Attitudes Toward Including Students With Intellectual Disabilities at College

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Abstract Although inclusive postsecondary education programs are increasingly available, little is known about the attitudes of matriculating college students toward the inclusion of students with intellectual disabilities in their classes. To assess these attitudes, the authors surveyed 256 college students about their attitudes toward students with intellectual disabilities and their inclusion in college classes. Overall, the college students reported positive attitudes. They noted that female students and those with higher comfort levels perceived the abilities of people with intellectual disabilities as higher, thought more benefits were associated with their inclusion, and were more willing to interact with them on campus. The authors concluded that these findings offer evidence of the social acceptability of inclusive postsecondary education programs among the general population of college students and the viability of such programs as an inclusive transition option for students with intellectual disabilities.

Keywords: attitudes, inclusion, intellectual disabilities, postsecondary education

INTRODUCTION

In recent years, a movement has arisen to provide inclusive postsecondary education (PSE) to young adults with intellectual disabilities (ID) (Grigal & Hart, 2010). These programs extend the inclusion of students with ID beyond primary and secondary schools into postsecondary settings. They offer students with ID the opportunity to continue learning academic material, expand their social circles, gain employment experience, and develop independence—all alongside their age peers enrolled in colleges and universities. In this way, young adults with ID can enjoy the college experience just as their siblings and friends do. For these reasons, many parents consider participation in inclusive PSE programs to be a beneficial option for their children with ID after high school (Griffin, McMillan, & Hodapp, 2010).

Such postsecondary options are increasingly available to students with ID, with over 250 such programs currently offered across the United States (Hart & Grigal, 2009). These programs exist at a wide variety of institutions of higher education, including technical schools, 2-year community colleges, and 4-year colleges and universities. Within these programs, a range of inclusive activities, supports, and services are available to students with ID.

In the United States, the recent expansion in PSE programs is due in part to the authorization of the Higher Education Opportunity Act (HEOA). Enacted in 2008, the HEOA contains several provisions to improve access to postsecondary educational opportunities for students with ID (Lee, 2009). The HEOA authorized the development and expansion of model transition and PSE programs as well as the establishment of a center to coordinate the model programs and to provide technical assistance. Finally, provisions in the HEOA allow students with ID to be eligible for federal financial aid. Thus, inclusive PSE options are more available to students with ID than ever before.

Despite the recent expansion of PSE programs though, little is known about the attitudes of general college students toward including students with ID at their college. Most previous work in this area has focused on the attitudes of age-peers toward students with ID at the primary and secondary school levels. Such studies of the attitudes of students have been conducted in elementary schools (Bak & Siperstein, 1987; Litvack, Ritchie, & Shore, 2011), middle schools (Hendrickson, Shokoohi-Yekta, Hamre-Nietupski, & Gable, 1996; Siperstein, Parker, Bardon, & Widaman, 2007), and high schools (Krajewski & Flaherty, 2000; Krajewski & Hyde, 2000). Several studies have also investigated attitudes toward people with ID among college students (e.g., Caruso & Hodapp, 1988; Hardman & Clark, 2006); however, few studies have researched attitudes toward the inclusion of these students in college courses and activities.

Offering an important first insight on attitudes toward including students with ID in postsecondary settings, Casale-Giannoni and Kamens (2006) conducted a descriptive study about the experiences of a student with Down syndrome at a 4-year private university. The authors surveyed classmates of this student, asking respondents to rate their level of agreement with the statement, “The professor will have to give extra attention to
a student with a cognitive disability which will take away time from other students in the class." Comparison of the presurvey and postsurvey responses revealed a significant, positive change in student attitudes related to this item. Though no other significant changes in attitudes were found, the authors noted that student attitudes toward inclusion were positive overall.

Similarly, positive attitudes were also found among college students toward students with ID at a 4-year college. Surveying 456 students who took a class with a student with ID, Hafner, Moffat, and Kisa (2011) found that 96% were "comfortable" or "very comfortable" around classmates with ID. Within the same study, a survey of 162 students who lived in dormitories with students with ID asked about friendships with residents with ID: 40% agreed or strongly agreed that friendships had developed, 31% were neutral, and 29% disagreed or strongly disagreed. Thus, a few studies have provided initial descriptive information about the attitudes of students toward including students with ID on college campuses.

Prior studies among younger students have also identified several characteristics that correlate with more positive attitudes toward students with ID and their inclusion in general education settings. Female students, for example, consistently express more positive attitudes toward their peers with ID (Bak & Siperstein, 1987; Krajewski & Flaherty, 2000; Litvack et al., 2011; Siperstein et al., 2007). Likewise, students who interact more (vs. less) frequently with people with ID hold more positive attitudes toward them (Krajewski & Flaherty, 2000; Siperstein et al., 2007). By identifying such group differences in attitudes, these studies provide a more nuanced description of the attitudes of college students toward students with ID.

