₂:** Pre-camp exposure to disabilities on the Contact with Disabled Persons Scale will not predict degree of attitude score on the MAS.

**Partners N Pals**

The setting for the study will be The Arc of Tri-Cities’ inclusive summer day camp, Partners N Pals, located in Tri-Cities, WA. Partners N Pals is a unique summer day camp, offering daytime-only services to clients 7 years to 21 years old with any developmental disability. Service delivery includes pick-up and drop-off, personal care, and facilitation in daily activities, such as swimming, bowling, roller skating, horseback riding, crafts, sports, and lawn games. Partners N Pals is designed purposefully to promote the inclusion of every individual attending the camp based in recreational activities. Counselors, both paid staff and volunteers, are trained and encouraged to participate alongside assigned clients in all activities. Volunteers are specifically given fewer in-camp responsibilities than employed staff in order to facilitate friendship development between adolescents with and without disabilities. Volunteer programs are designed to inspire equal social interaction between peers with and without disabilities.
**Definition of Terms**

*Adolescence.* A developmental period that occurs between the ages of 10 years to 20 years old (Lerner & Stienberg, 2009). According to The Arc of Tri-Cities (2012), as adolescence is a predetermined requirement for participation in the summer day camp, volunteers must be at between 11 years and 18 years old. Additionally, there will be participants entering their final year in high school at the age of 18 years. Therefore, the age of participants is delimited to 11 years to 18 years old, and they cannot have graduated from high school.

*Disability.* A broad range of conditions resulting from sensory, motor, neurological, intellectual, emotional, behavioral, or social limitations (Dattilo, 1994). More particular to the population examined in the current study, any constraint that affects an individual’s rate of development before the age of 18 years old (The Arc of Tri-Cities, 2012).

* Discrimination.* Differential treatment and opportunity based on categorical judgment of an individual or group (Oliver, 1996).

*Inclusion.* Illustrating the maxim that every individual deserves the right to active involvement in services and programs he or she would voluntarily participate in if typically developing (The Council for Exceptional Children, 1993). Participation by all members of a society in community life (Harry, 1995).

*Inclusive recreation.* Programs designed for participation by all community members in which modifications are made for individuals with disabilities to participate equally with individuals without disabilities (Dattilo, 1994).

*Social acceptance.* The perception of equal dignity between individuals with and without disabilities (Taylor & Bogdan, 1993).
Stigma. Negative or punitive responses toward any persistent trait of an individual or common to a group of individuals (Goffman, 1963).

Typically developing. Individuals without a diagnosed disability affecting their rate of development before the age of 18 years old.
Chapter 2

Review of Literature

The literature review will outline the following: (a) social attitudes, (b) adolescent involvement, (c) Contact Theory, and (d) inclusive recreation in summer day camps.

Social Attitudes

According to Ajzen (2005) attitudes are generally defined as “a disposition to respond favorably or unfavorably to an object, person, institution, or event” (p. 3). Crano and Prislin (2006) further described an attitude as “an evaluative integration of cognitions and affects experienced in relation to an object” (p. 347). Simply put, attitudes are evaluative judgments of people, individuals, or things.

The power of these judgments lies in the formation of attitudes. The normative beliefs and attitudes held by an individual’s in-group toward an out-group provide the basis of expectations for how the individual will react to a member of the out-group (Ajzen & Fishbein, 1980). The in-group sanctions or rejects the evaluative judgments made by its members. Attitudes, then, reflect the perceived desirability of social contact with members from the out-group and the consequences an individual faces when holding attitudes different from the members of the in-group. Favorable judgments of an individual with a disability, for example, may lead to greater social acceptance of that individual (Kalymon et al., 2010). The reverse is also true, where negative perceptions can lead to exclusion and isolation. In either case, attitudes produce either compliance or resistance to social norms. Attitudes are therefore not only a reflection of social stimuli, but they are also translated into an individual’s social interaction. For this very reason, examining the formation and malleability of attitudes has been extensively
studied, including studies of race (Joy-Gaba & Nosek, 2010), gender (Lenton, Bruder, & Sedikides, 2009), and disability (Rillotta & Nettelbeck, 2007).

Cohen (1966) suggested attitudes are malleable, though not perfectly so, and can be used to explain social action. If the possibility of attitude change exists, then attitudes can accept influence or resist it. The appeal surrounding the malleability of attitudes derives from the power of the intervention designed to create the transformation of attitudes. Attitude continues to be studied (Bohner & Dickel, 2011) as researchers seek to find an efficacious treatment to conceptualize, measure, and effect attitude change.

Notwithstanding changes in practices in education, employment, health care, and leisure services for individuals with disabilities, individuals with disabilities continue to perceive social barriers and feel excluded by their typically developing peers (Devine, 2004). One of the foremost barriers to the social inclusion of individuals with disabilities is attitudes of their typically developing peers (McDouggall et al., 2004). It is entirely possible many individuals without disabilities are simply unwilling to interact socially with their contemporaries with disabilities due to negative attitudes based on the judgments mentioned earlier. Peers without disabilities may be confused or frightened, or even repulsed because they do not understand why individuals with disabilities appear or behave in manners different from normative social expectation (Hughes & McDonald, 2009). Negative attitudes concerning individuals with a disability and how disability itself is characterized are manifest through the lack of interaction or inclusion among individuals without disabilities. Further, the persistence of interaction despite the presence of attitudes and beliefs of social superiority may be what Fichten, Amsel, Robillard, Sabourin, and Wright (1997) called the “kindness norm” or “sympathy effect” (p. 223), the result of social norms dictating an obligation to pity those perceived as less fortunate. This effect is
seen sometimes in explicit attitude surveys and may be attributable to social desirability, or the wish to be perceived by others in a particular way considered socially acceptable or advantageous (Holden, 2010). Condescension cannot, however, be considered inclusion. Only meaningful social acceptance will satisfy the need for acceptance among individuals with disabilities.

**Adolescent Involvement**

Previously, attitudes and the influence of peers on attitudes were discussed in general. This study considers adolescents more specifically. Adolescents are especially susceptible to peer influence (Brown, 2004; Kandel, 1978). Attitudes are less stable in adolescence than in adulthood (Krosnick & Alwin, 1989) and are therefore more highly prone to change. Sanction from the in-group on attitudes and beliefs become paramount, especially when considering individuals outside of the group, such as individuals with disabilities.

Devine and Wilhite (2000) found adolescents understand disability in both positive and negative ways. Prior to exposure to peers with developmental disabilities, adolescents may have relatively neutral or negative attitudes towards disabilities. Considering the relationship between social acceptance and leisure participation, it is possible to shape a long-term positive change in typically developing adolescents’ attitudes toward adolescents with developmental disabilities.

Thurber et al. (2007) suggested inclusive experiences can promote social development for adolescents without disabilities. Putting another person’s needs before self and sacrificing comfort and social prestige is a rare opportunity for adolescents. Organizations such as The Boy Scouts of America or church youth groups may require such service, but these activities are required for the attainment of some extrinsic reward. The occasion to interact between peers who do or do not have substantial disabilities can increase the strength of attitudes such as
tolerance, trust, patience, understanding of differences, and desire for belonging. For example, a study by Carter et al. (2001), compared high school students who did and who did not participate in a peer buddy program. After one semester in the program, willingness to socially interact with buddies with disabilities and frequency of contact increased statistically significantly for the volunteers but did not change significantly for non-volunteers. During adolescent years, individuals develop a deeper understanding of others’ needs and grow in awareness of their society (Selman, 1991). Intentional and meaningful interaction leads to an understanding of other people’s thoughts, emotions, motives, and intentions.

