A Comparison of Student Attitudes on Inclusive Postsecondary Education at Two Mid-Atlantic Universities

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Abstract

Inclusive postsecondary education (IPSE) programs for students with intellectual and developmental disabilities are growing rapidly, yet demand still outweighs availability of programs. To increase the success and sustainability of IPSE, universities must understand stakeholders' perceptions of inclusion. A survey on perceptions of diversity and inclusion was administered to students at two universities – a pilot IPSE campus and an established IPSE campus. Students held largely favorable perceptions of IPSE. Differences were evidenced in students' practices of inclusion, willingness to be peer mentors, and receptiveness for inclusion training. Considerations for enhanced training on IPSE campuses and recommendations for future research are provided.

Keywords: inclusive postsecondary education, intellectual and developmental disabilities, inclusion, perceptions, attitudes

Plain Language Summary

- Inclusive postsecondary education (IPSE) programs for students with intellectual and developmental disabilities (IDD) are growing rapidly, yet demand for programs still outweighs availability.
- To increase the success and sustainability of IPSE, universities must understand stakeholders' perceptions of inclusion.
- **What we did in this study:** We surveyed students, faculty and staff at two universities in Pennsylvania to learn about their views of students with disabilities, inclusion and IPSE on their campus. This article presents results from the student survey.

- **Findings:** We found that students had overall positive views of IPSE. Differences were found in how students practiced inclusion, their willingness to be peer mentors, and openness to being trained in inclusion.
- **Conclusion:** A variety of factors were related to students' views of inclusion and students with IDD attending college; these should be understood through a national survey of campuses with IPSE programs.

For young adults with and without disabilities, the transition from high school to adulthood is a challenging time as they make decisions about their future. Current data suggests that almost 70% of young adults in the United States (US) attend college following high school with roughly 7,000 institutions of higher education to choose from (Bureau of Labor Statistics, 2017; US Department of Education, National Center for Education Statistics, 2021). By comparison, less than 30% of young adults with intellectual and developmental disabilities (IDD) enroll in college with only 309 inclusive education options (Newman et al., 2011; Think College, 2021). Inclusive postsecondary education (IPSE) programs provide students with IDD an opportunity to achieve higher education and aim to close educational and employment gaps for this population (Harrison et al., 2019).

Developmental disabilities (DD) are conditions that are chronic in nature and result in cognitive, social, or physical impairments that impede a child's language, mobility, and/or independence (Centers for Disease Control and Prevention, 2022). Intellectual disability (ID) is one type of developmental disability characterized by limitations in intellectual functioning and adaptive behavior, which refers to practical activities of daily living and social skills. In most instances, ID and DD present at birth and are typically diagnosed prior to the age of 18 (American Association on Intellectual and Developmental Disabilities [AAIDD], n.d.). For the purposes of this study, "students with IDD" will be used to identify the population of focus – students with a diagnosed ID and/or DD who are between the ages of 18 and 26 and seeking or attending an IPSE program following their transition from high school (Transition and Postsecondary Programs for Students with Intellectual Disability [TPSID], 2021).

IPSE programs are 2- or 4-year college experiences for students with IDD that provide them the opportunity to engage in academic coursework with peers without disabilities in pursuit of either a certificate, bachelor's degree, or work experience. IPSE looks different from campus to campus, but most programs provide a degree of inclusive coursework, social engagement, internship and work experiences; some programs also provide a residential option in on-campus dormitories or apartments (Uditsky & Hughson, 2012). While IPSE has existed for some time in countries like Canada, mainstream adoption by North American institutions of higher education occurred more recently as a result of the Higher Education Opportunity Act of 2008 (HEOA, 2008). Provisions within the HEOA created new comprehensive transition and postsecondary programs (CTP) for students with IDD while affording them access to federal student aid. Programs expanded in the US when the Department of Education awarded competitive TPSID grants to academic institutions in 2010 to create or expand high-quality IPSE programs that emphasized "academic enrichment, socialization, independent living skills, and integrated work

experiences and career skills" (US Department of Education, 2015, para. 2). By the conclusion of the first TPSID grant cycle, 52 TPSID programs were recognized by Think College (Grigal et al., 2016).

In 2015, TPSID funding enabled the development of the Pennsylvania Inclusive Higher Education Consortium (PIHEC). PIHEC focuses on the provision of training and technical assistance to IPSE programs throughout the Commonwealth of Pennsylvania, some of which are in the early stages of planning and development. PIHEC has an institutional membership of 40 organizations and institutions of higher education, 15 of which operate IPSE programs (PIHEC, 2022). These programs vary in design, campus membership, entrance requirements, and level of inclusion (Think College, 2021). By providing ongoing support, PIHEC hopes to assist all Pennsylvania programs to adopt fully inclusive postsecondary educational practices. Through the provision of a second cycle of TPSID funding, five model IPSE programs are working collaboratively to grow PIHEC's membership to 100 institutions and enroll over 1,000 students with IDD in IPSE over the course of its five-year grant cycle (US Department of Education, 2020).

