

## Adolescent Summer Camp Volunteers' Attitudes Toward Peers with Disabilities

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### ABSTRACT

This study explored the malleability of adolescent attitudes toward their peers with disabilities after volunteering in a summer day-camp. The Contact with Disabled Persons Scale (CDP) and the Multi-Dimensional Attitude Scale (MAS) were used to collect data in order to determine the association between volunteering in a recreation-based summer day camp and adolescent 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 volunteers. The data suggested that participants perceived camp as a setting for the development of relationships with peers who have 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.

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The overarching question of this study focuses on the malleability of attitudes among typically developing adolescents who participated as volunteers in a summer day camp for their peers with disabilities. Negative attitudes of adolescents without disabilities has been identified as a barrier to the social acceptance of their peers with disabilities (McDougall, DeWit, King, Miller, & Killip, 2004; Kalymon, Getting, & Hanley-Maxwell, 2010; Pratt, 2008). For example, individuals without disabilities have reported being confused, frightened, and even repulsed because they do not understand why individuals with disabilities appear or behave in ways different from normative social expectations (Hughes & McDonald, 2009). Consequently, individuals without disabilities may feel uncomfortable interacting socially and building relationships with their peers with disabilities (Devine, 2004; Kennedy & Horn, 2004). Also, observed social disparities may produce feelings of social politeness and over-protection toward individuals with disabilities (Brown, Ouellette-Kuntz, Lysaght, & Burge, 2011; Holden, 2010; Kalymon et al., 2010). Theorists suggest this “kindness norm” or “sympathy effect” results from social norms that dictate an obligation to pity those perceived

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as less fortunate (Fichten, Amsel, Robillard, Sabourin, & Wright, 1997, p. 223). To address these issues, researchers have called for additional examination into factors that may produce improvement in attitudes, feelings, and inclusion for people with disabilities (e.g., Kalymon et al., 2010; Siperstein et al., 2007).

## Review of literature

### Attitudes

Cohen (1966) suggests attitudes are malleable 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* becomes paramount, especially considering individuals outside of the group, such as individuals with disabilities.

Formation and malleability of attitudes has been extensively studied, including studies of race, gender, and disability. Shapiro (1999) stated "attitude changes and empathy development can bridge the gap between persons with disabilities and those without them" (p. 31). Shared recreation experiences can reduce negative attitudes toward peers with disabilities and benefit individuals without disabilities (Brookman et al., 2003; Devine, 2004; Devine & Parr, 2008; Hughes & McDonald, 2009; Schleien, Miller, & Shea, 2009).

### Adolescents

Researchers have examined attitudes and perceptions of peers toward those with disabilities across the age span, including preschool children (e.g., Huckstadt & Shutts, 2014), elementary-aged children (e.g., Campbell, Ferguson, & Herzinger, 2005; McManus, Feyes, & Saucier, 2011), adolescents (e.g., Kalymon et al., 2010; Staniland & Byrne, 2013), and adults (e.g., Rossow-Kimball & Goodwin, 2014). Results of these studies indicate that, generally speaking, very young children demonstrate more positive attitudes about disabilities than those who are older. In fact, typically developing preschool children have been shown to hold neutral to only mildly negative attitudes towards people with physical disabilities in experiments using pictures and descriptions of both individuals with and without disabilities (Huckstadt & Shutts, 2014). Yet adolescents generally choose not to interact with a peer with disabilities (e.g., Siperstein et al., 2007).

As individuals reach adolescence, they understand disability in both positive and negative ways based on perceptions of ability, feelings of acceptance, and reciprocal relationships (Devine & Wilhite, 2000) and are highly receptive to peer influence (Brown, 2004). Thurber, Scanlin, Scheuler, and Henderson (2007) suggested joint experiences could promote social development for adolescents without disabilities.

### Contact theory

While previous research confirms the positive relationship between contact and attitudes toward disability (e.g., Carter, Sisco, Chung, & Stanton-Chapman, 2011; McManus et al., 2011; Kalymon et al., 2010; Rosetti, 2011; Scior, 2011), researchers have failed to produce consistent results in determining the types and conditions of exposure capable of ameliorating negative attitudes toward disability. Lindsay and McPherson (2012) claimed that contact alone is not

enough to create attitude change. Consequently, the direct relationship between contact and social attitudes remains tenuous.

