# Faculty and Student Attitudes Toward Postsecondary Education for Students with Intellectual Disabilities and Autism

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**Abstract**

Postsecondary education for students with intellectual disabilities and autism is a new frontier in higher education. As more programs are developed, information is needed regarding the attitudes of college faculty and students about having these students on campus. This study surveyed university faculty ($n$ = 152) and students ($n$ = 499) about their beliefs related to postsecondary education for students with intellectual disabilities and autism. Results highlight a willingness to embrace these programs but concerns about the effects in the classroom. Faculty participants indicated more uncertainty about inclusion of these students than did students. Implications for practice, education, and future research are provided.

*Keywords: Intellectual disability, postsecondary, attitudes*

Higher education constitutes one of the most important factors that enable an individual's potential. Individuals with intellectual disabilities (ID) have more opportunities to actively participate in an integrated society than at any other time in U.S. history due to the enactment of various laws. First, the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA; PL 108–446) increased quality preparation in secondary school and transition to postsecondary education and employment for individuals with ID. Second, the Americans with Disabilities Act of 1990 (ADA; PL 110-325) required the provision of reasonable accommodations to ensure equal access to learning and work environments. Last, and most recently, the Higher Education Opportunity Act of 2008 (HEOA; PL 110-315) provided broad authority to the Secretary of Education to waive certain sections of the law that would normally prevent students with intellectual disabilities from attending institutions of higher education. The HEOA also provided eligibility for college students with intellectual disabilities to access need-based grants and Federal Work-Study Programs.

Postsecondary programs for students with ID are becoming increasingly prevalent nationally. Many of these opportunities are provided by local school systems via programs created in response to parents' and students' desires to attend class in more age-appropriate settings once students reach the age of 18 (Grigal, Neubert, & Moon, 2001; Hall, Kleinert, & Kearns, 2000). In some cases, these opportunities are provided on a more individual basis by supporting students one at a time in one or more college classes (Doyle, 2003; Hart, Zafft, & Zimbrich, 2001). There are over 200 programs that support the participation of students with intellectual disabilities in higher education (Think College, n.d.). Most of these programs are certificate or non-degree programs, meaning that although they actively participated in campus activities and courses, participating students typically earn a credential rather than a degree (Grigal, Hart, Smith, Domin, & Sulewski, 2013).

As these programs continue to increase in number, research on university campus responses to such programs is needed. Thoma (2013) discussed the wide variations in postsecondary programs, noting the challenges in developing and implementing them, and suggested that gaining university support was helpful. Issues facing these postsecondary programs include lack of consistency in programming, varying levels of social activity inclusion, and sustainability concerns (Grigal et al., 2013). Also, previous research found that those less familiar with students with ID were less

comfortable interacting with them (Griffin, Summer, McMillan, Day, & Hodapp, 2012). Some research exists regarding the perceptions of others related to individuals with ID; however, little research has looked at the perspectives regarding the inclusion of individuals with ID in the college campus environment. Given the challenges in establishing and maintaining these postsecondary programs, university support is a necessary component for program success. The focus of this article was to explore college faculty and students' attitudes towards postsecondary education (PSE) opportunities for students with ID.

**Postsecondary Education for Students with Intellectual Disabilities**

As the phenomenon of students with ID accessing typical college courses is relatively recent and still rare, little research exists about their experiences or the program models that support greater access to the benefits of a postsecondary education and a more typical college experience (Wagner, Newman, Cameto, Garza, & Levine, 2005). Uditsky and Hughson (2012) described inclusive PSE for students with ID as a "moral and practice imperative" (p. 299), but noted that this option was not currently available to most young adults with ID. In their review of PSE options for students with ID and autism spectrum disorder (ASD), Hart, Grigal, and Weir (2010) stated that universities were not currently prepared for the influx of these students. They stressed the importance of additional training, better understanding of academic accommodations, and overall understanding of PSE programming to help faculty and college administrators embrace PSE programs. Understanding the current college climate can help increase programming success as well.