For campuses to successfully develop and sustain IPSE initiatives, the tenets of inclusion and acceptance of inclusive education for students with IDD must be understood among campus stakeholders. Stakeholders, including students, faculty, and staff, create the culture of a campus community and, therefore, have a significant impact on whether IPSE and students with IDD are accepted on campus (Brewer & Movahedazarhouligh, 2019). Positive perceptions among these stakeholders predict the success of an IPSE program, while negative beliefs and attitudes have been linked to lower levels of academic achievement and social engagement among students with IDD (Singh & Gilson, 2020).

Gilson et al. (2020) acknowledge that many definitions of inclusion exist related to students with IDD; while inclusion may be well-conceived in theory and research, IPSE programs do not always provide inclusive college experiences in their practical administration. For this study, we used the TPSID National Coordinating Center, Think College, definition of "inclusion" as a "human right that is realized when there is a mutual desire to develop and maintain relationships among individuals with varying abilities; based on individual and communal perspectives that [place value on difference; and that, at an institutional level, celebrate intellectual diversity]" (Jones et al., 2015, p. 2). Because inclusion is dependent on the acceptance of people with IDD into a community, it is crucial that attitudes of inclusive education be examined and understood among campus stakeholders (e.g., students, faculty, and staff).

Other studies have been conducted to evaluate perceptions of inclusion and IPSE on individual campuses. Gilson et al. (2020) developed and administered a survey on perceptions of inclusion and diversity to students (n = 1,465) and faculty (n = 172) at a large public university. While most students (86%) and faculty (69%) felt students with IDD should be given the opportunity to pursue IPSE, the student body consistently had more favorable perceptions than faculty about the ability of students with IDD to succeed on a university campus and procure a job of their choice. Gilson et al. (2020) also analyzed student predictors of acceptance (e.g., enrollment in the College of Education, familiarity, and comfort level with IDD); however, they did not assess how student attitudes differed

in response to the length of time a campus community was exposed to inclusive practices and IPSE.

An early study conducted by Gibbons et al. (2015) presented similar findings. They surveyed faculty (n = 152) and students (n = 499) at a large southeast land-grant institution to determine student and faculty perspectives of IPSE for students with IDD and autism. They found that most students and faculty surveyed believed that IPSE programs should exist and that the campus was equipped to offer inclusive programming; however, nearly 20% of participants were hesitant about having an IPSE program on their campus. Students generally reported a more positive perspective of IPSE than faculty, with most faculty expressing concern that having students with IDD in class with traditional students may disrupt the flow of the course and require more instructor time than traditional students. Findings from these studies have all indicated a need for additional research that continues to explore the perspectives of students, faculty, and staff at institutions of differing size and affiliation beyond large land-grant institutions.

For the present study, we used a modified version of Gilson et al.'s (2020) survey on perceptions of inclusion to understand student, faculty, and staff attitudes of inclusion and IPSE for students with IDD on two mid-size university campuses in Pennsylvania: a campus with a pilot IPSE program that had not yet begun and a campus with an established IPSE program. In this manuscript, we provide a summary and analysis of student responses; faculty data will be presented in a future manuscript. Researchers hypothesized that student attitudes may diverge between the two campuses due to the differing length of IPSE presence on each campus; specifically, that students from the established IPSE program would be more embracing of students with IDD on their campus.

We collected data to examine student perceptions of inclusion and IPSE, and the culture of acceptance of students with IDD on each university campus. Therefore, we posited the following research questions: (1) How do student perspectives on inclusion and IPSE for students with IDD compare between two Pennsylvania universities—a private, Catholic university with a pilot IPSE program and a public university with an established IPSE program?; and (2) What student characteristics predict attitudes towards inclusion, IPSE, and students with IDD? Information gathered from this study was vital to both programs. Study findings helped the pilot IPSE identify campus stakeholders willing to embrace a new IPSE program and gauge student interest to serve as peer mentors and/or natural supports for students with IDD as the campus embarked on full-scale program implementation. The established IPSE used the findings as a means of program evaluation to adjust current programming, as needed.

Methods

Setting

We used a cross-sectional survey design to understand student perspectives of inclusion and IPSE at one point in time on two university campuses in Pennsylvania: one campus was surveyed prior to the inception of their IPSE program and the other campus had an

established IPSE that had been in operation for five years. We used an adapted version of a survey instrument by Gilson et al. (2020) on perceptions of inclusion of diverse student populations on a college campus with permission from survey developers. While both campuses are situated in Pennsylvania, they represent distinct campus populations, perceptions, and attitudes.

The pilot program is anchored at a private Catholic university with a total enrollment of 9,260 students and bachelor's, master's and doctoral degree offerings. Its campus is grounded in the Spiritan charism and is explicit in its commitment to Catholic Social Teaching and supporting marginalized and minoritized communities (Byron, 1999). To this end, the university has several active community-engaged partnerships with local human service provider agencies that support members of the IDD community. Young adults and adults with IDD are present on campus for programming throughout the academic year and the campus serves as an anchor for a local high school transition program. Students' commitment to inclusion is evident in their volunteer engagement, community-engaged learning, and membership in a large Best Buddies chapter and Special Olympics programming. Although the pilot IPSE had not yet begun at the time of this study, two students had already been accepted into the program; these students would have the opportunity to participate in all facets of campus life from inclusive course enrollment, campus residential living (if desired), and membership in all student organizations. Upon graduation, students will receive a program certificate or bachelor's degree.