Allport (1954) hypothesized episodes of contact between groups could be used to decrease prejudicial tendencies and foster attitude change. Contact Theory (Allport) can be used as a framework to explain societal cohesion and address prejudice through four conditions: equal status, intergroup cooperation, institutional support, and intimate contact. Programs designed to encourage social equality, or equal status, may ameliorate hierarchal structures and lead to reciprocal interaction by allowing for perception of similarities (McClendon, 1974). Additionally, a common goal or objective provides structure for exchange of information, specifically similarities between groups (Gaertner et al., 1999). As individuals begin to understand each other, there must be support from an external source (Brown et al., 2011). 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. Finally, if contact is not sufficiently intimate, when a member of the out-group is seen, individuals may intentionally scrutinize and interpret observations to confirm previously held beliefs (Paluck, 2006), thus reinforcing in-group prejudice. Recent research using both quantitative and qualitative designs has found the quality, depth, and intimacy of contact, far more than the quantity of interaction, 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).

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 the integration of Contact Theory generally explained the positive effects of intergroup contact to the extent that all four conditions for contact were met, the authors also concluded that the existence of Allport's optimal conditions was not a guarantee of attitude change. In particular, uncertainty and intergroup anxiety reduction was identified as an important mechanism for positive relationship formation (Pettigrew & Tropp, 2006, 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., Paolini, Hewstone, Cairns, & Voci, 2004; Pettigrew, 1998). 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).

In summary, a synthesis of the research on between-group contact by Tropp and Page-Gould (2015) suggests the importance of the above-mentioned concepts while emphasizing the overarching prominence of intimate relationship development in reducing between-group prejudice. The synthesis supports the importance of high quality, cooperative, proximate, and frequent friend-based interactions. Tropp and Page-Gould (2015) additionally provide various situational recommendations to enhance relationship development between individuals of differing groups. First, emphasize group differences later in the relationship development process to facilitate intimacy and understanding, avoiding a sense of anxiety or threat that may be more apparent initially. Second, seek to create an inclusive in-group identity. Third, while quality interactions are critical, the development of intimate friendships is based on proximate and frequent opportunities for interaction. Finally, extended contact through observing positive interactions between groups, or simply knowing individuals who are friends with members of an out-group, can reduce prejudice.

## Recreation

The assumption that attitude improvements will occur merely by putting groups together in the same physical locale is false; additionally, research suggests that it can worsen attitudes by substantiating negative stereotypes and hierarchal power structures (Allport, 1954; Devine & O'Brien, 2007). Therefore, designing and creating appropriate settings for attitude change to occur may be difficult due to the complex and sensitive social structures surrounding individuals with disabilities.

Researchers have studied peer interaction between individuals with and without disabilities as well as attitudes about disabilities in various of settings, including education (e.g., Brown et al., 2011; Kalymon et al., 2010; Rossetti, 2011; Staniland & Byrne, 2013), recreation (e.g. Papaioannou, Evaggelinou, & Block, 2014; Rossow-Kimball & Goodwin, 2014), and the public domain (e.g., Coles & Scior, 2012; Pace, Shin, & Rasmussen, 2010). Most peer interaction studies have been conducted in schools and these studies have demonstrated mixed results (Morton & Campbell, 2008).

Recreation experiences, such as summer camps, may be uniquely efficacious in facilitating social inclusion (Brookman et al., 2003; Devine, 2004) if designed appropriately with a focus on positive youth development (Thurber et al., 2007). Considering the relationship between social acceptance and leisure, Kelly (1996) asserted that shaping long-term positive change in attitudes toward individuals with disabilities among individuals without disabilities is possible through intentionally designed recreation programs.

Various studies (e.g., Devine, 2004) have addressed Kelly's assertion using recreation programs involving individuals with and without disabilities participating in activities together. Although attitude change on the part of individuals without a disability was not the direct intent of these studies, perceptions of individuals with and without disabilities based on mutual recreation participation is insightful as it pertains to ways individuals' perceive disability. Devine and Wilhite (2000) indicated that when participants were personally familiar with one another and when their abilities were matched in social recreation settings, as compared to competitive sport settings, views towards individuals with disabilities were positive. Findings have also indicated that individuals with disabilities felt that joint recreation environments provided opportunities to connect with people without disabilities and fostered a sense of social acceptance, but that programs could also emphasize differences instead of similarities (Devine, 2004). In another study, a camp experience for adolescents both with and without disabilities not only facilitated social acceptance but also appeared to camouflage the lack of social acceptance among individuals without disabilities (Devine & Parr, 2008). Finally, specifically applying contact theory, Devine and O'Brien (2007) found recreation environments had the capacity to facilitate deep and intimate contact between individuals with and without disabilities.