A few early studies reported positive results about the benefits to students with ID participating in regular college classes. Weir (2004) concluded that students who benefited from an inclusive, individualized support model could make the same types of personal gains as students without disabilities. Weinkauf (2002) interviewed staff at three inclusive postsecondary education programs and identified a number of student outcomes including the development of self-esteem and confidence, improvement in academic skills, the development of job skills, and social status enhancement. In addition, Zafft, Hart, and Zimbrich (2004) found that participation in postsecondary education for students with significant disabilities correlated positively with job competitiveness, obtaining paid positions, and lessening work-related supports. PSE for students with ID positively impacts these young adults.

**Attitudinal Research**

Researchers have explored teacher beliefs about students with disabilities, including specific learning disabilities, physical disabilities, and developmental disabilities. In some studies, faculty members demonstrated positive attitudes toward students with disabilities and a willingness to provide learning and examination modifications (Bigaj, Show, & McGuire, 1999; Leyser, Vogal, Wyland, & Brulle, 1998; McKeon, Alpern, & Zager, 2013; Norton, 1997; Vaseck, 2005; Vogel, Leyser, Burgstahler, Sligar, & Zecker, 2006; Vogel, Holt, Sligar, & Leake, 2008). Research findings also indicated that faculty members who had contact with students with disabilities showed more favorable attitudes toward their presence in the classroom. Further, faculty members who have increased contact proved themselves more knowledgeable about relevant disability considerations (Aksamit, Morris, & Leunberger, 1987; Norton, 1997). In her literature review on faculty perceptions about students with disabilities in general, Rao (2004) noted that some studies found differences in attitude based on previous contact, program affiliation, and disability type, although faculty typically reported positive attitudes overall.

Other studies, however, reported that faculty held non-supportive attitudes (Minner & Prater, 1984) and that students perceived faculty as lacking sensitivity and awareness of their needs and reported a sense of intimidation and rejection (Kurth & Mellard, 2006; Wilson, Getzel, & Brown, 2000). Reports also indicated faculty were especially skeptical and mistrusting of students with non-visible disabilities such as learning disabilities, attention deficit hyperactivity disorder, and psychiatric disabilities (Beilke & Yssel, 1999; Jensen, McCrary, Krampe, & Cooper, 2004). Teachers felt students with moderate to severe disabilities made class preparation and activity difficult, and believed they needed more training on working with students with disabilities (Casebolt & Hodge, 2010).

A few studies also included opinions from college students about people with ID. Carroll, Petroff, and Blumberg (2009) interviewed teacher trainees enrolled in a college course alongside postsecondary students with intellectual disabilities. They learned these teachers-in-training enjoyed the inclusive experience and believed students with ID would successfully engage in a college course. Similarly, Griffin et al. (2012) surveyed college students about their views on postsecondary education for students with ID. Their survey occurred at a university with a postsecondary program in place and explored differences between students who interacted with students with ID and those who did not. Generally, students felt positively

about postsecondary inclusion and those with previous interactions were more positive about the abilities of students with ID. May (2012) also noted more openness to those with ID in college students enrolled in inclusive courses. Rice (2009) also studied college students' perceptions about people with intellectual disabilities and learned that students enrolled in a special education course held more positive attitudes, regardless of college major, than did students enrolled in a political science course. Finally, Izzo and Shuman (2013) qualitatively examined beliefs of students who worked as mentors for students with ID. Participants held positive beliefs about including students with ID in PSE and noted differences between their own beliefs and actions and those who lacked previous interaction with students with disabilities. Importantly, these participants found that other college students became more comfortable with students with ID as they increased interactions with them, highlighting the need for inclusive programming. A wide range of beliefs exists about people with ID in college settings, but interaction and exposure appear to positively affect these beliefs.

What is limited in the research are opinions from university groups about college students with ID. Students with ID are just starting to arrive on college campuses due to government funding to create programs for these students. We wanted to better understand the climate of our own campus as our PSE program began. Therefore, we surveyed faculty and students on their attitudes about college-level inclusion for students with ID. Specifically, we wanted to know how comfortable faculty and students felt about having students with ID and autism on the college campus and engaging in student and class activities. In preparation for the postsecondary certificate program beginning on our campus, we also wanted to better understand the current attitude on campus about postsecondary education for students with intellectual and developmental disabilities (IDD).