Historically, research on peer interaction has focused primarily on elementary-age children (Gifford-Smith & Brownell, 2003; Kalymon et al., 2010; McManus et al., 2011). Some research, however, suggested young children are incapable of differentiating between types of disabilities and classify peers as normal or abnormal (Magiati, Dockrell, & Logotheti, 2002). This study, however, examines attitude change through inclusive recreation among adolescents, since social contact and meaningful relationships between individuals with and without disabilities are more common in children than in adolescents (Carter & Hughes, 2005). As previously noted, adolescents have limited opportunities to interact with their peers who have disabilities in a non-academic setting (Kalymon et al., 2010). It may be the lack of intentional programming is one cause for the social isolation commonly experienced by individuals with disabilities.

In light of the improvement in attitude toward disabilities through participation in summer camp and the need for interaction between adolescents who do and do not have disabilities, this study seeks to determine if an adolescent’s change in attitude toward one social group will influence all major relationships in his or her life. Due to the unique circumstances
found in community recreation, these programs provide adolescents with the opportunity for mutual growth and reciprocal relationship development through peer contact.

While a good deal of literature has observed many opportunities for individuals with and without disabilities to interact in various settings, such as public education or community sports programs, opportunities for individuals with disabilities to form lasting friendships among their peers are still noticeably limited (Kennedy & Horn, 2004). Lack of contact may reinforce negative attitudes, and in turn negative attitudes promote the absence of meaningful contact. This explanation of the recurring cycle of social exclusion may seem over-simplified, but it demonstrates the necessity of research with the purpose of assessing the conditions under which attitude change occurs.

Kenworthy, Turner, and Hewstone (2005) appealed for further study to increase recognition of the types of contact capable of producing improvement in attitudes, feelings, and intentions toward socially excluded individuals. On the subject of the social inclusion of individuals with disabilities, this petition was echoed by Kalymon et al. (2010). In other words, what type of contact will produce positive attitudes toward and may promote social inclusion of individuals with disabilities among peers without disabilities? Along with the authors of the aforementioned study, the current study employs Intergroup Contact Theory (Allport, 1954) as a theoretical framework to develop optimal conditions for the foundation of positive attitudes and social inclusion.

**Contact Theory**

Intergroup Contact Theory, often simply called Contact Theory, was first proposed by Gordon W. Allport over 60 years ago. His initial premise was all human beings have prejudicial tendencies (Allport, 1954). Based on this argument, Allport (1954) hypothesized episodes of
contact between groups could be used to decrease those prejudicial tendencies and foster attitude change. Bramel (2004) claimed Contact Theory to be “one of the most long-lived and successful ideas in the history of social psychology” (p. 49). Contact Theory explores interaction between an in-group and an out-group, where the in-group holds prejudicial attitudes toward the out-group.

Contact Theory was originally introduced as a method of improving race relations (Allport, 1954; Meer & Freedman, 1966). This study, however, is primarily concerned with attitude change among individuals without disabilities toward their peers with disabilities. Contact is frequently used by researchers as the explanatory variable when studying the formation and malleability of attitudes toward disability (Altman, 1981). Biklen (1973) suggested lack of contact between individuals with and without disabilities may be one factor in the development of negative attitudes. Relating Contact Theory to disabilities research involves some further definition to make it applicable. Since intergroup contact, as Allport (1954) presented originally explored attitudes concerning race, and race research discusses prejudicial attitudes, the term prejudice may be commonly found in contact research. Prejudice is not, however, a word typically associated with disability. More common in the study of disabilities is the use of stigma. Prejudice implies an inaccurate set of unpleasant characteristics that are unfairly assigned to a group and generalized to all individuals in that group. Stigma is commonly linked to perceptions of deviant behavior, disease, and disabilities (Phelan, Link, & Dovidio, 2008). According to Goffman (1963), “Stigma…is the situation of the individual who is disqualified from full social acceptance” (p.4). This discrepancy may seem to preclude the use of Contact Theory in the present study. Phelan et al. (2008) concluded, however, stigma and prejudice are part of the same “animal” (p. 365). They argued functions and models of stigma
and prejudice overlap, encouraging for researchers to share methodology in both lines of study (Phelan et al., 2008).

In order to identify circumstances capable of affecting positive change, Contact Theory requires four conditions be present for an optimal intergroup contact experience to improve attitudes and decrease negative stereotypes equal status, common goals, intergroup cooperation, and institutional support. Recent research, however, suggests the contact situation requires an additional condition of the quality of contact (Devine & O’Brien, 2007). This condition favors intimate over trivial or casual contact (Allport, 1954; Devine & O’Brien, 2007). Pettigrew noted the imposition of nonessential conditions in previous studies. Since the attainment of common goals necessitates intergroup cooperation in Allport’s original model, the inclusion of both conditions may be tautological. This study, therefore, will use the following conditions: (a) equal status, (b) intergroup cooperation, (c) institutional support, and (d) intimate contact.

**Equal status.** Social acceptance is tantamount to equal status in social position (Schwartz, 1988). Equality, in this sense, may be interpreted as exhibiting appropriate social skills and perceiving similarities (Gifford-Smith & Brownell, 2003), leading to reciprocal interaction (Brown et al., 2011). These similarities must be expected and perceived between individuals and groups within the contact experience, though they may not be identifiable prior to the experience (Pettigrew, 1998). This is not always easily managed when, historically, individuals with disabilities have been viewed as distinctly different (Pettigrew, 1998). Their physical and mental development makes them strikingly dissimilar from their peers without disabilities. Brown et al. (2011) stated:

> It is clear that much of the resistance to interacting with individuals with disabilities is due to discomfort that is strong enough to outweigh the tendency to provide socially
acceptable responses, and that this discomfort is explained by a perceived dissimilarity between people with and without disabilities (p. 330).

Observation of these dissimilarities may persuade individuals without disabilities to engage in unequal or imbalanced interaction (Brown et al., 2011). Observed disparity in physical, cognitive, or emotional characteristics may produce feelings of social politeness, sometimes even protection, toward individuals with disabilities (Brown et al., 2011; Kalymon et al., 2010). These feelings of benevolence can lead to a one-way relationship, where individuals without disabilities provide service to individuals with disabilities (Kalymon et al., 2010). The natural imbalance of interaction that arises due to the nature of certain disabilities must be addressed, however. Individuals who require mobility, communication, or personal care facilitation may absolutely necessitate unilateral assistance. When serving individuals with disabilities, someone must provide assistance and someone else must receive it. This is a fact of life; one must be helped and one must provide that help. With this in mind, intentionally built programming may ameliorate the natural inequality. The study at hand seeks to dispel using this inequality as the focus of social interaction, such as with traditional care provision. Encouraging universal participation may dispel the perception of a hierarchal structure of providing service to another individual. If both participants and partners with disabilities were committed to equal participation in role reversal activities, such as bowling, they might take turns providing support and encouragement and receiving it.

**Intergroup cooperation.** Allport (1954) theorized interaction through cooperation is a key factor in reducing intergroup bias. A common goal or objective provides structure for intergroup contact. It must be worthwhile to both groups in order to motivate individual members to voluntarily participate. Worchel, Wong, and Scheltema (1989) defined intergroup
cooperation as “sharing both the labor and the fruits of the labor” (p. 213). Active contribution by all members in activities designed to engender equality may increase commonality between groups.

Opportunities for all individuals within the contact experience to contribute and succeed collectively are fundamental to the dissemination of positive peer interaction (Carter et al., 2001). As members argue, compromise, and reach agreement with each other, they convey information and values individually (Gaertner et al., 1999). This communication allows members of the in-group to develop differentiated perceptions of the out-group. According to Pettigrew (1998), individual adjustments to previously held beliefs at the onset of contact are crucial to the development of more accurate and favorable attitudes toward the out-group. Cooperation removes the pressure of competition and promotes an increase in intergroup exchange of information, specifically similarities between groups.