For five years, the established ISPE has thrived at a mid-size public university. With an enrollment of 7,495 students in pursuit of bachelor's, master's and doctoral degrees, this campus's commitment to inclusion began in 2014 with the inception of IPSE and is further reflected in the institution having identified inclusion as one of its six core values. The campus has also successfully attained two five-year TPSID grants awarded by the US Department of Education. At the time of this study, the established IPSE program had 16 enrolled students in inclusive course offerings, campus residential living (as desired), and membership in any student organization of their choice. Students in the established IPSE receive a program certificate upon graduation.

Participants

We administered the modified survey to samples of students, faculty, and staff at both universities. Convenience samples of approximately 1,200 to 1,500 full-time students received email invitations to participate in the survey. Complete survey responses were obtained from 199 students at the pilot IPSE campus and 121 students at the established IPSE campus.

Procedures and Measures

IRB approvals to administer the survey were obtained at both institutions. An email invitation that included a unique link to the Qualtrics survey (https://www.qualtrics.com) was sent to students at both universities via email. Email invitations were sent twice over a 6-week period between April and May of 2019. Students who chose to participate

clicked the link provided within the email to access an online informed-consent form built into Qualtrics as the first survey item. Informed consent was obtained from all participants using their electronic signatures. Upon providing informed consent, participants were directed to begin the survey, which took approximately 20 minutes to complete.

The survey contained an introduction with the purpose, a definition of IDD (AAIDD, n.d.), and 41 items: 13 items on students' demographics; 6 Likert-scale items assessing their self-perceived sense of belonging on campus; 6 Likert-scale items on their level of understanding and definition of inclusion; 3 items on their familiarity with people with IDD; 10 Likert-scale items assessing students' level of agreement with attitudinal statements on components of inclusion and IPSE, what students with IDD are capable of related to higher education and employment, and their willingness to support peers with IDD on the university campus; 1 rank-order item on students' interest in receiving inclusive practices training; and 2 open-ended items that gathered qualitative responses on their perceptions of inclusion. With permission from Gilson et al. (2020), Texas A&M-specific items were modified to reflect characteristics of the pilot and established IPSE campuses. Likert-scale items used a balanced 4-point scale from 1 ("Strongly Disagree") to 4 ("Strongly Agree").

Individual and social demographics were collected from students as well as details on their academic program, year, and course of study. Individual and social demographic items included the student's: *age; self-identified gender, race, and socioeconomic status; parents' educational background* (graduated high school or less, one parent graduated college, or both parents graduated college); *academic year; role at the university* (undergraduate versus graduate student); *academic school/division* (10 academic schools, which were collapsed into five categories for data analysis: Business, Technology and Law; Health Sciences, Nursing and Pharmacy; Education and Social Work; Environmental and Natural Sciences; and Liberal Arts, Music, Humanities and Psychology); *disability status*; and *sense of belonging*.

Because both universities' samples were racially homogenous and largely white/Caucasian, *self-identified race* was re-coded and analyzed dichotomously as students who identified as being from an ethnic/racial minority (Black; Indigenous; Latinx; Asian American; Pacific Islander; or Multiracial) and those who identified as white/Caucasian. *Disability status* was also defined dichotomously as those who received physical and/or academic accommodations through each university's Office of Disability Services and those who did not. *Sense of belonging* was captured through a series of 6 self-report items (e.g., "*I feel like I belong to a community at the university*"; "*I think all students are actively engaged with their peers at the university*"; etc.), which draws from several theoretical perspectives in higher education (Baumeister & Leary, 1995). Belonging is coincident with a student's sense of acceptance, value, inclusion and encouragement by faculty and peers in ways that typically parallel engagement (Masika & Jones, 2016; Thomas, 2012). For college students, belonging directly correlates with their academic achievement, which ultimately leads to increased rates of persistence, retention, and degree completion (Korpershoek et al., 2020; Strayhorn, 2018). Spending time in a valued activity, building meaningful peer relationships, and feeling included are three key aspects of social belonging (Merrells et al., 2019; Wolfensberger, 1998), all of

which were represented in the survey items designed to measure students' *sense of belonging*.

Data Analysis

Deidentified survey responses were downloaded from Qualtrics and transferred to SPSS (Version 27.0) for analysis. Listwise deletion was used for missing responses, and these cases were not included in statistical analysis. Descriptive statistics, including frequencies and percentages, were calculated to describe the survey respondents' individual, social, and academic characteristics as well as their sense of belonging on campus (independent variables). Frequencies, percentages, means, and standard deviations were calculated to summarize student responses to Likert-scale items, with a focus on the 10 attitudinal survey items that measured student perceptions of people with IDD and components of inclusion and IPSE (dependent variables of interest). We looked at descriptive statistics by university.