## Method

### Participants

All participants were from a single southeastern university. The university is a public, land-grant institution with approximately 27,000 undergraduate and graduate students and 1,400 faculty members. The university has 11 colleges and over 300 degree programs and is classified as a research institution. Because a secondary goal of the research was to assess campus climate, the participants were given general information about the inclusive postsecondary program for students with intellectual disabilities coming to the campus. This information was included on the first page of the survey along with definitions of ID and autism (referred to as intellectual and developmental disabilities; IDD). Participants therefore responded based on a general understanding of an inclusive postsecondary education program for students with intellectual disabilities.

**Student participants.** We administered a survey to 2100 randomly selected students. A total of 499 students responded for a 23.8% response rate. Demographic information is included in Table 1. Participants were quite diverse, representing all colleges across campus and all credit levels. Nearly all (99%) students reported being full-time.

Of student participants, 88% reported previous personal contact with an individual with ID. Of those reporting contact, 68.5% indicated contact that was infrequent or less than monthly contact. Seventy percent of participants indicated previous personal contact with a person with autism. Of those, most (78.5%) reported infrequent or less than monthly contact with an individual with autism.

**Faculty participants.** Faculty members were contacted through their college deans, so it is unknown how many faculty members actually received the survey request. A conservative estimate based on total faculty on campus results in a response rate of 12%, for a total of 152 faculty participants. Faculty demographics are included in Table 1. Professors and instructors at all ranks participated. Most (80.3%) reported teaching at least one course per semester and on average (58.6%) had been employed by the university for 1-10 years.

Of faculty participants, 90.8% reported previous personal contact with an individual with an intellectual disability. Of those reporting contact, 75% indicated contact that was infrequent or less than monthly contact. Sixty-three percent of participants indicated previous personal contact with a person with autism. Of those, most (81.5%) reported infrequent or less than monthly contact with an individual with autism. Generally, faculty participants had very limited contact with students with ID and/or autism.

### Instruments

Both the faculty and student versions of the Attitudes on Postsecondary Education for Students with Intellectual Disabilities and Autism Survey (APES-S; APES-F) were created for the purposes of this study. To build the instruments, the first two authors consulted other research on attitudes about disabilities. McConkey, McCormack, and Naughton (1983a, 1983b) were used as models for many of the Likert-type questions. This survey was originally used to examine percep-

Table 1

*Participant Demographics*

| | *N* | Percentage |
|---|---|---|
| ***Student Participants*** | 499 | |
| Gender | | |
| Male | 205 | 41.1 |
| Female | 294 | 58.9 |
| Race/Ethnicity | | |
| White/Caucasian | 428 | 85.8 |
| African American/Black | 27 | 5.4 |
| Asian | 20 | 4 |
| Other | 24 | 4.8 |
| Year Level* | | |
| Freshman | 143 | 28.7 |
| Sophomore | 123 | 24.6 |
| Junior | 138 | 27. |
| Senior | 110 | 22 |
| Other | 7 | 1.4 |
| College Status | | |
| Arts & Sciences | 193 | 38.7 |
| Business Administration | 77 | 15.4 |
| Education | 61 | 12.2 |
| Engineering | 50 | 10 |
| Communication | 42 | 8.4 |
| Other | 76 | 15.3 |
| ***Faculty Participants*** | 152 | |
| Gender | | |
| Male | 76 | 50 |
| Female | 76 | 50 |
| Race/Ethnicity | | |
| Caucasian/White | 142 | 93.4 |
| Other | 10 | 6.6 |

| Rank | | |
|---|---|---|
| Assistant Professor | 44 | 28.9 |
| Associate Professor | 36 | 23.7 |
| Full Professor | 40 | 26.3 |
| Instructor/Adjunct | 17 | 11.2 |
| Other | 15 | 9.9 |
| **College** | | |
| Arts & Sciences | 34 | 22.4 |
| Education | 54 | 35.5 |
| Agriculture | 29 | 19.1 |
| Other | 35 | 23 |

*Note.* *Some student participants indicated more than one college level, making the total exceed 100%.

tions of people with mental handicaps and addressed many of the attitudinal information we were seeking. Adaptations included updating wording from "mentally handicapped" to "intellectual disabilities" and revising many of the questions to better suit the needs of the survey.

