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COLLEGE STUDENTS' SOCIAL PERCEPTIONS TOWARD
INDIVIDUALS WITH INTELLECTUAL DISABILITY

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Abstract

The purpose of the current study was to describe the social perceptions of American college students towards individuals with intellectual disability (ID), identify factors that influence social perception, and determine if level of functioning alters one's perception. The sample was comprised of 186 American college students. The participants completed the Attitudes Toward Intellectual Disability Questionnaire (ATTID). The ATTID measures five factors—discomfort towards ID, knowledge of capacity and rights, interaction with individuals with ID, sensibility/tenderness, and knowledge of causes. The students' overall social perception towards ID was primarily positive for all factors except for sensibility/tenderness. More positive social perception was found amongst students with greater knowledge of ID and more frequent and more positive interactions with individuals with ID. Additionally, social perception was significantly more negative for lower functioning than higher functioning individuals with ID. This study helped identify factors that need more attention in awareness campaigns and educational programs.

Keywords: attitudes, social perception, intellectual disability, college students, developmental disability

College Students' Social Perceptions of Individuals with Intellectual Disability

Approximately 56.7 million people in the United States live with a disability (United States Census Bureau, 2012). However, even though individuals with disabilities make up a significant portion of the population, this group has historically been treated ineffectively and, at times, inhumanely (Mackelprang & Salsgiver, 1996). This is partially due to the general public's ignorance of disability as well as to the stigma associated with disability. Even today, the effects of the stigma associated with disability can be seen in the disproportionately elevated unemployment rates of individuals with disabilities (Bureau of Labor Statistics, 2017), the significant lack of resources available to people with disabilities and their caregivers (World Health Organization, 2016), as well as limited access to basic human rights including safe housing and adequate health care (Corrigan & Watson, 2002).

Perhaps more than any other group of people with disabilities, individuals with an intellectual disability (ID) have been mistreated, devalued, and isolated from society. According to the DSM-5, intellectual disability is characterized deficits in intellectual functioning that impair adaptive functioning in three domains—conceptual, social, and practical (American Psychiatric Association, 2013). Even though today most individuals with ID have been deinstitutionalized, after being treated like “hopeless cases” and “a problem population” for so long, society is slow in moving away from such negative perceptions. These social perceptions of ID can influence the level of inclusion and community participation for those with ID, which in turn influences their quality of life (Antonak & Livneh, 2000; Burge, Ouellette-Kuntz, & Lysaght, 2007; Lau & Cheung, 1999; Simoes & Santos, 2016; Verdonschot, de Witte, Reichrath, Bruntinx, & Curfs, 2009). Understanding the current social perceptions towards ID is necessary to identify areas that need attention in awareness campaigns and educational programs.

Disability inclusion is considered by some to be the civil rights movement of the 21st Century. In order for this movement to find success, individuals with disabilities must be treated as equals in society. Positive social perceptions are a sign of successful inclusion, where individuals with ID are seen as full members of society and are given the same freedoms and rights as everyone else, but negative social perceptions indicate a need for improvement and a sign of discrimination and limitation to freedoms, rights, and social inclusion (Morin, Rivard, Crocker, Boursier, & Caron, 2013). Ouellette-Kuntz, Burge, Brown, and Arsenault (2010) measured social perceptions through a measure of the social distance community members placed between themselves and individuals with ID. Social distance is a “willingness to recognize, live near, or be associated with” (Harth, 1971, p. 143) a particular group or individual, with a greater social distance indicating a more negative social perception. Ouellette-Kuntz et al. (2010) found that older and less educated individuals desired greater social distance from individuals with ID. Additionally, contact with individuals with ID and level of ID functioning was related to social distance, with less contact and more severity being associated with greater social distance (see also Yazbeck, McVilly, & Parmenter, 2004). However, concerns about the validity of their social distance scale limit the interpretation of these results.