**Institutional support.** For inclusive contact to have positive, demonstrable effect on attitudes there must be support from an external source, such as institutions, authorities, laws, or customs (Brown et al., 2011). Such support facilitates relationship formation and allows individuals to more fully understand each other (Kalymon et al., 2010). When an interaction is endorsed by an authority figure, it mitigates the presence of disinclination to participate in the situation and can provide an expectation of understanding. Valuing the institution or group, even prior to direct interaction with the institution, and seeking to gain approval from the group, may contribute to the formation of subsequent attitudes (Smith, Olson, Agronick, & Tyler, 2009). Without deliberate authoritative sponsorship of desired behaviors, organizations arranging intergroup contact may not observe the benefits of Contact Theory (Pettigrew & Tropp, 2006).
Recent research suggests the possibility of support from peers rather than administrators. Carter et al. (2007) found that interactions between students with and without disabilities actually increased when supported by another classmate instead of a paraeducator or special education teacher. Sanction of social attitudes is especially compelling when peers are the sanctioning body.

**Intimate contact.** Contact alone is not enough to create attitude change (Allenby, 2009). The reason may be when a member of the out-group is seen, individuals may intentionally scrutinize and interpret observations to confirm the previously held beliefs (Paluck, 2006), thus reinforcing in-group prejudice as true. Unstructured contact experiences do not promote a depth of interaction necessary to confront previous attitudes (Link & Phelan, 2001). The contact experience needs to be sufficiently intimate to allow for reciprocal interaction in order for knowledge to be shared and understanding to grow.

Intimacy could be confounded by the principle of institutional support. Kalymon et al. (2010) interviewed eight seventh-grade boys without disabilities about their attitudes toward social relationships with students with severe and intellectual disabilities. The boys identified the adult intervention as an interruption of “spontaneity of relationships and communication that typically exist between two students” (Kalymon et al., 2010, p. 313). Contact Theory makes it very clear attitude change through contact cannot be forced or manipulated (Allport, 1954). When contact is controlled by heavy-handed authority or becomes superficially casual, it has the possibility of exacerbating prejudice.

To the extent the four conditions of equal status, intergroup cooperation, institutional support, and intimate contact are met contact begins to mediate attitude change for the in-group. Pettigrew (1998) revised Contact Theory by expounding on four interrelated processes of
change. First, when two groups are introduced in a new situation meeting the conditions of Contact Theory, the acquirement of knowledge about the out-group overrides misconceptions and reduces prejudice held by the in-group. Second, the development of new awareness allows in-group members to perceive different expectations for themselves within the structured interaction. Concurrently, new knowledge changes expectations for members of the out-group. As more contact occurs, members of the in-group are more likely to feel at ease in repeating the behavior. Third, emotional reaction to contact is expected, especially in situations where one or both parties are likely to feel anxious (Fichten et al., 2005). Continued contact, however, can reduce negative reactions (Pettigrew, 1998). Finally, intergroup contact will lead naturally to a reevaluation of ingroup views and perceptions of the other group and the social environment in general. Part of this process is having less contact with in-group members and more with the out-group. Successful contact moves individuals away from their in-group friends and allows for intimate contact with the out-group. Essentially, the more time spent with the out-group and members of the in-group who also participate in the contact experience decreases the amount of time spent among peers who do not participate.

As noted before, peers hold strong influence over attitudes and reactions toward members of an out-group (Ajzen & Fishbein, 1980). Once an individual returns to the pre-contact social structure, ideally the attitude change would generalize into attitudes toward all members of the out-group. If, however, an individual was to abandon attitude change after a meaningful contact experience due to social pressure from the in-group, the goal of inclusion would be unmet. The value of such contact is not in the moment, but in the ability for individuals to internalize what they learn to the point the change in attitudes will generalize from the specific setting to acceptance of other members who did not directly participate in the contact experience and
out-groups not involved in the contact experience (Pettigrew, 1998). Intergroup contact would be of little import if the attitude change was conditional on the physical setting or the specific individuals in the experience.

Thankfully, the benefits of intergroup contact are not situational. Pettigrew and Tropp (2006) performed a meta-analysis testing Contact Theory. They discovered an inverse relationship between intergroup contact and prejudice and that the effects of contact were generalizable to members of the out-group who did not participate in the observed contact experience. Improvement of attitudes, then, is not dependent on the unique circumstances of the interaction but can be applied to other members of the out-group, in different situations.

Although contact can be influential, it will not always produce a positive change in attitude. If the conditions proposed by Allport (1954) for veritable contact are not met, contact may in fact produce “deleterious unintended effects” (p. 265). If the interaction lacks sincerity, it will merely emphasize perceived differences and substantiate previously held, erroneous beliefs.

Storey (2008) cited the Special Olympics as an example of the continuation of negative stereotypes toward individuals with disabilities, despite intentional contact. The huggers who wait at the end of races to offer hugs to all the athletes come into personal contact with many different individuals with disabilities and receive support from the organization for their position. This kind of contact, however, can produce harmful effects, as Storey explains, “Not only does the presence of the huggers reinforce the infantilization of adults with severe disabilities, they also reinforce the belief that people with disabilities need to be ‘helped’ by nondisabled people” (p. 137). The use of devaluing language toward the athletes in the Special Olympic also suggests they do not belong with the rest of society and ought to be denied peer status as adults (Smith et al., 2009). Under such circumstances, social interaction will inevitably fail to dispel stereotypes,
because it will allow for only as much contact for the in-group to recognize fallacious attributes among the out-group.

If the interaction is built around a competitive context, it will invariably enlarge the perceived disparity between the two groups (Wilhite, Devine, & Goldenberg, 1999). Beliefs in skill differential can lead to general beliefs of superiority or inferiority. Further, even strict adherence to conditions for meaningful contact may not produce positive attitude change. Some individuals may not allow new information to alter their preconceptions and resist any attempts to produce change. Allport (1954) acknowledged Contact Theory is only effective among individuals “with a normal degree of prejudice” (p. 281).

Allenby (2009) supported the opinion that genuine acceptance of individuals with disabilities is most likely advanced when programs are inclusive, or “when individuals with and without disabilities participate together as equals” (p. 2). This intentional construction of programming goes beyond physical integration or side-by-side participation. An inclusive environment offers cooperative interaction between individuals with and without disabilities (Allenby, 2009).

**Inclusive Recreation in Summer Day Camps**

Previous research examining inclusive interaction largely within educational settings has demonstrated a body of mixed results (Morton & Campbell, 2008). One possible explanation may be educators have not been guided by theory as they develop programming. The notion attitude change occurring merely by putting groups together in the same physical locale is not only false, but may actually worsen attitudes by substantiating in-group dogma (Allport, 1954; Devine & O'Brien, 2007).
Research has demonstrated students with disabilities are more likely to be isolated and rejected by peers than students without disabilities (Siperstein et al., 2007; Siperstein, Parker, Norins Bardon, & Widaman, 2007). One of the major drawbacks with the focus on educational settings is the overwhelming focus on academic performance. This creates an atmosphere of competition, highlighting the inability of students with disabilities to perform at the same level as their peers. Public school, by its educational nature, does not allow for much equality. Similarities are distanced and disparities are highlighted.

Middle school students in the study by Kalymon et al. (2010) mentioned having contact with peers with disabilities almost exclusively in school. They observed virtually no involvement in extracurricular activities and little participation in activities outside of school amongst students with disabilities. The lack of contact is particularly common during the summer, when there are few if any chances for students with and without disabilities to interact. Kalymon et al. supported contact as a means to minimize negative perceptions of peers with disabilities. The authors also noted, however, the responsibility to create opportunities for students with and without disabilities to interact and develop relationships lies with schools and not with students. By limiting research to students within public education, it is difficult to determine how interaction outside of these programs (i.e., away from the structure and administrative control) will be perceived (McManus, 2011). Intentionally designed programs participated in voluntarily may bring to bear the lasting nature of attitude change, especially if followed by post-program interviews.