In summary, research findings indicate that engagement in joint recreation experiences can reduce negative attitudes toward peers with disabilities and have the potential to reinforce negative stereotypes and perpetuate a lack of social acceptance (Brookman et al., 2003; Devine, 2004; Devine & Parr, 2008; Hughes & McDonald, 2009; Schleien, Miller, & Siperstein et al., 2009). The general intent of the present study was to examine effects of participation in a day camp experience on social acceptance of individuals without disabilities. Specifically, the purpose of this study was to examine the malleability of attitudes among typically developing adolescents who participated as volunteers in a summer day camp for individuals with disabilities.

## Method

To examine the relationship between volunteering at a summer day camp and attitudes toward individuals with disabilities, a mixed methods approach was used. Through this mixed-method approach, the meaningfulness of volunteering at summer camp on participants' understanding of disability was explored. The research was guided by the following question: Is the attitude of typically developing adolescents malleable toward peers with disabilities through volunteer participation in a summer day camp? This study sought to understand and describe typically developing adolescent participants' perceptions of camp participation on their attitudes and behaviors towards individuals with disabilities through qualitative data analysis. In addition, the following research hypotheses tested conceptually the same question through quantitative methods: (1) participant attitude scores on the Multi-Dimensional Attitude Scale (MAS) will demonstrate a significant reduction in stigmatizing attitude scores between self-ratings ( $p < .05$ ) after summer camp participation; and (2) pre-camp exposure to disabilities on the Contact with Disabled Persons Scale will predict degree of attitude change on the MAS.

## Research setting

When choosing the setting for this study, considerations were taken to select an environment designed to foster joint participation between camp participants and volunteers. The organization selected for participation in the study was a nonresidential summer day camp in the northwestern United States. The camp operated for eight weeks during the summer with locations in two neighboring cities. The camp has been in operation for over 50 years, providing local recreation for campers, ages 7–21, with a variety of disabilities and levels of independent functioning, including intellectual disabilities, attention deficit hyperactivity disorder, autism, cerebral palsy, deaf-blindness, and muscular dystrophy. To participate in the summer day camp participants were not required to have a specific diagnosis of intellectual or developmental disability, although, this was the target audience for the camp. At the time of the study, camp enrollment totaled 128 campers served in two camps, though weekly enrollment varied. Throughout the day, staff and volunteers traveled to a variety of off-site recreation activities with campers and actively participated in swimming, bowling, craft-making, cooking projects, and outdoor games. On average, staff and volunteers participated with campers for approximately six hours per day.

## Sample

Adolescent volunteers were recruited, selected, and screened by the organization sponsoring the day camp. As required, all volunteers committed to serving at least one full week of camp (five days) and attend training, approximately three hours of which was dedicated to types of disabilities, standards of treatment, personal care, manual interventions, and motivation. Volunteers were assigned one to three campers (similar in age) and were responsible for facilitating campers' involvement in all activities and providing personal care assistance as necessary. Every volunteer participated alongside assigned campers in all activities, both formal and informal, including swimming, skating, arts, games, horseback riding, movies, bowling, and free time.

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 recordings. 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 (68%) 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. Volunteers participated in camp for fewer weeks overall ( $M = 2.6$ ,  $SD = 1.7$ ) than volunteers who did not join the study ( $M = 4.0$ ,  $SD = 2.71$ ).

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 to participate in the interviews. From this pool of potential interviewees, 24 volunteers indicated they would be available to meet with the primary researcher during the data collection period; however, only nine adolescent volunteers participated in the interviews (five female, four male, ages 12–17). In this sample, three volunteers were LITs and six were camp volunteers. Although the disabilities of campers served by volunteers were not tracked, field notes and responses indicated that interviewees were exposed to campers with a range of disabilities, including campers who were lucid and had many adaptive skills to others who were noncommunicative and physically aggressive.

## **Quantitative data**

### **Data collection**

Immediately following their first week of camp, study participants were given a contact with disability questionnaire and two copies of a multidimensional attitude test with a preretrospective 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 with persons with disabilities. The CDP contains 20 items on a 5-point time-frequency Likert scale ( $1 = \text{never}$ ,  $5 = \text{very often}$ ), with higher scores indicating more frequent and positive contact with an individual with a disability. Sample questions from the CDP include: “how often have persons with disabilities discussed their lives with you?” and “how often have you had a pleasant experience interacting with a person with disabilities?” 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 a retrospective pre- and 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 undefined. Respondents read the vignette and rated items according to their beliefs of the accuracy of each item in signifying Joseph or Michelle's reaction to the situation.