The original instruments included 55 items for the APES-F and 54 items for the APES-S. In order to provide evidence of content validity, we consulted with three researchers at other universities who are experts in special education. They analyzed whether the items reflected the domains we were assessing and whether the questions were worded using nonbiased language (Whiston, 2013). Based on this review, several changes were made based on their responses. Some of the suggested changes included wording within specific questions and shortening the length of the survey by combining questions.

The student version was then piloted with 19 undergraduate and graduate students in special education and counselor education. Students were asked to complete an evaluation of the survey that included questions about clarity of survey directions and questions, length of time to complete survey, and general comments about the survey. The pilot results indicated that the directions were clear but that the survey was too long. Also, several students commented that they were confused by two of the questions, which were eliminated from the final version of the survey.

Based on the comments from expert review and the pilot study, the surveys were reviewed and shortened. In order to shorten the survey, we combined questions on intellectual disabilities and autism but added a detailed description of the types of students on which the study was focused. We described the postsecondary program we intended to create on campus, detailed the types of students who would participate in the program, and provided definitions of intellectual disability and autism. We also stated that all questions referred to young adults with an intellectual disability, some of whom may also be diagnosed with autism. We then repeatedly referred back to these descriptions in our actual survey questions (e.g., Students with intellectual disabilities and/or autism should be allowed to pursue postsecondary education through a certificate program such as [our program].).

The final surveys included 49 questions for the APES-F and 45 questions for the APES-S. Coefficient alpha reliabilities for the likert-type questions on the APES-F and APES-S were .90 and .80, respectively. Only the likert-type questions and demographic information were included for this article. The remaining questions were not included because they were part of a larger study.

On the APES-S, 10 demographic questions asked about year in college, gender, ethnicity, major, course load, and previous contact with people with ID or autism. The 16 likert-type questions all used a four-point scale (1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree). These questions focused on the perceived impact of having students with intellectual disabilities and autism on campus and in courses and beliefs about the academic rights of and access for students with intellectual disabilities.

On the APES-F, 15 demographic questions inquired about professional title, gender, ethnicity, years at the university, academic discipline, number of courses taught, previous teaching modifications for students with disabilities, previous contact with people

with intellectual disabilities or autism, and training on working with people with ID or autism. The 14 likert-type questions used the same four-point scale described above (strongly disagree to strongly agree) and focused on perceived impact of having students with ID and autism in courses as well as beliefs about the impact on teaching ability and style.

Ten likert-type questions and one demographic question were the same for both versions of the APES. The shared demographic question asked participants if, based on the definition provided about ID and our postsecondary program, they thought that students with IDD should be granted opportunities to learn at the university. The 10 shared attitude questions focused on the effects of having students with ID and autism in university courses. Examples of questions include: "Officials should not place students with IDD and students without IDD in the same university classes" and "If students with IDD were to be integrated in regular college classes, other students would lose their concentration easily."

**Procedures**

Faculty and students came from a single university in the southeast. All surveys were completed online and were accessed through an email request for participation. All data were collected the semester before postsecondary students with ID first arrived on campus, so participants had not met any program students. For faculty participants, we contacted the deans of each college in the university asking if they would be willing to forward a participation request to their faculty. All college deans agreed, although some may not have actually forwarded the request to faculty. The participation request was then sent via email to each dean, who then forwarded the email to his or her faculty members. One follow-up email was sent to each dean, which was to be forwarded to his or her faculty members. No incentives were offered for participation. For students, a random sample of undergraduates was generated by Student Data Resources at the university. All students in the random sample were sent an email requesting their participation in the survey. Two reminder emails were also sent to these students over a period of three weeks. Students were offered an incentive to be entered into a drawing for one of three $100 gift cards; no penalties existed for not participating. All results are based on 152 faculty and 499 student responses.

## Results

Faculty and students were asked their perceptions about the impact of postsecondary education for students with intellectual disabilities and/or autism (IDD) on a college campus. The faculty and student surveys contained shared items and items specific to the participants being surveyed. For all items, a four-point Likert-type scale was utilized (strongly disagree to strongly agree); mean scores above 2.5 indicate an above-average agreement while mean scores below 2.5 indicate a disagreement with the statement.