Chi-squared tests of independence were used to examine relationships between students' individual, social, academic characteristics, and sense of belonging, and their perspectives of inclusion and IPSE. Due to small cell sizes, chi-squared tests were based on data aggregated across universities. To examine these relationships, Likert-scale responses were collapsed into "Mostly Agree" (a combination of "Strongly Agree" and "Agree") and "Mostly Disagree" ("Strongly Disagree" and "Disagree").

A series of binomial logistic regression models were fit to each outcome to discover the most important predictors amongst variables regarded as, at least, marginally significant from the chi-squared analyses. Because some predictors trended at a marginal level of significance, we reported odd ratios with 90% confidence intervals.

Results

Descriptive Statistics

Student Characteristics. Student respondents from the pilot IPSE campus (n = 199) and established IPSE campus (n = 121) were mostly female (84% from the pilot IPSE; 75% from the established IPSE) and White/Caucasian (68% from the pilot IPSE; 83% from established IPSE). Students were primarily native English speakers (84% from the pilot IPSE; 86% from established IPSE).

Most student respondents were undergraduates (66% from the pilot IPSE; 93% from the established IPSE) from the Liberal Arts and Music programs (24% from the pilot IPSE; 62% from established IPSE). At the pilot IPSE, students from the School of Business (16%) and Health Sciences/Biomedical Engineering (15%) were the next highest respondents. Comparatively, established IPSE respondents were also largely from Social Work (13%) and Education (11%).

Approximately 14–15% of student respondents received accommodations through their university's Office of Disability Services (15% from the pilot IPSE campus; 14% from the

established IPSE). Students from the pilot IPSE campus reported higher rates of both parents having graduated college (52%) than those at the established IPSE campus, where 40% of students reported that their parents had a high school education or less. Table 1 provides complete descriptive statistics for student respondents from both universities.

Sense of Belonging. Approximately 16% of students from the pilot IPSE campus and 22% of students at the established IPSE campus expressed a lack of sense of belonging at their university. While students on both campuses largely felt that all students were free to choose their own academic, social, and personal life paths (76% from the pilot IPSE campus; 86% from the established IPSE campus), 56% of students at the pilot IPSE and 62% of students at the established IPSE did not believe that all students were engaged with other peers on their campus.

At the pilot IPSE university, students who received academic accommodations through the university's Office of Disability Services expressed marginally lower rates of belonging on campus than peers without accommodations ($p = .072$) and they felt that students were not supported to choose their own life paths ($p = .015$). Students from a racial/ethnic minority ($p = .008$) and non-native English speakers ($p = .013$) did not perceive that students were actively engaged with other peers on campus; those from racial/ethnic minorities also did not perceive that all students' voices were valued on their campus ($p = .047$).

Comparatively, student respondents who received accommodations from the established IPSE campus also had marginally lower levels of belonging than those without accommodations ($p = .077$); however, other belongingness item responses differed primarily by gender. Male (69%) and transgender (100%) students more frequently disagreed that students on campus were actively engaged with peers than their female counterparts (40%; $p = .018$); they also expressed higher rates of disagreement that all students on campus were valued (34% of males and 100% of trans individuals disagreed with this statement; $p = .025$).

Perceptions of Inclusion, IPSE, and Students with IDD

Table 2 presents a comparison of the frequencies/percentages of student responses on the main attitudinal outcomes of interest measuring perceptions of inclusion and IPSE. Mean scores and standard deviations for each item are also provided. Overwhelmingly, both student samples responded favorably to IPSE, with more than 60% rating "mostly agree" on the main survey items assessing student perceptions.

Perceptions of Students with IDD. The majority of students from the pilot IPSE campus (89%) and established IPSE campus (94%) agreed that students with IDD would succeed at a four-year college or university. Related to this finding, 60% of students from the pilot IPSE campus and 68% of students from the established IPSE campus disagreed that students with IDD should continue their college education at segregated "special schools". In addition, 96% of students at both the pilot IPSE and the established IPSE agreed that students with IDD would positively influence other students on their college campus.

Students from the pilot IPSE (70%) expressed a more favorable attitude towards individuals with IDD obtaining a job of their choice compared to the established IPSE campus (61%).

Perceptions of Support Needed for Students with IDD. While pilot IPSE students (88%) more frequently perceived that students with IDD would require greater instructor support in the classroom than established IPSE students (70%), they expressed a greater willingness to serve as peer mentor supports for students with IDD (81%) than those from the established IPSE campus (70%). Students from the pilot IPSE campus (76%) also expressed greater interest in receiving inclusive practices training on how to support students with IDD on campus than those affiliated with the established ISPE university (67%).

Bivariate Analysis

Tables 3 and 4 present detailed chi-squared results and significance values of respondents' perceptions of students with IDD and characteristics associated with those perceptions.