The MAS is based on the original 34-item scale developed by Findler et al. (2007) and comprised 12 affective, 5 cognitive, and 5 behavioral items, rated on a 5-point Likert scale (1 = *not at all*, 5 = *very much*). A sample question from the MAS cognitive factor includes: "he seems like an interesting guy." Vilchinsky, Werner, and Findler (2010) reported the modified MAS scale explained 66% of the total variance in their study on 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 pretest and .89 for the posttest.

Participants were asked to complete two copies of the questionnaire. In one copy they rated their answers as if Joseph or Michelle had not been to camp as a volunteer, on the other copy they responded as if they had volunteered at camp for at least one week. This approach is considered a retrospective pretest design (Sibthorp, Paisley, Gookin, & Ward, 2007). Retrospective pretests guards against response-shift bias, a condition where (a) attitudes, knowledge, and behavior may change due to an experience, and (b) an individual realizes after the experience that the pre-experience perceptions may have been faulty or uninformed. As an example relevant to this study, youth volunteers may think they have high levels of acceptance and positive attitudes toward individuals with disabilities, but after participating in camp realize that their prevolunteer perceptions were overinflated. Using a traditional pretest posttest design, the volunteer's overinflated perceptions prior to the camp experience may have discounted a change in perception, due to being overinflated at pretest. The retrospective pretest design allows for individuals to more accurately assess their pretest state and more accurately determine any change due to their experience (Pratt, McGuigan, & Katzev, 2000).

### **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 participant. Baseline differences in study variables were tested using *t*-tests. Results showed no significant differences between CDP scores of participants from the two different camps ( $t = -.521, p = .955$ ), male or female participants ( $t = -1.899, p = .650$ ), or participants who served as camp volunteers versus LITs ( $t = -.282, p = .101$ ). 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 pretests and posttests. Next, a covariate-adjusted regression was used to analyze the MAS change (pretest minus posttest) and CDP scores, adjusted for the initial difference in pre-test scores among participants.

## **Qualitative data**

### **Data collection**

A phenomenological approach was employed to examine the “embodied, experiential meanings aiming for a fresh, complex, rich description of a phenomenon as it is concretely lived” (Finlay, 2009, p. 242). This was accomplished through in depth dyadic interviews of nine camp volunteers. Interviewees received a second gift card for their involvement. Field notes, observations, and detailed memos were recorded additionally to add further sources of information. Interviews were conducted in the camp office, chosen for its familiarity to participants and quiet setting, and lasted from 45 to 90 minutes. 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 such as “was there anything that made your experience meaningful?” 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 said you felt that way ...?” This open design allowed for flexibility and variation to explore topics not covered by the interview guide. The principle investigator who was visible at the camp but did not have significant interactions with any of the participants conducted the interviews.

Subsequent to each interview, field notes were composed on overall perceptions of the interview and additional notes were taken on observed behavior during interviews (Glaser, 1978). These memos were additionally used to validate trustworthiness of interview transcriptions (Lincoln & Guba, 1985). 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 the ideas being formulated.

### **Data analysis**

The researcher’s personal experience was bracketed out prior to data collection to identify possible assumptions during analysis. Before interviewing, the researcher wrote a full description of the camp experience to clarify preconceptions of the camp phenomenon. Identifying potential assumptions allowed the researcher and external auditor to focus on examination of the volunteers’ descriptions of the phenomenon. Data from interviews were analyzed through qualitative data analysis (Corbin & Strauss, 2008). All aspects of data were transcribed, including audio recordings, notes on expression and body position, memos during field observation, and postinterview notes. 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 graduate students served as reliability coders. Each coded the same interview, with 42 and 44 agreements, respectively.

Credibility was established using member checks and debriefing, which included a process of (a) showing participants transcriptions of the interviews, the coding associated with the interviews, and drafts of the interpretation of results, and (b) providing an opportunity for participants to discuss their impressions and provide recommendations after reading the transcripts, coding, and interpretation of results. Four of the nine participants agreed to review the original transcripts, coded interview transcripts, accompanying analysis, and interpretation of the analysis. One participant recommended two additional ideas to be considered. After review by the external auditor and the researchers, these concepts were merged into an existing theme. Participants identified no other discrepancies or concerns; therefore, no

additional revisions were made based on member checks and debriefing. Additionally, an external auditor, a graduate student studying linguistics, who was not part of the data collection process, offered weekly feedback throughout analysis, such as pointing out vague descriptions or assumptions made by the researcher. 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 observe attitude change scores on the MAS after volunteer participation in the summer day camp. Results from the paired-samples *t*-test demonstrated a significant difference between precamp ( $M = 3.22$ ,  $SD = 0.605$ ) and postcamp MAS ( $M = 1.89$ ,  $SD = 0.473$ ) scores  $t(52) = 13.60$ ,  $p < .0001$ . Thus, the data established that participation as a volunteer in the summer day camp was significantly associated with reduction in stigmatizing attitude scores on the MAS.