Student participants were asked about allowing access to campus activity centers such as the university center, library, and recreation center. On average, participants strongly agreed ($M$ = 3.74, $SD$ = .58; 96% agreed/strongly agreed) that students with IDD should be allowed access to campus activities. Generally, participants also strongly agreed ($M$ = 3.59, $SD$ = .64; 94% agreed/strongly agreed) that students with IDD should be allowed membership in college student organizations.

Two questions inquired about social interaction between college students and students with IDD. On average, participants strongly disagreed ($M$ = 1.37, $SD$ = .67; 93.5% disagreed/strongly disagreed) that students with IDD should only be allowed interaction with other students with similar disabilities. Overall, participants moderately disagreed ($M$ = 2.11, $SD$ = .73; 72.9% disagreed/strongly disagreed) that students with IDD prefer to talk and interact with other students with intellectual disabilities and autism rather than with students without disabilities.

Generally, participants strongly agreed ($M$ = 3.71, $SD$ = .55; 97.1% agreed/strongly agreed) that students with IDD should be allowed a typical and regular life. When asked if they would feel uncomfortable if students with IDD were to be integrated into regular university courses, participants overall somewhat disagreed ($M$ = 1.89, $SD$ = .86; 75.4% disagreed/strongly disagreed).

Faculty-specific questions explored the perceived effect on teaching resulting from integrating students with IDD into regular classes. In general, faculty reported a somewhat favorable view ($M$ = 2.84, $SD$ = 1.01; 64.7% agreed/strongly agreed) of modifying their teaching style to provide an equal opportunity for learning for all students, including those with IDD. On average, faculty participants somewhat believed ($M$ = 2.51, $SD$ = .74; 45.1% agreed/strongly agreed) that other university students would feel uncomfortable with having students with IDD in regular courses. Faculty participants, overall, somewhat believed ($M$ = 2.52, $SD$ = .81; 47.1% agreed/strongly agreed) that integrating students with IDD in their courses would

disturb routine educational activities. Faculty, in general, moderately believed ($M = 2.82$, $SD = .77$; 25.5% agreed/strongly agreed) that students with IDD would take more than their share of instructor time.

**Shared Questions**

For the shared demographic question, which asked if they thought that students with IDD should be granted opportunities to learn at the university, answers were yes (faculty = 75.2%, students = 77.8%), no (faculty = 5.9%, students = 4.8%), or not sure (faculty = 18.3%, students = 17%). Generally, both students and faculty responded positively, on average, to the idea of a postsecondary program for students with IDD on our campus.

Table 2 describes the results for the shared likert-type questions. In some cases, faculty and students agreed there was response variance in other cases. Although both groups believed that students with IDD should be allowed to pursue postsecondary education, they disagreed in some cases as to the effect this would have on university classes and students. Student participants, on average, somewhat disagreed that other students would lose their concentration or that classroom modifications would have a negative influence if students with IDD were integrated into classes, while faculty participants were more moderate in their disagreement about these statements.

**Group comparisons.** Independent sample *t*-tests, without assuming equal variances, were used to test for differences in ratings between students and faculty on the ten shared questions, differences by faculty home, and differences by level of contact with people with intellectual disabilities and/or autism. Based on the central limit theorem, normality of the sample means was ensured by the large participant sizes in this study and equal variances are not required for a simple, two-way sample comparison.

For ratings on shared questions, significant differences were found for four of the 10 questions (See Table 2), indicating some differences between student and faculty attitudes as described in the previous section. In examining differences by faculty home, the assumption was made that faculty in the College of Education who comprised 40% of participants might differ from other university faculty based on their knowledge of people with disabilities. Therefore, two groups were created, one with faculty from the College of Education and the other with all remaining faculty. Differences were examined for the 13 attitudinal questions on the faculty survey. Several statistically significant differences were found, as detailed in Table 3. Generally, faculty in the college of education were more open and accepting of having students with IDD in their courses, and believed that integration of these students would not have a negative effect on the classroom or other students.