While social perceptions towards ID have greatly improved in recent years, primarily due to the deinstitutionalization movement and transition to community-based care (Hastings, Sjostrom, & Stevenage, 1998; Schwartz & Rabinovitz, 2001), a “disability phobia” still persists and undermines integration efforts (Yazbeck et al., 2004). Lau and Cheung (1999) investigated social perception towards individuals with ID, using the contact hypothesis (Stephan, 1987) as a guiding principle. The contact hypothesis suggests that personal contact is necessary for positives to be seen and negatives to be dispelled. Applied to ID, personal contact with

individuals with ID hypothetically allows one to determine positive characteristics, break down stereotypical perceptions, and reduce discriminatory attitudes. Lau and Cheung (1999) found support for the contact hypothesis. Participants that had contact with individuals with ID in the past 6 months showed less discrimination on all variables measured. However, results showed that the general population was not comfortable at all social distances with individuals with ID. Participants responded that they were willing to talk with, work with, and be in the same place as individuals with ID but objected more to having individuals with ID as a neighbor. Lau and Cheung concluded that education programs that promote interaction with individuals with ID are greatly needed to improve social perception and acceptance. Similar studies replicated this contact hypothesis with ID, showing greater acceptance and more positive social perceptions for individuals with ID when there is higher quantity and quality of interactions (Keith, Bennetto, & Rogge, 2015; Manetti, Schneider, & Siperstein, 2001; Piercy, Wilton, & Townsend, 2002).

Similarly, Scior, Addai-Davis, Kenyon, and Sheridan (2013) examined the relationship between stigma and awareness about ID among working age adults. For part of the study, participants were given a vignette of a young man with symptoms of mild ID. The vignette did not explicitly give an ID diagnosis, and after reading, participants were asked, “What do you think is going on with him?” Approximately one quarter of participants correctly identified the symptoms as possible ID. Those who did not cite ID offered answers including mental health problems (specifically depression), psychosocial stressors, indulgent parenting, and personal laziness. The researchers found that those who correctly identified the possible ID showed fewer stigmas about ID than those who believed the man struggled from mental health problems, personal stressor, or laziness. Consequently, the misattribution of symptoms of ID as personal

character flaws can lead to potentially even greater stigmatization. As with Lau and Cheung (1999), Scior and colleagues highlighted the need for greater awareness and education about ID.

Further, increased education is needed to improve the quality of interactions with individuals with ID. Interactions with individuals with disabilities tend to be tainted by unease, discomfort, uncertainty, fear, and pity (Findler, Vilchinsky, & Werner, 2007; Loo, 2001). People do not know what to say or how to act with someone with ID, so in many cases they will limit or avoid such interactions. People feel sad for someone with ID and allow this sadness to define all interactions. People believe that individuals with ID are unpredictable and, therefore, could be dangerous and scary. While these beliefs are predominately based on a lack of understanding, they still continue to undermine the personal autonomy, inclusion and community participation for individuals with ID (e.g., Hunt & Hunt, 2004).

Previous studies have assessed societal perceptions towards ID, but many measures lacked reliability and validity or assessed social perceptions unidimensionally. To more accurately and thoroughly understand social perceptions about ID, Morin, Crocker, Beaulieu-Bergeron, and Caron (2013) developed the *Attitudes Toward Intellectual Disability Questionnaire* (ATTID). The ATTID is rooted in Findler et al.'s (2007) three attitude dimensions— affective, cognitive, and behavioral. The affective dimension examines positive and negative emotions towards individuals with ID and is measured on the ATTID by two factors, discomfort and sensibility/tenderness. The cognitive dimension explores the thoughts, ideas, perceptions, beliefs, and opinions about ID and is measured on the ATTID by two factors, knowledge of causes and knowledge of capacity and rights. Finally, the behavioral dimension refers to the way in which one behaves during interactions with individuals with ID and is measured on the ATTID by one factor, interaction.

Morin, Rivard et al. (2013) used the ATTID to assess the attitudes of 1605 adult participants. Overall, they found the social perception towards individuals with ID to be positive on all three attitude dimensions— affective, cognitive, and behavioral. However, two of the factors, sensibility/tenderness and knowledge of causes, showed neutral but not positive perceptions, making them needed targets for awareness campaigns or education programs. Many view sensibility/tenderness as a caring response to someone with a disability, but such emotions are shrouded in sadness and pity, which undermines one's personal autonomy, self-determination, and social inclusion. The lack of knowledge about causes of ID leads to a lack of understanding of the characteristic differences that exist within an ID diagnosis. Not everyone with ID will have the same skills, abilities, personality, and behaviors, and a greater awareness of such differences can improve social integration.