In light of previous research, there is a demonstrated need for an opportunity beyond in-school programming in which individuals with and without disabilities can interact in a natural setting to promote lasting attitude change and acceptance (Kalymon et al., 2010). Interactions
with individuals who have disabilities are not likely to be contrived and rigid as they may sometimes be during inclusion programs. There is evidence social inclusion and meaningful contact is possible through participation in recreation activities (Siperstein et al., 2009).

Kelly (1996) substantiated the possibility of shaping identities and personal meanings within leisure experiences. Considering the relationship between social acceptance and leisure, Kelly asserted shaping long-term positive change in attitudes toward individuals with disabilities among individuals without developmental disabilities is possible through recreation. Boyd et al. (2008) called for further study of community recreation as a setting for intergroup interaction. By studying the best practiced community-based inclusive recreation programs with the capacity to allow peer-level contact, research could expand understanding of the intergroup contact and attitude change.

Siperstein et al. (2009) found participants in an inclusive summer recreation program considered peers with and without disabilities equally when evaluating potential friends they would spend time with. In fact, “almost all children attending the program were socially accepted and made new friends” (Siperstein et al, 2009, p. 104). The program was intentionally designed to ensure equal treatment of all participants in order to facilitate social development.

Similarly, Thurber et al. (2007) measured pre-camp and post-camp development of children from a nationally representative sample who completed at least one week in a day or residential summer camp. Results indicated “accredited summer camps of at least a week’s duration may all provide, to some degree and for most children, the essential ingredients for positive youth development” (Thurber et al., 2007, p. 251), suggesting camp experiences may be particularly suited for positive adolescent development.
The camp setting allows individuals with and without disabilities an opportunity to interact beyond school and normative inclusive programming. Amado (2004) asserted meaningful, reciprocal relationships occur outside of public education buddy programs. Van der Klift and Kunc (2002) expounded on this subject:

Friendship circles, school clubs, and special buddy systems have been implemented as formalized attempts to foster inclusion and develop relationships. While increased interaction may result from such efforts, friendship often remains elusive. Children may have successful buddy systems during school hours and still be isolated and friendless after three o'clock. (p. 1)

In camp settings, participants are removed from the influence of popular media, peers, and the structure of the everyday. Camp settings are traditionally outdoors, allowing campers the opportunity to participate in challenging and healthy risk-taking physical activities. In general, summer camp promotes positive behavioral changes (Thurber et al., 2007). With the demonstrated success of summer camp in shaping the identities and meaning systems of individuals (Kelly, 1996), research can examine the impact of summer camp under the lens of Contact Theory.

Within inclusive summer camps, meaningful contact (those experiences having equal status, intergroup cooperation, institutional support, and intimate contact) can occur and may address the innate inequality between individuals with and without disabilities. The disparity may be underscored, however, in settings where the focus is on skill comparison or the contact is one-sided. Devine and O’Brien (2007) examined contact between campers at an inclusive, residential summer camp with and without disabilities, using Contact Theory as the theoretical framework. The authors performed qualitative interviews of campers with and without
disabilities and found contact based solely on assisting campers with disabilities were positive, but lacked reciprocity and acceptance. Additionally, any contact seen as positive, yet hierarchal, such as giving campers with disabilities the opportunity to access peers without disabilities, also were not necessarily capable of increasing acceptance. Mixed experiences such as these may demonstrate the need to meet as many of the conditions of Contact Theory as possible in order for attitudes to change (Devine & O’Brien, 2007).

By alleviating pressure to perform and offering activities that highlight participation and socialization, inherent inequality between groups may be removed. This is currently practiced by some camps, such as the Muscular Dystrophy Association summer camp and The Arc of Tri-Cities Partners N Pals day camp. Although the interaction may never be completely equal, the feeling of separation is less when intentional program design alleviates participants’ need to demonstrate superiority. Campers with disabilities require assistance from volunteers without disabilities to fully participate in all the camp activities, but volunteers are required to participate in all activities to assuage feelings of separation. In camp, no one individual is favored due to physical or mental ability. This level of equality is possible since activities are designed for mutual enjoyment and not physical or educational measurement. The interaction is supported by caring and accepting camp leadership who encourage peer-level contact (Thurber et al., 2007).

Summary

The malleability of attitudes and the process of attitude change have been explored with the goal of improving social inclusion for a stigmatized group. Despite efforts toward inclusion, individuals with disabilities remain socially isolated (Kennedy & Horn, 2004). Disabilities are often stereotyped by exaggerated and distorted attitudes held by individuals without disabilities who have little or no contact with individuals with disabilities. Contact Theory (Allport, 1954)
offers an intentional structure for meaningful intergroup contact to assess, understand, and improve meanings applied to individuals with disabilities. Without research grounded in theory, an understanding of the process of and contributing factors to attitude change may be severely limited.

Currently, there is a scarcity of research exploring the possibility of attitude change in natural settings, specifically within the context of recreation. Recreation dilutes the separation between individuals with and without disabilities by creating opportunities for equality through play activities. Considering the particular proclivity of adolescents to be influenced by their peers and the overall lack of non-school interaction with their peers who have disabilities, this study seeks to influence and measure attitude change toward disability among adolescents without disabilities through inclusive recreation programming.
Chapter 3

Methods

The purpose of the study is to examine how participation in inclusive recreation influence attitudes and perceptions toward peers with disabilities. Further, the study seeks to understand the ability of attitude change through participation in inclusive recreation to extend beyond the experience and influence interaction with individuals not part of the original program. The following areas are covered: (a) study setting, (b) selection of subjects, (c) selection of test instruments, (d) pilot study, (e) study design, (f) data collection, and (g) data analysis.

Study Setting

The Arc of Tri-Cities recruits adolescent volunteers and paid staff to serve as counselors for its annual summer day camp, Partners N Pals. The Arc of Tri-Cities is a branch of The Arc of the United States (The Arc) located in Kennewick, WA. “The Arc promotes and protects the human rights of people with intellectual and developmental disabilities and actively supports their full inclusion and participation in the community throughout their lifetimes” (The Arc, 2012). Partners N Pals is a unique summer day camp, offering services to clients who have a developmental disability, ages 7 years to 21 years old. The day camp “is an opportunity for kids to make friends, learn to accept others, develop patience, compassion, and develop independence” (The Arc of Tri-Cities, 2012). Partners N Pals is a non-residential camp operating for eight weeks during the summer serving individuals with a variety of physical, mental, emotional, and behavioral disabilities. Clients are introduced to the camp through caseworkers, teachers, and other families familiar with The Arc of Tri-Cities. Families and care providers register clients for an entire week of service and may register for multiple weeks if desired. The day camp offers a wide variety of off-site recreation activities, such as swimming,
bowling, craft-making, roller skating, cooking projects, and outdoor games. Throughout the day, clients and counselors are bused from the camp site-location, typically a school gymnasium, to local activity centers and parks. Clients are assigned to counselors at either one-on-one level or group-level (up to one-on-five) staffing. Counselors facilitate clients’ involvement in all activities and participate alongside their assigned clients. Anticipated enrollment each year is estimated to be 100 total clients served, though weekly enrollment will differ.