Perceptions of Students with IDD. Across multiple survey items, students who were younger generally had more favorable perceptions of what students with IDD could achieve in higher education and employment. For example, nearly 69% of younger students (18–29 years) believed people with IDD could obtain a job of their choice after college compared to only 44% of students who were 30 years or older ($p = .040$). Younger students (96%) also more frequently agreed that students with IDD should be given the opportunity to advance their education at the university level than older students (92%; $p = .001$).

Students from the Schools of Business, Technology, and Law (53%) and Environmental and Natural Sciences (50%) most frequently felt that students with IDD should receive their education at "special schools"; conversely, students from Schools of Education and Social Work (77%) and Liberal Arts (69%) were more likely to disagree with segregated education.

Across all items, students whose parents had received a high school education or less consistently responded with less favorable attitudes of inclusion and perceptions of what students with IDD could accomplish. For instance, students with parents who attended high school or less were less likely to agree that people with IDD could obtain a job of their choice than students whose parents had attended college ($p = .019$).

Perceptions of Support Needed for Students with IDD. A variety of characteristics were also related to perceived support needs for students with IDD at the university. Students who identified as female (88%) more frequently perceived that students with IDD would require greater instructor support compared to students who identified as male (71%) or transgender (60%; $p = .001$). Students who were a part of the Schools of Education and Social Work were marginally less likely to believe that students with IDD would require additional instructor support (71%; $p = .081$). These students were also more willing to

serve as a peer support for a student with IDD (88%; p = .040) and receive training in inclusive practices (79%; p = .055), along with students from the Schools of Health Sciences, Nursing, and Pharmacy (86% and 83%, respectively).

Part-time students were more likely (87%) to believe that students with IDD would require greater instructor support compared to full-time students (77%; p = .039). However, part-time students (83%) were also more likely to serve as a peer support for a student with IDD compared to full-time students (72%; p = .043).

Students who knew someone with an IDD expressed more willingness to be trained to support students with IDD (75%; p = .018) compared to students who did not know an individual with an IDD. Lastly, students who felt a sense of belonging on their campus were more likely to want to be a peer support for a student with IDD (p = .008) and more open to being trained to support students with IDD (p < .001) compared to peers who lacked a sense of belonging.

Predictors of Student Attitudes

Perceptions of Students with IDD. We conducted a series of binomial logistic regressions controlling for important factors from the chi-squared analyses and found that part-time students had about 2.3 times higher odds of agreeing that people with IDD could secure a job of their choice than full-time students [Exp(B) = 2.255, 90% CI (1.329, 3.826)]. Students over the age of 30 had 76% times lower odds of agreeing that individuals with IDD could obtain a job compared to those aged 18-29 [Exp(B) = 0.242, 90% CI (0.108, 0.541)]. Students who had one parent with a college education had about 2.7 times higher odds of agreement that students with IDD could secure a job compared to students whose parents who had a high school education or less, while students with both parents having a college degree had 1.8 times higher odds of agreeing [Exp(B) = 2.678, 90% CI (1.468, 4.886) and Exp(B) = 1.785, 90% CI (1.031, 3.089), respectively]. Overlap in these confidence intervals indicates that students with one parent having a college education did not significantly differ in their beliefs on this outcome from students with both parents having obtained a college degree. Students who agreed that all students were free to choose their life path had about 2.1 times higher odds of agreeing that individuals with IDD could secure a job [Exp(B) = 2.136, 90% CI (1.191, 3.832)].

Students who believed that all students were free to choose their life path also had about 2.4 times higher odds of agreeing that individuals with IDD should attend “special schools” [Exp(B) = 2.420, 90% CI (1.247, 4.695)]. Relative to students in Business, Technology, or Law, students in the Schools of Education and Social Work had nearly 71% lower odds of believing that students with IDD should attend “special schools” and students in Liberal Arts, Psychology, Music, or Humanities had about 55% lower odds [Exp(B) = 0.287, 90% CI (0.128, 0.643) and Exp(B) = 0.452, 90% CI (0.230, 0.880), respectively].
Students who reported knowing someone with IDD had nearly 6 times higher odds of agreeing that students with IDD should participate in all aspects of campus life than those who did not know an individual with IDD [Exp(B) = 5.872, 90% CI (1.278, 26.971)].

Perceptions of Support Needed for Students with IDD. Males had about 56% times lower odds of agreeing that students with IDD would require extra support from instructors than their female counterparts [Exp(B) = 0.443, 90% CI (0.232, 0.845)]. Students who agreed that all students on campus were engaged with peers were about 2.3 times more likely to agree that students with IDD would require extra support from instructors [Exp(B) = 2.329, 90% CI (1.283, 4.229)].