## Discussion

Faculty and students at a large southeastern university were surveyed about their beliefs regarding postsecondary education for students with IDD. They were asked about their comfort level with having students with IDD on campus, beliefs about postsecondary options for students with intellectual disabilities and autism, and the effects that having these students on campus would have on them and their teaching or learning. Several themes emerged from the results, each of which is discussed below.

**Beliefs About Access to Postsecondary Education**

Faculty and students were generally positive about the idea of postsecondary education (PSE) for students with IDD. This study supports previous work by Aksamit et al. (1987) and Norton (1997), who concluded faculty members who had contact with students with disabilities showed attitudes that were more favorable. Most faculty and students surveyed reported having a previous personal contact with a person with IDD. Most believed a postsecondary program serving students with IDD should exist and the majority believed the study site was a suitable campus to offer these services. Similarly, faculty and students disagreed that students with IDD should be relegated to special schools to continue their education. Still, nearly one-fifth of students and faculty were unsure about having postsecondary options on their campus. These results generally suggest that the atmosphere is positive regarding offering postsecondary programs on traditional college campuses, at least for the campus we surveyed.

In addition, this study supports previous research about examining college student beliefs about PSE for students with IDD. Student participants stated their strong belief that students with IDD be allowed a typical and regular life, which seems to include access to postsecondary opportunities. Griffin et al. (2012) also indicated that students felt positively about postsecondary inclusion. Student participants also believed that students with IDD would enjoy interacting with students with and without disabilities, rather than just students with disabilities.

Table 2

*Shared Likert-Type Questions*

| | Group | *N* | *Mean* | *SD* | *p* |
|---|---|---|---|---|---|
| 1. Students with intellectual disabilities and autism (IDD) should be allowed to pursue postsecondary education through a certificate program. | Fac | 152 | 3.16 | .95 | .096 |
| | Stu | 499 | 3.30 | .93 | |
| 2. Classroom and curricular modifications made on behalf of students with IDD will have no influence on other students in the classroom. | Fac | 152 | 2.25 | .97 | .117 |
| | Stu | 499 | 2.38 | .91 | |
| 3. Officials should not place students with IDD and students without IDA in the same university classes. | Fac | 152 | 2.11 | .92 | .001** |
| | Stu | 499 | 2.48 | .9 | |
| 4. Individuals with IDD should be allowed to continue their education only at special schools. | Fac | 152 | 1.79 | .82 | .286 |
| | Stu | 499 | 1.87 | .78 | |
| 5. Classroom and curricular modifications made on behalf of students with IDD will have a positive influence on other students in the classroom. | Fac | 152 | 2.72 | .80 | .055 |
| | Stu | 499 | 2.58 | .78 | |
| 6. If students with IDD were to be integrated in regular university/college classes, students with intellectual disabilities and autism would need more attention than other students. | Fac | 152 | 3.23 | .61 | .667 |
| | Stu | 499 | 3.20 | .66 | |
| 7. If students with IDD were to be integrated in regular college classes, other students would lose their concentration easily. | Fac | 152 | 2.07 | .74 | .001** |
| | Stu | 499 | 2.37 | .86 | |
| 8. Classroom and curricular modifications made on behalf of students With IDD will have a negative influence on other students in the classroom. | Fac | 152 | 2.11 | .86 | .006** |
| | Stu | 499 | 2.32 | .86 | |
| 9. If students with IDD were to be integrated into regular college classes, it would give students with IDD a better chance to prepare themselves for life. | Fac | 152 | 3.22 | .80 | .613 |
| | Stu | 499 | 3.25 | .74 | |
| 10. If students with IDD were to be integrated in regular classes, other students would learn how to communicate with and interact with individuals with disabilities better. | Fac | 152 | 3.27 | .65 | .006** |
| | Stu | 499 | 3.44 | .65 | |