A second analysis examined the relationship between contact with disability prior to camp participation and degree of attitude change. MAS pretest 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 & 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 pretest score  $p < .0001$ , and significant CDP by MAS pretest 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.

### Themes in the qualitative data

#### Developing relationships

General observations consistently pointed to the relationships volunteers built with campers and the importance those relationships had on volunteers' comprehension of their camp experience. Volunteers described their interaction with others as important to enjoying and otherwise emotionally connecting to the camp experience in a positive way. When questioned about

**Table 1.** Summary of quantitative results ( $n = 53$ ).

Variable	SE	<i>T</i>	<i>p</i> -value
CDP	0.369	5.73	<.0001
MAS pre-test	0.088	3.32	0.0017
Intercept	0.099	9.16	<.0001
$R^2$		0.647	
adj $R^2$		0.632	
<i>F</i>		45.732	

Note.  $p < .05$

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 12-year-old female described the collective group attending camp as “the camp 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 in the 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 13-year-old female 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.” 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 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 and felt that they had experienced reciprocal friendships with campers. Volunteers described “getting to know them personally” through camp participation as the impetus for building “connections” and mutual friendships with campers, as this 12-year-old female 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.

Not only did volunteers appear to want a reciprocal relationship with campers, but in some cases they also felt that from the campers “[they] let you be their friend and 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.”

Though all volunteers articulated enjoying 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 17-year-old male explained that 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 all 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 male.

A 17-year-old female 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.” One 12-year-old male volunteer 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 to experience fun with campers was elucidated by a 16-year-old male:

I think the funniest 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 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 friends 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 camp. 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 16-year-old female 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. Responses included, “It would be a little tiny bit boring, and it wouldn’t be so interesting,” and “If I didn’t have to work as hard, I think it would be a lot easier, but I don’t think I 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 16-year-old female 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 16-year-old male 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.” A 17-year-old male 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 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 13-year-old female shared a long story of working with a one-on-one camper:

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 16-year-old female 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 commented, "I feel like I grew a lot as a person." A 17-year-old male described that 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 improve through increased participation, as one 13-year-old male 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 skills they gained were a result of 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 identified the reason for this was that, "you have to be fun and outgoing to be with the kids," since "outgoing" people were more likely to get along with campers. The one volunteer who did not describe relationships with campers as friendships described his perceived changes this way: "You change their lives, but at the same time they kind of change your life."

All nine volunteers commented at least twice on an increase in 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 13-year-old female 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 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 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**

This study sought to examine changes in attitudes based on the MAS and to gain an understanding of the volunteers' perceptions of individuals with disabilities following their joint participation in a summer day camp. Adolescent attitudes toward campers with disabilities and their descriptions of their camp experience were analyzed simultaneously to examine relationships and correlations between stigmatizing attitudes as represented in the MAS and the experiences volunteers were having with individuals with disabilities. While the design of this study cannot suggest a causal relationship between the MAS and the qualitative data,

it does provide potentially interesting insights and future research direction related to structured contact and stigmatizing attitudes.

### ***Attitude change***

Participation as a volunteer in the summer day camp was associated with a more positive attitude toward disability as reported on the MAS. This was true regardless of gender, position in camp, and camp location. The training provided prior to volunteering should be considered a part of the entire volunteer experience and may have contributed to attitude change. Results are, however, consistent with prior research suggesting that recreation environments involving intimate levels of contact may increase social acceptance among individuals without disabilities toward their peers with disabilities (Devine & O'Brien, 2007). The qualitative data suggest that the volunteers interpreted their interactions with campers to be reciprocal. The camp was intended to provide a variety of socially based recreation opportunities designed to promote personal interaction with campers with disabilities (Devine & Wilhite, 2000). While this interaction was not sustained for an extended period of time, it appears that even a one-week experience was minimally sufficient to identify associations with a reduction in negative attitudes.