While male students more often disagreed that students with IDD would need extra instructor support, they expressed 51% lower willingness to serve as a peer mentor for students with IDD than female students [Exp(B) = 0.482, 90% CI (0.266, 0.871)]. Students who reported knowing someone with IDD were about 3 times more likely to receive inclusion training on how to support peers with IDD than those who did not know someone with IDD [Exp(B) = 2.750, 90% CI (1.009, 7.496)]. Students from the Schools of Education and Social Work were about 4 times more likely to want to be a peer mentor and 3 times more likely to be willing to obtain inclusion training than students in the Schools of Business, Law, or Technology [Exp(B) = 2.956, 90% CI (1.017, 8.588); [Exp(B) = 3.874, 90% CI (1.432, 10.484), respectively]. Full-time students had 53% lower odds of willingly serving as a peer mentor than part-time students [Exp(B) = 0.470, 90% CI (0.258, 0.857)]. Students who expressed a sense of belonging on their campus had 99% higher odds of expressing willingness to be a peer mentor for a student with IDD and about 2.4 times higher odds of agreeing to participate in inclusive practices training [Exp(B) = 1.993, 90% CI (1.093, 3.632); Exp(B) = 2.438, 90% CI (1.349, 4.408), respectively].

Discussion

While our research team focused on drawing comparisons between perceptions of inclusion and IPSE at two mid-size Pennsylvania universities, we also drew important parallels to Gilson et al.'s (2020) findings on student perceptions at Texas A&M, a large public university in the southwest.

Campus Culture

Similarities and differences noted among student perceptions at the Pennsylvania institutions and at Texas A&M (Gilson et al., 2020) suggest that there may be campus-specific characteristics that predict IPSE success. These findings provide future IPSE program directors and researchers with an important understanding of campus stakeholders' views of inclusion (in this case, students) to increase the success and sustainability of IPSE and continue much-needed expansion of postsecondary opportunities for students with IDD.

Student perceptions of inclusion and IPSE were largely positive between the campuses involved in this study. Both student samples had extremely favorable responses to having students with IDD on their college campuses (96% of students from the pilot IPSE and 96% of students from the established IPSE campus believed students with IDD would positively influence the campus community), thus supporting the potentiality that IPSE could be successful at these universities.

Compared to the Pennsylvania samples, Texas A&M students from Gilson et al.'s (2020) study were 10–11% less likely to agree that students with IDD should have the opportunity to advance their education through an IPSE program at their university (86% compared to 96% at the pilot IPSE campus and 97% at the established IPSE campus). Campus climate, namely the pilot IPSE campus's commitment to their Spiritan mission and the established IPSE campus's core values of inclusion and early adoption of IPSE, likely played a significant role in why students responded the way they did.

Perceptions of Students with IDD in Inclusive Postsecondary Education

Few differences were noted in attitudes regarding students with IDD and their ability to succeed in IPSE between the pilot IPSE campus and established IPSE campus; however, distinct differences were noted between student perceptions at the Pennsylvania campuses and at Texas A&M. Student respondents from the established IPSE campus held slightly more favorable beliefs that students with IDD should be offered inclusive education opportunities (97%), pursue higher education (97%), and take part in all aspects of university life (99%) than those from the pilot IPSE campus (94%; 96%; and 96%, respectively). Students from the Texas A&M study consistently rated their perceptions on these items approximately 5–10% lower than the students in this study (Gilson et al., 2020). On the contrary, Texas A&M students were much less likely to think that students with IDD should continue their education at special schools (8%) than students from the pilot IPSE (40%) and established IPSE (32%). Distinctions in these findings may stem from the overall size and mission of each university; whether the university was private or public; the length of time each IPSE had been in operation on the campus; and/or differences in the cultural or societal expectations of people with IDD in various regions of the country.

Correlates for IPSE Success

Favorable ratings of inclusive education among these student populations may be the result of inclusive experiences at the K–12 level or in higher education settings (Fisher et al., 2019). This finding could also be due to meaningful social interactions between students with IDD and non-disabled peers (Athamanah et al., 2020). Westling et al. (2013) found that university students expressed favorable attitudes toward students with disabilities, but these attitudes were predicated on prior relationships and experiences. Findings revealed that participants who had prior contact with individuals with IDD had more favorable perceptions than those who had not, and even more so if students had knowledge of IPSE programs (Westling et al., 2013). Similarly, the present study found that when students knew someone with an IDD, they were 6 times more likely to believe that students with IDD should participate in all aspects of university life than those who did not know someone with IDD. Other studies have demonstrated that high-quality interactions between students with and without IDD increased knowledge of and positive attitudes towards those with IDD, ultimately leading to increased prosocial behaviors among students without IDD (Copeland et al., 2004; Siperstein et al., 2007).

Parental level of education appeared to play a pivotal role in students' attitudes towards people with IDD and what IPSE students were capable of. In the bivariate analysis,

students with one or both parents who had graduated college consistently rated their perceptions of inclusion and IPSE more favorably across all attitudinal survey items. When all variables were controlled for, parent education fell out of significance for many items, but significantly predicted students' beliefs that people with IDD could obtain a job. Few studies have included parent education as a potential predictor of student attitudes towards those with disabilities; however, higher levels of educational attainment have been found to predict positive attitudes toward people with ID (Yazbeck et al., 2004). Because stigma, attitudes, and beliefs are passed culturally from generation to generation, it is possible that student perceptions towards those with disabilities are also relayed over time and should be examined in future studies (McConkey et al., 2016).