In addition to describing the social perceptions of adults, Morin, Rivard et al. (2013) found that certain demographic characteristics as well as level of contact with individuals with ID influenced perceptions. First, they found that younger (18-59 years old) and more educated participants had more positive social perceptions. Age influenced all five attitudinal factors, while level of education influenced all but knowledge of causes. Second, their results showed that participants with a greater knowledge about ID had more positive perceptions on all factors except for knowledge of capacity and rights. Similar research has shown the efficacy of educational programs about ID in improving social perception (Hunt & Hunt, 2004; Li, Wu, & Ong, 2014; MacDonald & MacIntyre, 1999). Third, they found that more frequent contact with individuals with ID and higher quality interactions were associated with more positive perceptions. Those with more frequent contact had lower discomfort, more positive interaction, and less sensibility/tenderness, and those with higher quality interactions had lower discomfort,

more positive interaction, and increased knowledge of causes. Finally, the researchers discovered that positive social perceptions were more likely for higher functioning individuals with ID rather than lower functioning, again emphasizing the need for further awareness and education specifically about the various ID profiles and differences in behaviors and abilities.

While some more recent work has examined attitudes and stigmas towards ID, much of the research done thus far examining social perceptions towards ID occurred prior to major policy changes regarding social inclusion, especially in regards to elementary and secondary education. New studies are needed to examine current perceptions towards ID to determine current barriers to community integration. The present study sought to expand the work of Morin, Rivard et al. (2013) to a sample of American college students who have possibly had more lifelong exposure to individuals with ID given the education policy changes in the United States (i.e. Individuals with Disabilities Education Act). Repeatedly, research has shown more positive social perception towards ID for those with more interaction with individuals with ID, younger adult participants, as well as more educated participants (Lau & Cheung, 1999; Morin, Rivard et al., 2013; Ouellette-Kuntz et al., 2010; Yazbeck et al., 2004). Therefore, studying a young college sample that, theoretically, had greater exposure to ID through educational inclusion should result in more positive social perceptions. To date, only a couple of studies have examined the social perceptions of college students towards individuals with ID (Griffin et al., 2012; Hafner, Moffatt, & Kisa, 2011). Overall, they found fairly positive attitudes towards individuals with ID. However, their evaluations of social perceptions were not comprehensive. The current study was designed to comprehensively assess college students' perceptions on all three attitude dimensions— affective, cognitive, and behavioral.

The objectives of the current study were to describe the current social perceptions towards ID for American college students and to explore ID-related variables that might influence their perceptions. As found by Morin, Rivard et al. (2013), we hypothesized that social perceptions would be primarily high, specifically for students with greater knowledge about ID and more interactions with individuals with ID. However, we hypothesized that negative perceptions would still be found for lower functioning individuals with ID compared to higher functioning individuals with ID.

Methods

Participants

Participants were recruited from a liberal arts university in the southern United States. To recruit participants, the researchers contacted professors from across campus asking if they would allow us to come to their class to get students to sign up. In exchange for participating, students were offered extra credit in their class. Professors from every school on campus agreed to let us recruit participants in their classroom. By recruiting outside of the Psychology Department, we hoped to increase the generalizability of our results. The final sample size was 186 undergraduate students (141 females, 42 males, 3 unknown gender; 161 White, 14 Asian/Pacific Islander, 6 African American, 2 American Indian, 2 Multi-Racial, and 1 Other Race). The average age of the participant was 20.07 years ($SD = 1.25$, Range = 18 – 23). Ethical approval for human subjects research was granted for this project from the participating university's institutional review board. Consent was obtained from all participants prior to their participation in the study.

Measures

Background Questionnaire. The background questionnaire asked participants about demographic information including age, gender, race, and socioeconomic status. Additionally, several questions were included to assess the quantity and quality of the interactions and relations the participants had with individuals with ID. Three questions in particular were important for analyses: (1) How much do you know about ID? (Response options: Nothing, Not much, Quite a bit, A lot), (2) How often have you had contact or interactions during your lifetime with people with ID? (Response options: Never, Sometimes, Often, Very often), and (3) How would you describe your relations with the people you know who have ID? (Response options: Excellent, Good, Neutral, Bad, Very bad).