### ***Relationship development***

The finding that seven of the nine interviewed volunteers described their relationships with campers as friendships is interesting considering the research identifying development of friendship as a key factor in reducing negative attitudes (Tropp & Page-Gould, 2015). It appears that the camp environment provided opportunities for quality, cooperative, proximate, and frequent interactions between volunteers and campers. The data also seemed to indicate that volunteers had a strong desire to be recognized as friends by the campers; however, reciprocity and deep friendship development was not clearly identified. Further investigation is needed to understand relationship development within recreation settings, particularly among individuals with differing roles such as campers and volunteers.

While quantitative data supported attitude change toward disability associated with camp participation, volunteers unanimously considered their participation a positive experience and noted that these changes influenced their lives beyond the camp environment. From volunteers' descriptions of camp, it appears that friendships and personal change can occur through intentionally designed recreation-based settings where contact is a regular part of the experience (Devine & O'Brien, 2007), although the depth and long term status of those relationships was not determined.

### ***Role of prior contact***

A significant relationship was found between contact prior to volunteers' camp experience and cumulative attitude change. Although in general attitude change scores were significant following camp involvement, higher frequency of contact with individuals with disabilities prior to camp significantly predicted the degree of attitude change following camp experience, regardless of whether prior contact experiences was perceived as general, positive, or negative.

Prior contact with individuals with disabilities may help to 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.”

These findings support Pettigrew and Tropp’s (2006) recommendations for the integration of prior contact as a moderator of contact experiences. The data also indicate that reducing anxiety through prior contact (Brown & Hewstone, 2005) and concurrently introducing positive knowledge formation while participating in recreation activities may positively influence attitudes toward individuals with disabilities (Tropp & Page-Gould, 2015).

### ***Improving attitudes toward individuals with disabilities***

Reviewing the quantitative and qualitative findings concurrently offers insights regarding the application of Contact Theory as a way to explain the reduction in negative attitudes through intergroup contact (Allport, 1954). Participation from the volunteers in a recreation environment that included interactions with campers with disabilities produced a variety of positive outcomes including the perception of reciprocal relationships and personal growth. Although the literature generally supports the potential for achieving positive outcomes from contact, Pettigrew and Tropp’s (2008) meta-analysis found the presence of Allport’s conditions does not guarantee positive contact effects. Pettigrew and Tropp asserted that the ideal conditions for contact are most effective when designed to occur simultaneously as opposed to individually or one at a time. As was illustrated in this study, the potential for a well-designed recreation experience to reduce negative attitudes towards individuals with disabilities is associated with facilitating Allport’s conditions simultaneously while emphasizing the importance of intimate contact.

### ***Limitations and recommendations***

Various limitations and recommendations exist based on results of this study. First, while the age range of the campers were essentially the same as the volunteers, logistically it was not possible to match all campers with volunteers of the same age. This may have inhibited development of reciprocal relationships. Second, the qualitative findings were based on volunteers’ perceptions of the camp experience four months following camp participation and, therefore, were susceptible to retrospective interpretation. Third, since the volunteers in the sample self-selected to participate, the results may have been initially skewed due to volunteers’ desire to interact with peers who have disabilities. Fourth, many potential influences exist within the complex relationship between intergroup contact and attitude towards disability. Since this study is correlational, other variables may account for attitude change, such as self-selection as a volunteer or the volunteer training provided by the agency prior to volunteers’ camp participation.

Based on results of this study, various recommendations can be considered. The findings of this study support the provision of intentionally designed recreation programs as a method to improve attitudes toward individuals with disabilities, even when the experience may include differing roles among those participating, such as those roles associated with being a camper or volunteer.

Additionally, since most interactions between adolescents with and without disabilities occur at school (Kalymon et al., 2010), teachers are encouraged to facilitate opportunities for typically developing students to interact with special education students in nonacademic activities, such as holiday celebrations, recess, lunch parties, or basic socialization during art,

cooking, or game-playing. Results of this study reinforce the importance of prior contact in development of positive attitudes towards individuals with disabilities. Future researchers examining attitudes toward disability may find it useful to consider the interplay between direct contact and pre-contact training programs as occurred in this study.

## Conclusion

Results from both quantitative and qualitative analyses support previous research indicating that intergroup contact, when structured purposefully around Allport's conditions, predict improved attitudes toward disability among typically developing adolescents. The study identifies connections between a camp experience involving adolescent campers with disabilities and volunteers without disabilities and positive attitude change for the volunteers.

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