Partners N Pals employs full-time camp management staff, paid camp counselors, and volunteers to direct, transport, and facilitate client’s participation in camp activities. Camp volunteers will be selected by The Arc of Tri-Cities management. Partners N Pals offers two volunteer positions, camp volunteer and Leader in Training volunteer. Camp volunteers must be at least 11 years old, complete a registration form, pay for activity fees, and attend a one-time, two-hour training with camp management and the Recreation Director. Leader in Training volunteers must be at least 15 years old, complete a registration form, pass the interview process, accept camp assignment, and attend three days of camp training. All volunteers are designated by camp management to serve in either Richland or Pasco Camp. Camp volunteers are assigned as counselors to one client during camp, whereas Leader in Training volunteers are assigned as counselors to up to three clients, based on the functional and personal care needs of individual clients being served. Camp volunteers register for an entire week at a time, with the possibility of multiple weeks being accepted by camp management. Leader in Training volunteers apply and are selected to serve four or eight weeks during the summer.

Selection of Subjects

A convenience sample will be selected from a pool of volunteers interviewed, selected, and trained for The Arc of Tri-cities’ Partners N Pals summer day camp program for the summer
season of 2012. Since The Arc of Tri-Cities does not recruit volunteers on the basis of experience working with individuals with a disability, and individuals self-select to apply for volunteer positions in Partners N Pals, the researcher cannot control motivational factors. The study will measure only individuals who are 11 years to 18 years old and present for a minimum of one week or five days of camp service. Further, participants must be first-time volunteers. At least 40 volunteers are estimated to participate in the study.

Protection of subjects. Approval from an Institutional Review Board (IRB) associated with Brigham Young University will be obtained prior to data collection. IRB-approved protocols will be observed exactly to ensure confidentiality of the data and protection of the subjects. Research subjects will submit a completed Participant Consent prior to testing. If the subject is under the age of 18 years, a completed Parental Permission from must be submitted with the Participant Consent. If, at this time, any participant or participant’s parent declines participation, no further consent will be necessary, and testing will not take place.

The research data will be kept in a secure location and on password protected devices accessible only to the researcher. The data will remain the sole possession of the primary researcher and will only be shown to other members of the research team. No additional copies of the data will be made, and data will not be downloaded onto any device other than those under the exclusive access of the researcher. Any hard copies of the data will be shredded by the researcher after transcription and will be kept in a separate container until the disposal by the researcher at a designated disposal site. All data will be kept for the duration of analysis and destroyed immediately after presentation of study results. At the end of the study, data will be deleted by the researcher and a notification of the deletion will be mailed to the participant.
**Selection of Test Instruments**

Intergroup contact has been thought to be one of the primary methods to reduce prejudicial and stigmatizing attitudes for over half a century (Allport, 1954; Pettigrew & Tropp, 1998, 2005). Pettigrew and Tropp (2006) performed a meta-analysis of over 516 studies and concluded intergroup contact generally reduces intergroup prejudice. Catalano, Bezyak, Lee, Chan, and Wampold (2006) performed a meta-analysis of research on disability attitude change and noted the paucity of contact as an intervention in studying attitudes toward individuals without disabilities.

Disability attitude studies employing measures of contact may not account for previous contact, or exposure, an individual has had with individuals with disabilities. In order to account for variability of exposure we cannot control, the study at hand will utilize quantitative methods to determine the type and frequency of pre-camp exposure. Yuker and Hurley (1987) developed the Contact with Disabled Persons Scale (CDP) due to the simplicity, based on a priori assumptions, and lack of consistency of psychometric property measurement in previous measures of contact. The CDP is designed to measure of the amount of contact an individual has had with individuals with disabilities. According to Pruett, Lee, Chan, Wang, and Lane (2008), the CDP “is the most frequently used psychometrically validated instrument to measure the amount of contact that an individual has had with people who have a disability” (p. 217). The instrument is comprised of 20 items rated on a 5-point, time-frequency Likert scale (1 = never, 5 = very often).

Several studies have used the CDP since its development as a measure of contact with individuals with disabilities (e.g. Eberhardt & Mayberry, 1995; Hunt & Hunt, 2000; Lam et al., 2010; Pruett & Chan, 2006). Wang (1998) updated items of the CDP to focus on person-first
language. This modified version was examined by Pruett et al. (2008) to determine if a greater range of factors could be identified than previously supposed. Their examination of the CDP identified three subscales of contact with people with disabilities: (a) General Interpersonal Contact, (b) Positive Contact Experiences, and (c) Negative Contact Experiences (Pruett, Lee, Chan, Wang, & Lane, 2008). General interpersonal situations were associated with nine items, such as *How often have you eaten a meal with a person with a physical disability?* Positive experiences were characterized by four items, such as *How often have you met a person with a disability you like?* Negative experiences were represented by three items, such as *How often have you been annoyed or disturbed by the behavior of a person with a disability?* The coefficient alphas computed for the three factors were .88, .86, and .76, respectively, generally supporting the use of the CDP as a multidimensional scale (Pruett et al., 2008). The authors also eliminated four items from the original scale: *How often have you had a brief conversation with people with disabilities? How often have you tried to help people with disabilities with their problems? How often have you worked with a client, student, or patient with a disability on the job?* and *How often have you met a person with a disability for whom you feel sorry?* (Pruett et al., 2008).

For the original CDP, the median split-half coefficient was .93 and the median Cronbach alpha coefficient was .92 (Yuker & Hurley, 1987). The modified version of the CDP proposed by Wang (1998) reported a Cronbach alpha coefficient of .87. Pruett and Chan (2006) also tested the internal consistency for the modified CDP and found a .89 Cronbach alpha coefficient. Pruett et al. (2008) called for replication of the modified multidimensional CDP to investigate the suitability of its use in analyzing the effect of various types of contact with individuals who have disabilities on social attitudes toward disability in general. The modified multidimensional
CDP (Pruett et al., 2008) will be used to measure exposure to disability prior to the day camp intervention. Type and amount of contact will be used as covariate or interacting variables to predict degree of change in the dependent variable, attitude toward disability.

Antonak and Livneh (2000) performed a comprehensive review of scales measuring attitudes toward individuals with disabilities. The authors stressed the importance of refining instruments utilizing indirect methods and multidimensional scales differentiating between the three components of attitude: (a) affects, (b) cognitions, and (c) behaviors (Antonak & Livneh, 2000). Due to the complexity of measuring attitude toward disability and the difficulty in validating an instrument utilizing indirect methods on a multidimensional scale differentiating between affective, cognitive, and behavioral components of attitude (Antonak & Livneh, 2000), Findler, Vilchinsky, and Werner (2007) constructed the Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) and are still in the process of establishing the validity of its properties. The MAS is comprised of 16 affective, 20 cognitive, and 11 behavioral items rated on a 5-point Likert scale (1 = not at all, 5 = very much). Affective items included emotions such as stress or shyness. Cognitive items included thoughts such as he/she seems to be an interesting guy/girl. Behavioral items included actions such as move away or start a conversation.

Findler et al. (2007) modified the social scenario vignette used by Fichten and Amsel (1988) to study the interaction between college peers who do and do not have a physical disability through indirect measures. The modified vignette illustrates an interaction between “Joseph” or “Michelle” and an individual in a wheelchair, though the nature of the individual’s disability is left undefined. Male and female research subjects respond to questionnaires representing Joseph or Michelle, respectively. Subjects read the vignette and rate items
According to their beliefs of the accuracy of each item in signifying Joseph or Michelle’s reaction to the situation. The modified vignette is designed to apply to a variety of situations and other disabilities.

Although the original MAS instrument demonstrated reasonable internal consistency (Findler et al., 2007), further inspection of the original affect factor distinguished three separate factors: Negative Affect, Interpersonal Stress, and Calm (Vilchinsky, Werner, & Findler, 2010). Additionally, modifications were made to factors of Positive Cognitions and Distancing Behaviors. The authors also omitted 12 items loading high on more than one factor or having the lowest loading on their relevant factors. The original MAS with three components explained 47.5% of the total variance (Findler et al., 2007), compared to the 65.99% of total variance explained by the modified MAS (Vilchinsky et al., 2010).