Attitudes toward Intellectual Disability Questionnaire. The Attitudes toward Intellectual Disability Questionnaire (ATTID; Morin, Crocker et al., 2013) measures affective, cognitive, and behavioral aspects of attitudes through five factors—discomfort toward ID, knowledge of capacity and rights, interaction, sensibility/tenderness, and knowledge of causes. The ATTID includes 67 items. The first 30 items assess general beliefs and attitudes about ID (e.g., *In your opinion, the majority of people with an intellectual disability are able to hold down a job?*). The remaining 37 items require participants to respond to questions based on two vignettes, one about a higher functioning individual with ID and one about a lower functioning individual with ID. Higher functioning was indicated through a description of greater independence, communications skills, and daily living skills, while lower functioning was described as limited independence and communication skills and greater assistance and accommodation requirements. Participants respond on a 5-point Likert scale (1 = *totally agree* and 5 = *totally disagree*) with higher scores indicating more negative attitudes towards individuals with ID. That is, higher scores indicate greater discomfort, decreased knowledge of

capacity and rights, more negative interactions, increased sensibility/tenderness, and decreased knowledge of causes. Many struggle to understand why increased sensibility/tenderness would be indicative of more negative attitudes, but high levels of sensibility/tenderness become pity. No one wants to continually be viewed as an object of pity or as a vulnerable victim, which is what makes higher levels of sensibility/tenderness a more negative attitude. Mean scores for each of the five factors as well as the overall global attitude score were used in analyses. The ATTID had good internal consistency for the five factors (Cronbach's alpha = 0.59 – 0.89) as well as the global attitude score (Cronbach's alpha = 0.92; Morin, Crocker et al., 2013). Further the five factors displayed high test-retest correlations, ranging from 0.62 to 0.83.

Procedures

Participants were recruited from every school across the university campus. After signing up to participate, participants were emailed a link to participate in the survey. All data was collected through an online survey tool. Participants signed the informed consent, completed the ATTID, and then completed the background questionnaire.

Results

Descriptive Statistics

The descriptive statistics for each of the five factors and the global attitude score are listed in Table 1. In addition to the mean and standard deviation, the percentage of scores that were positive, neutral, or negative is provided. Positive scores were responses of 1 or 2 (*totally agree* or *agree*). Neutral scores were responses of 3 (*neither agree nor disagree*), and negative scores were responses of 4 or 5 (*disagree* or *totally disagree*). The students' attitudes toward individuals with ID were primarily positive for all factors except for sensibility/tenderness,

which as 52.30% negative. The remaining four factors showed positive attitudes ranging from 68.09% to 78.64%.

Main Analyses

To determine the extent to which attitudes were associated with ID-related variables, participant groups were created from the background questionnaire items regarding level of knowledge about ID, frequency of contact with people with ID, and perceived quality of relationships with people with ID. For knowledge about ID, participants that responded *nothing* or *not much* were grouped together and compared to participants that responded *quite a bit* or *a lot*. For frequency of contact, participants that responded *never* or *sometimes* were grouped together and compared to participants that responded *often* or *very often*. Finally, for perceived quality of relationships, participants that responded *excellent* or *good* were grouped together and compared to participants that responded *neutral*, *bad*, or *very bad*. These groups were used to compare attitudes for the global attitude score as well as the five individual factors. Means, standard deviations, and ranges for all attitude scores separated into comparison groups are listed in Table 2. Based on visual inspection of score distributions, there were no serious violations of normality.

Global Attitude. To determine group differences on the global attitude score, three independent sample *t*-tests were run. Attitudes significantly varied based on one's knowledge of ID, $t(183) = 2.97, p = .003$, the frequency of contact with individuals with ID, $t(183) = 3.94, p < .001$, and the perceived quality of relations with individuals with ID, $t(183) = -4.72, p < .001$. More positive attitudes were found amongst students with greater knowledge of ID, more frequent contact with individuals with ID, and higher perceived quality of relations with individuals with ID.