Building on prior work, this study investigated the attitudes of college students toward the inclusion of students with ID at their college. Such research is needed for several reasons. Following the recent surge in development of PSE programs for students with ID, more students are being included in college than ever before. Social inclusion is a primary goal of these programs, and studying the attitudes of age peers may provide an indication of the social climate that students with ID will experience (Siperstein, Bak, & O'Keefe, 1988).

Research on the attitudes of college students is also needed because including students with ID in college differs significantly from inclusion at the primary and secondary levels. First, the free, appropriate public education guaranteed to students with disabilities under the Individuals with Disabilities Education Act (IDEA, as amended, 2004) does not extend to students after age 21. Additionally, participation in college has historically been regulated through traditional, achievement-based admissions processes. For these reasons, inclusion of students with ID at the college level is not nearly as widespread as inclusion at the primary and secondary school levels. This might result in differences in attitudes of college students toward the inclusion of students with ID, and therefore warrant further investigation.

As the U.S. movement to provide inclusive postsecondary options to students with ID is relatively recent, few studies document the attitudes of students toward such inclusion. To investigate this topic, we surveyed matriculating college students at a private 4-year university during the first semester of an inclusive PSE program. Our findings reveal the general students' opinions about the abilities of students with ID, their willingness to inter-

**METHOD**

**Participants**

Participants included 256 matriculating college students: 69% were female (n = 177) and 30% were male (n = 77). Their ages ranged from 17 to 26, with a mean age of 19.81 (standard deviation (SD) = 1.45). Because we wanted to gain a general understanding of the attitudes of enrolled students at the university level, we surveyed both students who had interacted with students with ID in their classes as well as those who had not. Therefore, to recruit participants, we contacted professors who taught classes that did and that did not include students with ID. We also contacted PSE program staff to meet with peer mentors who volunteered to support students with ID.

**Setting**

The survey was conducted at Vanderbilt University, a private 4-year university in Nashville, Tennessee (United States). Surveys were distributed during the first semester of the 2-year, nonresidential PSE program housed at the university. Each semester of the program, participating students with ID attend one university class; expectations regarding participation and assignments for the student are identified in an individualized learning contract. Each semester, students with ID in the program also participate in an internship as well as in various classes targeting specific skills needed for employment and independent living. Additionally, students with ID participate in social events and a wide variety of campus activities, from attending sports events to taking university-affiliated art classes. Program staff and volunteer peer mentors support the students, as needed, across this range of activities.

**Procedure**

To develop the survey, we drew on prior research on the attitudes of college students toward including students with ID (e.g., Siperstein et al., 2007). Survey development involved collaboration among family members of students with ID, PSE program staff, and university-affiliated researchers. In order to recruit survey respondents, we contacted various faculty members to request a brief presentation period during one of their classes.

Six university professors responded favorably, and the surveys were distributed in their classes. Of the six university classes, four included a student with ID as a class member and two did not. We also distributed surveys to peer mentors who volunteered to support students with ID participating in the PSE program (n = 15). After obtaining informed consent, students
completed the surveys in 5–10 min, typically at the end of classes or meetings. Survey responses were transferred for analysis to the Statistical Package for the Social Sciences (SPSS) 18 for Windows (IBM, Chicago, IL, USA).

Survey instrument The survey was composed of 35 items, most of which were multiple choice or ratings on a 5-point Likert scale (1 = least, 5 = most). Two open-ended questions were also included at the end of the survey. Questions fell into the following categories.

Demographic information. Five questions addressed the respondent’s name, sex, age, year in college, and academic major.

Interaction with people with ID. Six questions addressed the respondent’s interaction with people with ID (e.g., ways of learning about people with ID, frequency of contact, type of relationships, and comfort level in interactions). Questions also addressed respondents’ voluntary participation in the Best Buddies program or as a peer mentor to students with ID on campus. Peer mentors and members of Best Buddies were grouped together into a single “volunteer” category.

Perceptions of abilities of students with ID. Six items were ratings of whether respondents thought that students with ID would be able to participate in various campus activities, with help if needed (1 = no, 3 = maybe, 5 = yes). Items addressed attending classes, eating meals, participating in clubs, living in dormitories, playing intramural sports, and using libraries. Cronbach’s alpha for these items equaled .80.

Willingness to interact with students with ID. Eight items involved ratings of whether respondents would be willing to talk with students before or after class, lend them a pencil, help them after an absence from class, include them in a group project for class, say “hello” to them on campus, help them find a building on campus, introduce them to friends, and invite them to an activity outside of class (1 = no, 3 = maybe, 5 = yes). Cronbach’s alpha for these items equaled .84.