The Cronbach alpha coefficients for the five factors of the modified MAS (Negative Affect, Interpersonal Stress, Calm, Positive Cognitions, and Distancing Behaviors) were .68, .79, .93, .90, and .82, respectively (Vilchinsky et al., 2010). Vilchinsky et al. (2010) recognized the modified MAS as a self-reporting instrument with results that “cannot necessarily be taken as reflections of real-life encounters with people using wheelchairs” (p. 170). In the current study, real-life interaction with individuals with disabilities will be the medium for attitude change instead of hypothetical situations.

**Qualitative Interviews**

Recent research has benefited from the use of mixed methods, or the simultaneous collection of both quantitative and qualitative data (Viadero, 2005). The current study will employ mixed methods methodology to draw on its “potential for deeper understandings” (Viadero, 2005 p. 20). Dyadic interviews with camp volunteer subjects will also take place to
provide additional sources of thick and rich data. All interviews will take place at The Arc of Tri-Cities’ main office, located in Richland, WA. Interviews will be informal, designed to encourage subjects to reflect on their experiences in camp and communicate openly about what made their camp experience meaningful, in order to capture the essence of the phenomenon of camp participation. When conducting dyadic interviews, the primary researcher will use an open design utilizing a few general prompts. A degree of flexibility will permit the researcher to ask follow-up questions during interviews to gain deeper understanding subjects’ attitudes and behaviors toward disability.

**Phenomenology.** To examine participants’ experiences in camp and then arrange those experiences into their intended meanings, research must begin by recognizing the relationship between knowledge and the acts of living the experience. “The human consciousness actively constitutes the objects of experience” (Holstein & Gubrium, 2000, p. 263). By attuning to gathered knowledge, often communicated by the individual, the researcher reflects on the individual’s prior subjective experience through commonality (Schutz, 1967). Familiar experiences can then be categorized, interpreted, and applied to the individuals’ specific experiences (Holstein & Gubrium, 2000). Schutz (1967) warned, however, against assuming all-encompassing parallelism with the observed, noting instead how identifying one’s own lived experiences with those being observed allows the researcher to forego projective empathy. Recognizing this subjective context permits social scientists to create a realistic understanding of the meaningfulness of an experience in the moment individuals live it (Schutz).

A phenomenological approach will, therefore, be employed to examine “embodied, experiential meanings aiming for a fresh, complex, rich description of a phenomenon as it is concretely lived” (Finlay, 2009, p. 242). Phenomenological research is ideal for gaining deeper
understanding of the essence of the phenomenon, generating policy, and developing practices (Creswell, 2003). Given the call for more inclusive recreation (e.g., Boyd et al., 2008; Hughes & McDonald, 2009; Schleien et al., 2009) and to find an efficacious treatment to conceptualize, measure, and effect attitude change, the strengths and objectives of phenomenology were ideal for this research.

The researcher’s personal experience will be bracketed out prior to data collection. Before interviewing, the researcher will write a full description of her own camp experience in order to clarify her own preconceptions of the camp phenomenon. Identifying potential assumptions will allow the researcher and external auditor to focus on the examination of the volunteers’ descriptions of the phenomenon. The data will then be labeled and grouped into common categories among interview participants.

**Study Design**

Prospective volunteers for the summer of 2012 will register with The Arc of Tri-Cities prior to and during the months of camp operation. Subjects will be screened by the researcher for participation in the study. Potential subjects will receive written invitation to participate in the study, with copies of Participant Consent and Parental Permission forms. Upon arrival for camp training, potential subjects will submit completed Participant Consent to the primary researcher. Participant Consent forms will include consent to audio and video recording. If subjects are under the age of 18 years old, parents or responsible guardians present at camp training will submit completed Parental Permission forms. Selected subjects (both camp volunteers and Leader in Training volunteers) will complete the pre-camp exposure CDP test prior to training with The Arc of Tri-Cities. All subjects will receive camp training prior to admittance into camp. Leader in Training volunteers will be selected and trained prior to the
commencement of camp service. All subjects will also receive post-camp experience MAS testing at The Arc of Tri-Cities main office, immediately following the final day of their first or second consecutive week of camp participation.

Both the pre-camp exposure test and the post-camp experience test will be administered by the researcher, in the company of at least one member of Partners N Pals camp management, under the supervision of the Recreation Director. Subjects may not accurately represent data surrounding perceptions of the experience in the presence of the researcher alone, since the researcher will also be one of two Camp Directors. In order to obtain the most accurate data possible and to ensure the comfort of subjects in reporting truthful perceptions of the experience, the presence of a manager not under direct supervision of the researcher during testing will be necessary. Any subject uncomfortable answering questions or speaking to the primary researcher may appeal to an alternate camp manager for assistance.

In addition to pre- and post-camp quantitative testing and dyadic interviews will be conducted during December 2012. These dyadic interviews will be conducted at The Arc of Tri-Cities’ main office. Individual interviews will be conducted at The Arc of Tri-Cities’ main office. Audio and video recording, as well as hand-written field notes, will be used to document observations.

Data Collection

Permission was obtained from the Recreation Director of The Arc of Tri-Cities to request the participation of individuals accepted into the Partners N Pals summer day camp program as subjects for the study as well as the location for testing. The investigator described the study and presented a copy of both quantitative survey instruments and the list of qualitative interview questions to be used to the Recreation Director.
A brief description of the study will be included in the volunteer registration packets dispersed to all potential camp volunteers and Leader in Training volunteers. Selected volunteers will be notified by mail of acceptance to participate in the study. Participant Consent and Parental Permission forms include request for guardian accompaniment during testing. Forms will also describe subsequent qualitative interviews, potential risks associated with the study, and incentive for participation. Each participant will receive a photocopy of signed consent forms with the primary researcher’s contact information.

Subjects under the age of 18 years may be accompanied by parents during testing at the subjects’ request. Subjects will receive a hardcopy version of the pre-camp exposure CDP test prior to any camp exposure and will be tested concurrently. The CDP test will include demographic information, including the individual’s name, age, sex, personal contact information, and parent’s contact information. The researcher will collect completed tests immediately following completion. The subjects who indicate a willingness to participate in the study but will not complete pre-camp testing will be eliminated from the pool of research subjects.

After pre-camp exposure testing, all subjects will receive camp training at The Arc of Tri-Cities. Camp volunteers will complete a one-time, two-hour training under the direction of Partners N Pals camp management and the Recreation Director. Leader in Training Volunteers will complete three days of camp training led by Partners N Pals camp management and the Recreation Director. Camp volunteer trainings will occur three times throughout the summer season, allowing for multiple intakes of camp volunteers to gain admittance to camp. No successive intakes of Leader in Training volunteers will be admitted once camp has begun.
Both camp volunteers and Leader in Training volunteers will pre-register for specified weeks of camp service. Based on the greatest number of initial consecutive weeks of offered service, the researcher will test subjects following the first or second week of camp service to ensure no dilution of camp treatment. Subjects will receive post-camp testing prior to any absence of one week or greater. The retrospective MAS test will be administered by the researcher immediately following the last day of the first or second consecutive week of camp service. The MAS will be used to test change in attitude toward disability following the conclusion of each research subject’s designated first weeks of volunteer experience (one week or two consecutive weeks). Subjects under the age of 18 years may be accompanied by a parent or guardian at the guardian’s request. Subjects will receive a hardcopy version of the test and will be tested concurrently. The researcher will collect completed tests immediately following completion. Any subjects who completed CDP testing but will not complete MAS testing will be eliminated from the pool of research subjects. All subjects who complete both pre- and post-camp testing will receive a $10 gift card. Subjects who decline to complete testing at any point after initial CDP testing has begun will still receive compensation.