Five Factors. To determine if attitudes significantly varied based on knowledge, contact, and relations when examining the five attitude factors (discomfort, knowledge of capacity and rights, interaction, sensibility/tenderness, knowledge of causes), three multivariate analyses of variance (MANOVAs) were conducted. The first MANOVA revealed a significant difference between those who knew nothing/not much about ID and those who knew quite a bit/a lot about ID, Wilks' Lambda = 0.87, $F(5, 179) = 5.42, p < .001, \eta_p^2 = .132$. Univariate follow-up analyses revealed that the groups were significantly different on discomfort, $F(1, 183) = 21.19, p < .001, \eta_p^2 = .104$, and sensibility/tenderness, $F(1, 183) = 5.35, p = .022, \eta_p^2 = .028$, but were not significantly different on knowledge of capacity and rights ($p = .722$), interaction ($p = .162$), or knowledge of causes ($p = .373$). Students with more knowledge about ID reported less discomfort and less sensibility/tenderness than those with limited knowledge about ID. The second MANOVA found a significant difference between those who never/sometimes interacted with individuals with ID and those who interacted often/very often, Wilks' Lambda = 0.90, $F(5, 179) = 3.78, p = .003, \eta_p^2 = .096$. Univariate follow-up analyses revealed that the groups were significantly different on discomfort, $F(1, 183) = 15.84, p < .001, \eta_p^2 = .080$, interaction, $F(1, 183) = 9.41, p = .002, \eta_p^2 = .049$, and sensibility/tenderness, $F(1, 183) = 5.75, p = .018, \eta_p^2 = .030$, but were not significantly different on knowledge of capacity and rights ($p = .123$) or knowledge of causes ($p = .446$). Students with more frequent contact with individuals with ID had less negative attitudes about discomfort, interaction, and sensibility/tenderness. The final MANOVA showed a significant difference between those who had neutral/bad relations with individuals with ID and those who had excellent/good relations, Wilks' Lambda = 0.88, $F(5, 179) = 4.86, p < .001, \eta_p^2 = .120$. Univariate follow-up analyses found that the groups were significantly different on discomfort, $F(1, 183) = 21.52, p < .001, \eta_p^2 = .105$, knowledge of

capacity and rights, $F(1, 183) = 6.47, p = .012, \eta_p^2 = .034$, and interaction, $F(1, 183) = 16.14, p < .001, \eta_p^2 = .081$, but were not significantly different on sensibility/tenderness ($p = .234$) or knowledge of causes ($p = .700$). Students with higher perceived relations with individuals with ID had less negative attitudes about discomfort, knowledge of capacity and rights, and interaction.

Functioning Level. A paired samples *t*-test was used to test for differences between mean attitude scores on the vignette describing a lower-functioning individual with ID ($M = 2.59, SD = .51$) versus the vignette describing a higher-functioning individual with ID ($M = 2.13, SD = .46$). The *t*-test was significant, $t(185) = -18.01, p < .001$. Attitudes were more negative for lower functioning individuals with ID than higher functioning individuals.

Discussion

Overall, the current study replicated many of the findings by Morin, Rivard et al. (2013), expanding the results to an American college sample. In general, the students' social perceptions were fairly positive towards individuals with ID. Given the American legislative and societal changes that have increased inclusion and, therefore, increased the frequency with which one interacts with individuals with ID, such positive perceptions were to be expected. The overarching positive perceptions are indicative of a more inclusive, integrated society where individuals with ID are gaining more equality and opportunities for participation. These positive perceptions offer much hope for the future, as these young citizens may be more likely to support authentic inclusion and fair standards of pay for individuals with ID than past generations with limited prior experiences with people with ID.

While vast improvements have been made in the inclusion movement, the goal of complete integration has yet to be fully achieved. The current study helped identify factors that

still need attention. First, one of the five factors, sensibility/tenderness, showed a more negative attitude than positive. This factor was also found to be less positive in Morin, Rivard et al.'s (2013) study. People have a hard time recognizing how tenderness and pity causes harm, but such emotions limit true acceptance, inclusion, and autonomy within society. It is considered appropriate behavior to feel pity for someone experiencing heartache and to express constant tenderness towards an infant. However, an individual with ID is not experiencing heartache because of their ID diagnosis and is not an infant. Consequently, when these emotions are expressed at such high levels, they are inappropriate and degrading.