Perceptions of Support Needed for Students with IDD in Postsecondary Education

The perceived need for support of students with IDD was higher on the pilot IPSE campus (88%) compared to that of students from the established IPSE campus (70%) and Texas A&M (46%; Gilson et al., 2020). Perhaps institutional awareness and visibility of IPSE in the five years that the established program had been in operation led to greater awareness of natural supports for students with IDD and greater utilization of inclusive course design among faculty. Alternatively, greater use of Universal Design for Learning principles, course adaptations, and natural supports on the established IPSE campus may have led students to not notice the additional support provided to students with IDD.

While students from the pilot IPSE campus may have perceived that more instructor support would be necessary for peers with IDD, they were more willing to serve as peer supports (81%) for students with IDD and more open to receiving inclusive practices training (76%) than those at the established IPSE program (70% and 67% respectively). This may relate to the university's Catholic Spiritan mission and/or their students' high level of commitment and exposure to social justice causes and community-engaged learning experiences.

Students' sense of belonging at their university also significantly predicted their willingness to serve in a peer mentor role for other students with IDD on campus and be part of future inclusion training. This finding suggests that when students feel a stronger sense of belonging within their campus community, they are more committed to supporting inclusion for other students and communities, potentially those who regularly experience stigmatization and marginalization. This finding requires further exploration. Current literature speaks to the positive impact that belonging can have on student outcomes, including improved self-esteem and self-efficacy, increased engagement, higher levels of achievement, and an overall positive attitude of their campus climate (Korpershoek et al., 2020; Strayhorn, 2018); however, little research has been done to explore how these positive outcomes subsequently lead to higher levels of support for peers with disabilities or other minoritized communities.

Limitations and Future Research

The present study had several limitations, which can be addressed in future research. While the use of a survey allowed researchers to examine student attitudes at one point

in time, a cross-sectional design limits the ability to draw causal relationships between student attitudes and IPSE success and sustainability on these campuses. This survey should be re-administered to students at future time points to evaluate how campus-wide perceptions of inclusion and students with IDD evolve over time with increased exposure to IPSE. Additionally, this survey was only administered to two of PIHEC's 40 colleges and universities. While these two universities differed in the type of academic programs offered, their student populations were demographically similar. A future study could examine perceptions of inclusion and IPSE across PIHEC institutions, or across the US, as preliminary differences were noted between these mid-size universities and a larger public university in the southwest (Texas A&M). Sample sizes and student response rates to this survey may have also been low on both campuses as the survey was administered close to final examinations.

Response bias may have been a factor and should be considered when interpreting survey findings; namely, students who cared about inclusion or had friends or loved ones with IDD may have self-selected to participate in the survey, thus biasing responses (e.g., these students may have also responded more favorably on attitudinal items leading to overall higher mean scores). The term "inclusion" could have been interpreted by respondents in a variety of ways. Over the past few years, the topic of inclusion has been on the forefront of higher education, public, and social discourse, especially as it relates to people from racial, sexual, and gender minorities. Even though the survey made clear its intent to assess inclusive attitudes regarding people with IDD, some qualitative responses yielded concerning comments about other minority populations on campus. The researchers intend to disseminate findings from this survey to university administrators to justify expansion of diversity, equity and inclusion training, or future campus climate surveys, so that all underrepresented student populations feel supported.

Confounding variables (e.g., continuous age of respondent; whether the respondent had a sibling, family member or friend with a disability; etc.) may not have been gathered, but may have influenced findings. Some items may have been misinterpreted and were, therefore, removed from this analysis. For example, student responses on the socioeconomic status item varied a great deal, which led researchers to believe that students may have been confused on whether to report their family's annual household income or their own. Lastly, continuous data was not gathered for some variables (e.g., age), which limited the level of statistical analysis that could be conducted and our specificity in drawing conclusions from that data.

Implications for Practice

Findings from this study have several important implications for increasing access to IPSE for students with IDD. There was a strong willingness among student peers to receive training in support of students with IDD on college campuses (76% on IPSE pilot campus; 70% on IPSE established campus). As recognized in both scholarly literature and practitioners working in IPSE, no current best practices exist for campus-wide inclusive practices training (Alqazlan et al., 2019). There is a need for future researchers to determine if peer mentor training programs, or diversity and inclusion training programs aimed at the broader campus community, can impact student perceptions of inclusion,

comparing these efforts to campuses that do not engage in intentional training. Both IPSE campuses in this study employ peer mentor training on person-centered approaches, Universal Design for Learning, and Social-Role Valorization; however, IPSE campuses may benefit from more standardized training approaches aimed at reaching the entire student body, as well as university faculty and staff.