Table 3

*Differences by Faculty College Home*

| | Faculty Home | *N* | *Mean* | *SD* | *p* |
|---|---|---|---|---|---|
| 1. If I agreed to having a student with IDD in my class, I would be open to modifying my teaching/learning style to provide that student an equal opportunity for learning. | Other | 98 | 2.67 | 1.01 | .005* |
| | Education | 54 | 3.15 | .94 | |
| 2. Classroom and curricular modifications made on behalf of students IDD will have no influence on other students in the classroom. | Other | 98 | 2.11 | .95 | .018* |
| | Education | 54 | 2.50 | .97 | |
| 3. Officials should not place students with IDD and students without IDD in the same university courses. | Other | 98 | 2.32 | .93 | .000* |
| | Education | 54 | 1.72 | .79 | |
| 4. Classroom and curricular modifications made on behalf of students with IDD will have a positive influence other students in the classroom. | Other | 98 | 2.51 | .78 | .000* |
| | Education | 54 | 3.09 | .71 | |
| 5. If students with IDD were to be integrated in regular college courses, other students would lose their concentration easily. | Other | 98 | 2.16 | .77 | .029* |
| | Education | 54 | 1.89 | .66 | |
| 6. Classroom and curricular modifications made on behalf of students with IDD will have a negative influence on other students in the classroom. | Other | 98 | 2.29 | .86 | .000* |
| | Education | 54 | 1.78 | .74 | |
| 7. If students with IDD were to be integrated in regular university/college courses, other students would learn how to communicate with and interact with individuals with disabilities better. | Other | 98 | 3.16 | .67 | .006* |
| | Education | 54 | 3.46 | .57 | |

*Note.* IDD=Intellectual disabilities and/or autism/developmental disabilities. Other = faculty not a member of the College of Education * = significant difference >.05

**Beliefs about Effects on Classroom**

Faculty and students had mixed beliefs about the effects on the classroom if students with IDD were to be integrated into regular classrooms. Student participants disagreed that traditional college students would feel uncomfortable if students with IDD were integrated into their courses. This finding supports more openness to college students with ID enrolled in inclusive courses (May, 2012). This belief also supports earlier findings that younger people or college-age students tend to express more positive views about people with IDD (Carroll et al., 2009; Griffin, et al., 2012).

Faculty responses were less strong, however, indicating their belief that traditional students might feel uncomfortable if students with IDD were in their courses. The responses from faculty regarding the effects on classroom routine should students with IDD be integrated into regular courses were varied. The average faculty response is a slight agreement that this would disturb the class routine and that students with IDD would take more instructor time than would traditional students. Previous research (Engelbrecht, Oswald, Swart, & Eloff, 2003) highlighted faculty concerns about including students with IDD in regular education classrooms. They found teachers were moderately stressed about inclusion, with the most stress resulting from accountability standards, curriculum adaptation, sustaining active learning, lack of training, and difficult student behaviors. It is possible some mixed feelings about postsecondary access may be related to perceived feelings of stress about interacting with students with intellectual disabilities and autism.

Faculty participant responses indicated some concern with the success and failure of students with IDD. These results mirror other studies of attitudinal beliefs regarding other types of disabilities. In previous studies, faculty members indicated they had concerns about students with disabilities in their classrooms and on their campuses. Research indicated faculty members were (a) concerned about the absorption of time and resources students with disabilities demand (Kaufman, 2006; Tyre, 2007), (b) concerned about classroom modifications (Waterfield, West, & Parker, 2006), and (c) concerned about whether or not students with disabilities can be successful in postsecondary education (Becker, Martin, Wajeeh, Ward, & Shern, 2002). Nevertheless, our participants expressed a readiness to learn more about what it would be like to have these students on campus.

Both faculty and student responses indicated they believed students with IDD would require more attention than other students, but did not respond that this would cause other students to lose their concentration in the classroom. Participants reported uncertainty as evidenced by middling responses to each question. It seems that faculty and students are unsure what the effects on other students might be, but they are generally willing to try integration of students with IDD into university courses.

**Beliefs about Impact on Campus**

Faculty and students also reported mixed responses about the impact students with IDD would have on the campus community. Student participants generally agreed that students with IDD should be allowed access to campus activities, including membership in college organizations and admittance to recreation facilities. Student participants also strongly agreed that having students with IDD on campus would help other students learn to interact with students with disabilities better. Again, faculty responses were less strong, suggesting concerns about the effect that students with IDD would have on other college students. These results relate to other attitudinal research, with some findings indicating faculty hold positive attitudes toward students with disabilities (e.g., Bigaj et al., 1999; Leyser et al., 1998; Vasek, 2005; Vogel et al., 2008) while others report less supportive attitudes (Minner & Prater, 1984). Clearly, faculty members represent a diversity of perspectives about having students IDD on campus.