Positive and negative attitudes toward including students with ID in college. Positive perceptions included benefits such as the following: students with ID will benefit from their classes, I might be able to help the students learn about going to college, inclusion might help me understand different types of people, and inclusion will bring more diversity and a different perspective to campus (1 = disagree, 3 = somewhat agree, 5 = agree). Cronbach’s alpha equaled .72.

Negative perceptions included: professors might pay more attention to the students with ID, professors might make classes too easy to help the students, I might not know how to interact with the students, and the students might not know how to act in class. Cronbach’s alpha for these items equaled .56, docu-

menting poor internal consistency. These items were therefore analyzed individually, rather than as a scale.

RESULTS

Preliminary Findings

Of the 256 respondents, 25% (n = 64) reported that the closest interaction they have with someone with ID is as a stranger in the same setting (e.g., store); 26.2% (n = 67) reported being acquaintances (e.g., neighbors); 17.6% (n = 45) reported having a casual relationship (e.g., classmate); 26.2% (n = 67) reported a close relationship (e.g., friend); and 7% (n = 18) reported a very close relationship (e.g., immediate family). In terms of frequency of interaction with individuals with ID, about half of all the respondents (52%; n = 133) reported interacting with people with ID rarely (i.e., once or twice a year) and 22% (n = 56) reported interactions once or twice a month. Finally, 25.4% (n = 65) had more frequent contact, interacting with a person with ID at least once a week.

Though many respondents reported infrequent interaction, most reported feeling comfortable interacting with people with ID. Of the 256 respondents, 25.4% (n = 65) reported feeling very comfortable, 38.3% (n = 98) were fairly comfortable, and 23.4% (n = 60) were somewhat comfortable. Finally, 8.2% indicated that they were not very comfortable (n = 21) and 1.6% were not at all comfortable (n = 4). Because these final two categories were relatively small, we combined them for our analyses.

Reported Attitudes

Overall, the college students indicated positive attitudes toward students with ID. On a 5-point scale, the means were 4.20 (SD = 0.65) for perceptions of abilities of students with ID; 4.52 (0.56) for willingness to interact with students with ID at college, and 4.00 (0.72) regarding benefits of inclusion. Likewise, respondents indicated low levels of agreement with negative statements. The means were 1.91 (0.97) for concerns that the professor might make the class too easy in order to help the student with ID; 2.56 (1.17) for respondents might not know how to act around students with ID; 2.87 (1.07) for respondents might not know how to act in class; and 2.94 (1.14) for concerns that professors might pay more attention to students with ID.

Differences in Attitudes Related to Respondent Characteristics

Though respondents indicated positive attitudes overall, certain characteristics were related to more positive attitudes. The most pronounced differences related to respondent sex and self-reported comfort level with people with ID.

Sex Female respondents had more positive perceptions of the abilities of students with ID, F(1, 251) = 9.47, p = .002; were more willing to interact with them, F(1, 252) = 21.07, p < .01;
and perceived more benefits associated with their inclusion, $F(1, 244) = 43.85$, $p < .01$. As Figure 1 shows, the greatest difference related to perceptions about the benefits of inclusion; females’ average rating was 4.19 (.63) compared with males’ average of 3.57 (.74). In addition, males were more concerned about how to act around students with ID, $F(1, 249) = 5.19$, $p = .024$.

**Comfort level** Respondents who were less comfortable with students with ID were more concerned about knowing how to act around them, $F(3, 240) = 16.40$, $p < .01$. Respondents who indicated greater comfort with people with ID had more positive perceptions of their abilities, $F(3, 242) = 10.38$, $p < .01$; perceived more benefits associated with their inclusion, $F(3, 235) = 10.37$, $p < .01$; and were more willing to interact with them, $F(3, 243) = 37.46$, $p < .01$. On these 5-point scales, differences between those with highest and lowest comfort levels ranged from .78 points (perception of abilities) to 1.13 points (willingness to interact). See Figure 2.

**Voluntary involvement** Compared with the remaining respondents, consistent differences were noted for respondents who volunteered to interact with students with ID (e.g., participating in Best Buddies or as peer mentors). Volunteers held more positive perceptions of the abilities of students with ID, $F(1, 245) = 5.47$, $p = .020$; perceived more benefits associated with their inclusion, $F(1, 239) = 5.36$, $p = .021$, and were more willing to interact with them, $F(1, 246) = 8.22$, $p = .005$.

**Relationships and levels of interaction** Several small but significant differences were also associated with respondents’ relationships with people with ID and level of interaction. For example, respondents who took a class with a student with ID reported more positive perceptions of their abilities, $F(1, 240) = 5.15$, $p = .024$, and perceived more benefits associated with their inclusion, $F(1, 233) = 5.40$, $p = .021$. Similarly, respondents who more frequently interacted with people with ID were more willing to interact with students with ID, $F(5, 250) = 4.08$, $p < .01$. Finally, respondents who had closer relationships with someone with ID (e.g., family members or friends) were more willing to interact with students with ID, $F(5, 250) = 5.96$, $p < .01$, and perceived more benefits associated with their inclusion, $F(5, 242) = 3.13$, $p < .01$.