Based on pre-camp CDP scores, subjects will be chosen for qualitative interviews during December of the same calendar year. Both individual and dyadic interviews will attempt to understand the processes that led to relatively high or low degrees of attitude change. Only the subjects who indicated a willingness to participate in qualitative interviews will be considered. Selected subjects will be notified via email and phone call. The researcher will set up independent interview appointments with each selected subject. Subjects under the age of 18 years will be accompanied by a parent or guardian. Interviews will take place at The Arc of Tri-Cities
main office. Subjects who participate in qualitative interviews will receive another $10 gift card after completion of the interview.

**Data Analysis**

JMP statistical software package will be used to analyze data and test hypotheses of quantitative data from pre- and post-camp testing. Scores from the CDP will be analyzed as raw scores, computing a CDP score for each individual. Scores from the MAS will also be analyzed as raw scores, computing an overall MAS change score.

Data will be analyzed through an analysis of covariance ($p < .05$). A mixed model will examine the effect of CDP scores as a covariate to predict overall MAS change scores. The model will answer questions of interest of the interaction between CDP scores and overall MAS change scores and will adjust for explanatory variables of one or two weeks of participation, gender, camp designation, and first-year or returning volunteers.

Data from interviews will be analyzed through qualitative data analysis (Corbin & Strauss, 2008). Data scrubbing and analysis will take place in Winter 2012 semester at Brigham Young University. Scrubbing or cleaning of data will allow the primary researcher to detect and remove any errors found in the database through spot-checks, eye-balling, and logic checks. For spot checks, the primary researcher will randomly select a few interview transcripts and will compare to original data to ensure accuracy in transcription. The primary researcher will eyeball the data after transcription to search for obvious errors, such as entries not fitting within the value range of a particular column. Finally, logic checks will review the data for illogical entries, such as an answer to a contingent question without the appropriate answer to the previous filter question. Continuing in Spring, Summer, and Fall semester 2012 at Brigham
Young University, the primary researcher will analyze data using open, axial, and selective coding (Corbin & Strauss, 2008).

Emerging themes and reoccurring conceptual categories will be identified using open coding. Interview transcripts will be analyzed word by word, breaking down the data into discrete parts, looking for distinct concepts. These concepts will be broken down into first- and second-level categories. Once specific phenomenological categories are developed, axial coding will be used while re-reading the text to confirm accurate representation of interview responses and search for commonalities and relationships. These relationships will be analyzed to determine if any of the relational patterns can become core themes or variables and subcategories. Core variables explain the responses of participants in addressing their primary perceptions of the experience. Selective coding will then focus on the emergence of theories and description of the patterns of the observed phenomena as they relate to core variables identified during axial coding. Once core variables are identified, the data will be analyzed again, focusing on relationships between previous themes and core variables determined to be important to answer the current study’s research question. The goal of the qualitative data analysis process is to identify the participants’ perceptions of their camp experience on their attitudes toward disability and their social interactions with individuals, especially those with disabilities and members of other socially marginalized groups, several months after their participation in Partners N Pals.

**Validity Plan for Establishing Trustworthiness**

Trustworthiness in empirical research establishes the researcher’s ability to convince the audience the inquiry and its findings are valid and true until proven otherwise, insofar as research methods are consistent and appropriate to gather evidence to support findings (Newman,
Ridenour, Newman, & DeMarco, 2003). This validity plan will foster trustworthiness in the research at hand by utilizing appropriate methodological techniques. The following constructs are discussed: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability.

**Credibility.** According to Corbin and Strauss (2008), credibility “indicates that findings are trustworthy and believable in that they reflect participants’, researchers’, and readers’ experiences with a phenomenon” (p. 302). The explanation given must, however, be used within the context of the research inquiry, since many possible interpretations of the data might exist. To establish the credibility of the current study, interview questions were designed to achieve triangulation, or using a variety of question types (Flick, 2008). In qualitative research, triangulation validates how different approaches enhance the understanding of and elaborate on each other (Brannen, 2005). Dr. Barney will meet with the primary researcher weekly for peer debriefing and evaluation for consistency of investigator triangulation (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). Additionally, member checks will confirm the accuracy of interview transcriptions. Member checks will present transcriptions to participants prior to analysis and interpretation of results at the first level, and will present analysis and interpretations of data to participation for validation at the second level (Brantlinger et al., 2005).

**Transferability.** According to White (2011), transferability in qualitative research “permits a researcher who has read other qualitative accounts, to extrapolate and ‘transfer’ aspects of the research setting described in those accounts to that of their own” (p. 237). Transferability is facilitated by providing thick, detailed descriptions of all aspects of the research. The current study will collect detailed descriptions of data and provide a thorough and precise report of findings, documentation of findings, and reflection about the primary researcher’s personal position in order for readers to “determine the degree of transferability to
their own situations” (Brantlinger et al., 2005, p. 201). The uniqueness of the current study does not, however, promote the extrapolation of findings to a broad range of research settings.

**Dependability.** According to Erlandson, Harris, Skipper, and Allen (1993), dependability is evidence findings can be repeated if another study were to employ the same or similar subjects, setting, and methods. Although White (2011) claimed qualitative research cannot be replicated, dependability is possible by elucidating the processes making the given interpretation of results possible. Dependability is synonymous with reliability, or “stability, consistency, predictability, accuracy” (Lincoln & Guba, 1985, p. 292). Erlandson et al. posited an audit trail is crucial in assuring dependability. An external auditor, who is not part of the data collection process, will assess the data analysis process by independently examining data. The primary researcher will keep detailed notes of the data collection and analysis process through a daily journal, e-mails, and personal memos.

**Confirmability.** According to Lincoln and Guba (1985), confirmability is defined as “the degree to which [an inquiry’s] findings are the product of the focus of its inquiry and not the biases of the researcher” (p. 290). In other words, the researcher’s conclusions and interpretation are logical and unambiguous. An audit trail will establish dependability by “looking at the processes that were used in the study” and enable “an external reviewer to make judgments about the products of the study” (Erlandson et al., 1993, p. 35). An external auditor will meet with the primary researcher regularly after data collection to confirm findings. Additionally, Dr. Barney will meet with the primary researcher every week after data collection to compare and contrast interpretation of findings in order to establish the validity of the research at hand. Any bias from the primary researcher will be rejected during weekly peer debriefing on analysis.
Conclusion

The methods explained above will allow the primary researcher to measure the malleability of attitudes toward disability among typically developing adolescents through volunteer participation in an inclusive summer day camp. Through these methods, the primary researcher will also seek to understand and describe typically developing adolescent participants’ attitudes and behaviors toward disability and socially marginalized groups while in their home environment four months after the conclusion of camp service.
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Appendix B – Consent Forms and Instruments
Research Participant Assent

What is this study about?
My name is Megan Fort. I am from Brigham Young University. I would like to invite you to take part in a research study. Your parent(s) know we are talking with you about the study. This form will tell you about the study to help you decide whether or not you want to be in it.

In this study, we want to learn about the way you think about kids your age with disabilities.

What am I being asked to do?
If you decide to be in the study, I will ask you to fill out three question sheets:

1. Before you start camp, answer questions about any time you spent with a person with a disability.
2. After your first/second week, read a story and answer questions as if you were about to start camp.
3. After #2, read the same story and answer questions with the things you learned and did at camp.