## Conclusions and Implications

As with all research, some limitations to our study exist. This research was limited based on the response rates of participants and the interest of the participants in taking the time to complete the survey. Other limitations outside the control of the primary researchers included a lack of participation by faculty members and student participants. While not exhaustive, these limitations could affect generalizability of the results. First, all participants came from a single college campus, so generalizability may be limited. Second, participants were asked to respond regarding students with intellectual disabilities and autism. Results may differ if the disability categories were parceled-out and participants were only asked, for example, about students with ID. Third, all data comes from self-report of personal attitudes, so the actual behaviors of faculty and students may differ from their reported beliefs. Also, participants self-selected to complete the survey; it may be that those who chose to participate are not representative of typical college students and faculty. Finally, the survey was created solely for this study and, although it was based on previous attitudinal research, it is not possible to know if the survey truly examined attitudes and beliefs.

**Implications**

As the number of PSE programs increase, faculty at PSE universities and colleges need training regarding college students with IDD in order to maximize learning opportunities and experiences. Faculty members are responsible for instruction and the implementation of accommodations to support students with intellectual disabilities. Further, their perceptions affect students. Therefore, understanding how faculty members feel about students with intellectual disabilities is important. As mentioned by McKeon, Alpern, and Zager (2013), faculty need to learn ways to increase curriculum accessibility for students with ID. The HEOA (2008) includes ideas for increasing success for students with ID in PSE. For example, it mentions the use of Universal Design for Learning (UDL), a framework for instructors to ensure that information is presented in a flexible manner that engages students and allows varied opportunities to demonstrate knowledge, skills, and competencies. Faculty would benefit from training sessions to become aware of and to develop successful accommodation strategies.

Facilitating access and mitigating discrimination on college campuses can prove difficult. Faculty and instructors do support college students with IDD but are unclear about their classroom performance. It was evident that support from faculty members was not without concern or reservation; however, the majority of faculty members indicated that they did not mind making accommodations or modifying their teaching style to provide an equal opportunity for learning for students with IDD. Offices of Disability Services and Diversity and Equity, as well as campus centers charged with improving teaching practices for instructors, are services and resources that already exist on most university and college campuses. The support for college students with IDD would align with their mission statements.

As college students with intellectual disabilities increase on university and college campuses, students without ID also will require training and opportunities to work with and interact with students with ID. Some students may have never interacted with a person with an intellectual disability and may express ambivalence or negative feelings. As noted by Izzo and Shuman (2013), increased comfort and acceptance by college students occurred when they were introduced to and interacted with students with ID. Students should be provided structured opportunities to work and interact with diverse students in order to adequately prepare them to engage in a diverse global society. Student clubs and organizations on college campuses provide a natural means to facilitate such opportunities.

**Future Research**

More studies are needed on the beliefs about, and actual impact of, postsecondary programs for students with IDD. Future studies could focus on faculty and students from multiple schools so that generalizability could be increased. In addition, longitudinal studies are needed to determine if attitudes change once a postsecondary program for students with ID is started on campus. It would be important to know if attitudes changed, as well as exploring what the actual impact on classes and campus were once the program existed. Future research also should separate students with ID and students with autism. Respondents may possess differing beliefs and attitudes that are disability specific. Lastly, future research would also benefit from examining the success of these students in completing postsecondary programs and by examining the relationship between success levels and attitudes of faculty and students.

Although the results of this study needs to be replicated, our findings suggest that university students and, to a lesser degree, faculty favor the development of PSE programs, the inclusion of college students with IDD in classroom, and the inclusion of college students with IDD in campus activities and events. As previous research has noted, interactions with individuals with disabilities changed a person's attitudes and beliefs in a positive manner (Aksamit et al., 1987; Norton, 1997). Therefore, as more PSE programs develop and people are provided more opportunities to interact with individuals with intellectual disabilities and autism, overcoming misperceptions and encouraging positive change will be more likely.

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