Second, the current study found that social perception was higher amongst students with greater knowledge of ID, more frequent contact with individuals with ID, and higher perceived quality of relations with individuals with ID, which supports the findings from previous research (Lau & Cheung, 1999; Morin, Rivard et al., 2013; Ouellette-Kuntz et al., 2010; Yazbeck et al., 2004). The more that they knew about ID, the less discomfort they felt towards individuals with ID and the less likely they were to pity individuals with ID. The more frequently they had interacted with individuals with ID, the less discomfort they felt, the less pity they portrayed, and the more likely they were to interact with individuals with ID in the future, and if these interactions were positively perceived, participants also showed a higher accuracy in understanding the capacity and rights of individuals with ID. Finally, results found social perception to be more positive towards individuals with mild ID than individuals with more severe ID. Society appears to be more accepting of individuals with ID but only to a particular severity level (Ouellette-Kuntz et al., 2010; Morin, Rivard et al., 2013). If the symptoms are more severe and include increased adaptive behavior problems, then people's initial reaction is to avoid due to personal discomfort and stereotypical limitations placed on individuals with ID.

As encouraged by other researchers (Hunt & Hunt, 2004, Lau & Cheung, 1999; Morin, Rivard et al., 2013; Ouellette-Kuntz et al., 2010), these findings highlight the increased need for awareness campaigns and educational programs, specifically programs that promote interaction with individuals with ID. Campaigns and programs should target areas that still show negative social perception including sensibility/tenderness, discomfort, interaction, knowledge of capacity and rights, and varying severity levels. Li et al. (2014) found that intervention with college students through a disability awareness course can improve attitudes toward individuals with ID. Such programs can become more specialized for problem areas as we learn more about the positive and negative social perceptions maintained by today's young adults. Additionally, increased interaction with individuals with ID can improve all of the negative perceptions found in the current study. As stated in the contact hypothesis (Lau & Cheung, 1999; Stephan, 1987), increased personal contact breaks down the negative, discriminatory barriers that inhibit one from noticing the positive characteristics. As one interacts more with individuals with ID, including lower functioning individuals, one is able to see how similar they are to individuals without ID. There is a commonality to all of humanity, regardless of cognitive function, that many people miss because they feel too uneasy or uncomfortable or overwhelmed by pity to initiate an interaction. Inclusion and equality for individuals with ID will only be reached when education improves knowledge and promotes interaction.

Limitations and Future Directions

This study had several limitations that should be considered when interpreting the results. First, all of the student participants volunteered to participate in a study on ID and, therefore, might be different in some way from students who declined to participate in a study on ID. For instance, it is possible that the students that agreed to participate are already more aware of or

interested in individuals with ID, which could potentially account for the more positive social perceptions. Similarly, we did not collect data on the participants' fields of study. This should be done in the future because certain areas of academic training could potentially result in more positive social perceptions (e.g., education or psychology). A lack of academic diversity in a sample could negatively impact generalizability. Further, in any survey study, there is a possibility of socially desirable response bias. Also, the current sample was predominantly white, well-educated individuals from a small liberal arts university. Generalizability of these results cannot be determined without a more diverse sample. To more completely understand American college students' social perceptions, future work should include universities of all sizes and backgrounds.

In combination with Morin, Rivard et al.'s (2013) study, the present study identified several clear areas for societal intervention. Future research is needed to assess the effectiveness of awareness campaigns and educational programs that target these areas specifically. Further, it is important to determine how social perception towards ID varies based on an individual's age. For example, research looking at social perceptions of younger children or adolescents would be particularly interesting to see if increased educational inclusion is actually improving perceptions and if educational programs can effectively change social perceptions at a young age. Today's children will be the future's employers, colleagues, policymakers, and neighbors. Finally, future research is needed to assess social perceptions of professionals that might be likely to have contact with individuals with ID including teachers, doctors, nurses, employers, police, and public service providers.

Conclusions

The present study is the first to assess the three dimensions of social perception of American college students towards individuals with ID. Overall, their social perceptions were fairly positive, which is encouraging for the current inclusion efforts. However, several areas were identified as areas needing greater awareness and education specifically for those people with limited knowledge and interaction with individuals with ID. Efforts should be made to increase interaction with individuals with ID in order to lessen negative perceptions and promote greater equality, personal autonomy, and community participation for individual with ID.

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