During winter break 2012, I might ask you to join a group of other volunteers to talk about what you learned at camp. This will take up to an hour. If you decide to talk with the group, I might also ask you to talk to me one-on-one after that. This will only take 30 minutes. I will video and audio record you only if you say it’s okay.

What are the benefits to me for taking part in the study?
If you take part in this study, you will not get any special privileges in camp.

Can anything bad happen if I am in this study?
I think there are a few risks to you by being in the study. If you join the group or one-on-one discussions, I will record you, but I will only show the recordings to people working on the study. I will never give anyone else a copy of your video, and I will never use your recording in a presentation. I will also never post any of the recordings online. As soon as I am done with the recordings, I will delete all of them and send you a letter letting you know I deleted it. You can choose to not answer the question sheets or leave the talks at any time you want.

Also, because we will talk about your thoughts and feelings, I will start the group talk by asking you to agree to not share anything we talk about in the group. I will tell you again at the end of the group not to talk about our discussion outside the group.

I will be the only person with access to recordings of you. Any tapes of the group will be destroyed after one year or at the end of the study.

Who will know that I am in the study?
I won’t tell anybody that you are in this study and everything you tell me and do will be private. Your parent(s) may know that you took part in the study, but I won’t tell them anything you said or did, either. When I tell other people or write articles about what I learned in the study, I won’t include your name or anyone else’s name from the study.
Do I have to be in the study?
No, you don't. The choice is up to you. No one will get angry or upset if you don't want to do this. You can change your mind anytime if you decide you don't want to be in the study anymore.

What if I have questions?
If you have questions at any time, you can ask us and you can talk to your parents about the study. I will give you a copy of this form to keep. If you want to ask us questions about the study, contact Megan Fort at (509) 521-5282 or megankylie@byu.net.

You will receive an iTunes gift card for being in this research study. If you decide you don’t want to be in the study anymore, you will still receive the gift card. Before you say yes to be in this study, what questions do you have about the study?

If you want to be in this study, please sign and print your name.

☐ Yes, I will be in this research study. ☐ No, I don't want to do this.

☐ Yes, I give my permission to be audio and video recorded. ☐ No, I don’t give my permission to be audio and video recorded.

☐ Yes, I want my parent to be present during testing. ☐ No, I don't want my parent to be present during testing.

☐ Yes, I want my parent to be present during interviews (if I am asked to join). ☐ No, I don't want my parent to be present during interviews (if I am asked to join).

Name (Printed): ______________________ Signature ______________________ Date: _____________
Parental Permission for a Minor

Introduction
My name is Megan Fort. I am a graduate student from Brigham Young University. I am conducting a research study about the malleability of adolescent attitudes toward disability through peer interaction in an inclusive recreation program. I am inviting your child to take part in the research because he/she will be volunteering at The Arc of Tri-Cities’ Partners N Pals summer day camp. Additionally, you child meets the requirements for participation:
- Age 11 to 18 years old
- A first-time volunteer at Partners N Pals

Procedures
If you agree to let your child participate in this research study, the following will occur:

• Your child will be asked to respond to three questionnaires:
  Questionnaire #1 - Contact with Disabled Persons Scale (measuring type and frequency of contact your child has had with individual with disabilities prior to beginning camp) taken before camp starts
  Questionnaire #2 - Multidimensional Attitude Scale (a social vignette about how “Joseph” or “Michelle” would feel when meeting an individual with a disability) answered as if your child had not yet participated in camp, taken after the first or second week of camp
  Questionnaire #3 - Multidimensional Attitude Scale (the same questionnaire) answered as your child feels now, taken immediately after the second questionnaire

• This will take place at The Arc of Tri-Cities’ main office on scheduled days of attendance at camp.

Risks
There is a risk of loss of privacy, which the researcher will reduce by not using any real names or other identifiers in the written report. The data will remain the sole possession of the primary researcher and will only be shown to other members of the research team. No additional copies of the data will be made, and data will not be downloaded onto any device other than that under the exclusive access of the researcher.

Confidentiality
The research data will be kept in a secure location and on password protected devices accessible only to the researcher. Any hard copies of the data will be shredded by the researcher after transcription and will be kept in a separate container until the disposal by the researcher at a designated disposal site. At the end of the study, data will be deleted by the researcher and a notification of the deletion will be mailed to your child.

Benefits
There are no direct benefits for your child's participation in this study.

Compensation
Selected participants will receive a $10 iTunes gift card for taking part in the study.
Questions about the Research
Please direct any further questions about the study to Megan Fort at (509) 521-5282 or send emails to megankylie@byu.net. You may also contact Dr. Keith Barney, Ph. D. at (801) 422-3382 or send emails to keith_barney@byu.edu.

Questions about your child's rights as a study participant or to submit comment or complaints about the study should be directed to the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602. Call (801) 422-1461 or send emails to irb@byu.edu.

You have been given a copy of this consent form to keep.

Participation
Participation in this research study is voluntary. You are free to decline to have your child participate in this research study. You may withdraw your child's participation at any point without penalty.

Child's Name: ________________________________

Parent Name: ___________________ Signature: ___________________ Date: ___________
## Contact with Disabled Persons Scale (CDP)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Parent’s name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>Parent’s phone:</td>
</tr>
<tr>
<td>Sex:</td>
<td>Number of siblings:</td>
</tr>
<tr>
<td>Cell phone:</td>
<td>Birth order:</td>
</tr>
<tr>
<td>e-mail:</td>
<td></td>
</tr>
</tbody>
</table>

### General Contact

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often have you discussed your life or problems with a person with a disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you had a long talk with a person with a disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you eaten a meal with a person with a physical disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you visited persons with disabilities in their homes?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you worked with a co-worker with a disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have persons with disabilities tried to help you with your problems?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often has a friend with a disability visited you at your home?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have persons with disabilities discussed their lives or problems with you?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you contributed money to organizations that help people with disabilities?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
</tbody>
</table>

### Positive Contact

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often have you met a person with a disability that you admire?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you met a person with a disability you like?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you had pleasant experiences interacting with person with disabilities?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you been pleased by the behavior of a person with a disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
</tbody>
</table>

### Negative Contact

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often have you been annoyed or disturbed by the behavior of a person with a disability?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you had unpleasant experiences interacting with persons with disabilities?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>How often have you met a person with a disability you dislike?</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
</tbody>
</table>
Imagine the following situation: Joseph went out for lunch with some friends to a sandwich shop. A guy in a wheelchair, whom Joseph does not know, enters the sandwich shop and joins the group. Joseph is introduced to this person, and soon after, everyone else leaves, with only Joseph and the guy in the wheelchair left alone together at the table. Joseph has 15 minutes to wait for his ride. Try to imagine the situation.

Multi-Dimensional Attitude Scale (MAS)

People feel many different emotions when they take part in such a situation. Following is a list of possible emotions, which may be felt before, during, and/or after such a situation. Please choose on each line how likely you think Joseph might feel this emotion:

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Degree of Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Guilt</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Pity</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Rejection</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Upset</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Tension</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Stress</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Shyness</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Alertness</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Relaxation</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Serenity</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Calmness</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

People think many different things, called cognitions, when they take part in such a situation. Following is a list of possible idea that may be thought before, during, and/or after such a situation. Please choose on each line how likely you think Joseph might think this:

<table>
<thead>
<tr>
<th>Cognition</th>
<th>Degree of Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>He seems to be an interesting guy</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>He looks like an OK person</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I enjoy meeting new people</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>We may get along really well</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>He looks friendly</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

People act out many different behaviors when they take part in such a situation. Following is a list of possible behaviors that may be done before, during, and/or after such a situation. Please choose on each line how likely you think Joseph would behave this way:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Degree of Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get out</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Move away</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Move to another table</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Find an excuse to leave</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Read the newspaper or talk on a cell phone</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>