**DISCUSSION**

Shedding light on attitudes toward inclusive PSE programs, this study extends prior research by identifying characteristics associated with differences in attitudes of college students toward including students with ID in college life. It also extends prior studies of attitudes toward inclusion in primary and secondary schools. Despite differences between inclusion at these younger levels and inclusion in PSE, we found that college students expressed generally positive attitudes toward including students with ID at their college.

Though responses of the college students were positive overall, several respondent characteristics were associated with differing attitudes. Most notably, consistent differences in attitudes were related to the respondents’ sex and self-reported comfort level. Female (vs. male) respondents held more positive attitudes toward including students with ID in college. Such sex-related differences are consistent with prior research among younger students (e.g., Krajewski & Flaherty, 2000; Siperstein et al., 2007; Litvack et al., 2011). Also, those who were more comfortable interacting with people with ID perceived their abilities as higher, thought more benefits were associated with their inclusion, and were more willing to interact with them. Similarly, compared with the remaining respondents, those who
volunteered to interact with students with ID held more positive perceptions of these students’ abilities, were more willing to interact with them, and thought more benefits were associated with their inclusion.

Our analyses revealed less consistent patterns related to negative perceptions about the inclusion of students with ID in college life; we therefore analyzed these items individually. Overall respondents’ averages on items related to concerns did not rise above 3 on a 5-point scale. Respondents’ lack of concern about including students with ID in college life reinforces our findings that college students are generally positive about this prospect. Only a few group differences related to participant concerns; notably, respondents who were less comfortable with students with ID were more concerned about knowing how to act around students with ID, as were male respondents.

This study has various implications for policy, practice, and research related to inclusive PSE programs. Regarding policy, the positive attitudes held by college students toward the inclusion of students with ID underscore the social acceptability of PSE programs and their viability as an inclusive transition option. These findings might address the reservations of policymakers, higher education instructors, and administrators at the secondary and postsecondary level. Inclusive PSE programs have expanded greatly in recent years, and these findings support the continued expansion of such programs for students with ID.

This study also has various practical implications related to inclusive PSE programs. Although the attitudes of college students were generally positive, respondent sex and comfort level related to consistent differences in attitudes toward including students with ID. Prior efforts to intervene among students with less positive attitudes have included instruction and structured contact (Kersh, 2011). PSE program staff might promote positive attitudes among college students by taking an “instructional” approach, that is, by sharing information about these programs with new and returning students. Information about PSE programs might be included in campus tours for prospective students, in orientation activities for new students, and in communications to returning students. Similarly, structured opportunities for college students to interact with students with ID might be integrated into orientation activities and other events throughout the academic year. Providing information and structured opportunities for interaction would familiarize the general student population with their peers with ID, thereby allaying some of their concerns.

Finally, this study has several implications for continued research. Regarding intervention approaches to attitude change, future studies might investigate the effectiveness of such strategies as sharing information, facilitating interaction, or combining the two. Future studies might also extend research on attitudes toward including students with ID in college by investigating differences related to disability type. Nevill and White (2011) have begun this work by researching college students’ attitudes toward peers with autism spectrum disorders (ASD). In contrast with prior studies of attitudes toward students with ID, findings revealed that males were more open to their peers with ASD than females. Future studies might investigate attitudes toward students with ASD who do and do not have ID. Future studies might also investigate attitudes and perspectives of other stakeholders, for example, the students with ID themselves as well as the professors who teach them in inclusive college classes.

Several limitations of this study should also be mentioned. First, because data were collected using surveys, our findings were not confirmed by observations of student behavior. Though self-report data allow insight into the perceptions of participants, observational data would enhance our understanding of the interactions among college students and students with ID, and how these behaviors relate to stated attitudes. Second, respondents may have felt compelled to answer positively about their attitudes toward students with ID. Though social desirability bias may have affected these results, responses did range from the most positive to the least positive, minimizing this concern to some degree.

Still, even in spite of these limitations, our survey revealed positive attitudes toward including students with ID in college life. We found that females and respondents who are more comfortable around students with ID held more positive attitudes toward the inclusion of students with ID in college. Going to college is an increasingly viable option for students with ID, and more students are being included in college than ever before. College students with ID and our survey respondents—college students who attend college alongside them—are part of a generation of young adults with new experiences and expectations of inclusion. We have much to learn about their experiences in college and about the perspectives they will bring to the communities in which they later live and work.

REFERENCES