Researchers may also wish to consider how campus climate can impact perceptions of inclusion in respective environments. Findings from this study as well as Gilson et al.'s (2020) demonstrated that unique characteristics of individual campuses may shape how inclusion is viewed by students, faculty, and staff. These characteristics may be best understood if large-scale replication of this study were conducted nationally to understand the dispositions and trends that promote or inhibit inclusion and the success of IPSE programs. This study would also be of benefit to campuses that do not currently host IPSE programs or have college-like experiences for students with IDD to better understand key distinctions between campuses with and without fully inclusive models.

Conclusion

This study extends the current body of literature on stakeholder attitudes of inclusion by comparing student attitudes at an established IPSE campus to those of a pilot IPSE campus. Students from the established IPSE had more favorable ratings of inclusion and IPSE, potentially demonstrating that attitudes had been enculturated over the five years of their program, while students from the pilot IPSE expressed increased willingness to serve as peer mentors and receive inclusion training. Students in this study generally reported more favorable perceptions of inclusion than Texas A&M students. This speaks to the need to conduct a national survey of campus stakeholder attitudes on IPSE. As postsecondary opportunities continue to expand for students with IDD, it is vital that we understand facilitators and barriers to these programs to champion inclusion within our campus communities and across the US.

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Table 1

Participant Characteristics

Student Characteristics	Pilot IPSE Campus Students (n=199)	Existing IPSE Campus Students (n=121)
Age, n (%)		
18-29	176 (88.4)	112 (93.3)
30-39	8 (4.0)	3 (2.5)
40-49	5 (2.5)	3 (2.5)
50+	8 (4.0)	2 (1.7)
Gender, n (%)		
Female	167 (83.9)	89 (75.4)
Male	29 (14.6)	25 (21.2)
Transgender or Other	2 (1.0)	2 (1.7)
Race, n (%)		
White/Caucasian	171 (68.4)	99 (82.5)
Multiracial	8 (4.0)	2 (1.7)
Hispanic, Latino Spanish	7 (3.5)	8 (6.7)
Asian	5 (2.5)	1 (0.8)
African American/Black	4 (2.0)	9 (7.5)
Native Hawaiian or Pacific Islander	1 (0.5)	0 (0.0)
Academic Programs, n (%)		
Liberal Arts and Music	47 (23.6)	74 (62.2)
Business	31 (15.6)	5 (4.2)
Health Sciences/Biomedical Engineering	29 (14.6)	0 (0.0)
Education	27 (13.6)	13 (10.9)
Natural and Environmental Sciences	27 (13.6)	9 (7.6)
Pharmacy	20 (10.1)	0 (0.0)
Nursing	13 (6.5)	0 (0.0)
Law	5 (2.5)	0 (0.0)
Social Work	0 (0.0)	15 (12.6)
Technology	0 (0.0)	3 (2.5)
Language, n (%)		
English	168 (84.4)	103 (85.8)
Non-Native English Speakers	31 (15.6)	17 (14.2)
Role, n (%)		
Undergraduate student	131 (65.8)	111 (92.5)
Master student	43 (21.6)	8 (6.7)
Doctoral student	25 (12.6)	1 (0.8)
Accommodations, n (%)		
Yes	29 (14.6)	17 (14.2)
No	170 (85.4)	103 (85.8)
Parent Education, n (%)		
High school education or less	49 (24.6)	49 (40.8)
One parent graduated college	42 (21.1)	39 (32.5)
Both parents graduated college	106 (52.3)	32 (26.7)
Knows Someone with IDD, n (%)		
Yes	167 (95.4)	107 (93.9)
No	8 (4.0)	7 (5.8)
Sense of Belonging, n (%)		
Yes	160 (83.8)	93 (77.5)
No	31 (16.2)	27 (22.5)

Table 2

Student Perceptions of IPSE and Students with IDD

Survey Items	Pilot IPSE Campus Students (n=199) [mean (SD)]	Pilot IPSE Campus Mostly Disagree [n (%)]	Pilot IPSE Campus Mostly Agree [n (%)]	Established IPSE Campus Students (n=121) [mean (SD)]	Established IPSE Campus Mostly Disagree [n (%)]	Established IPSE Campus Mostly Agree [n (%)]
I think people with IDD can obtain the job of their choice.	2.84 (.75)	50 (29.9)	117 (70.1)	2.72 (.65)	46 (39.0)	72 (61.0)
I think people with IDD should be offered the same educational opportunities as those without disabilities.	3.49 (.63)	10 (6.0)	158 (94.0)	3.55 (.59)	4 (3.4)	114 (96.6)
I think students with IDD should continue their education at special schools.	2.39 (.79)	100 (60.2)	66 (39.8)	2.19 (.79)	79 (68.1)	37 (31.9)
I think students with IDD can succeed in a four-year college or university.	3.26 (.65)	17 (10.2)	150 (89.8)	3.27 (.57)	7 (5.9)	111 (94.1)
I think students with IDD should have the opportunity to advance their education through an inclusive higher education program my university's campus.	3.43 (.62)	7 (4.2)	160 (95.8)	3.41 (.56)	4 (3.4)	114 (96.6)
I think students with IDD should be able to take part in all aspects of university life including sporting events, student organizations, and social opportunities.	3.56 (.58)	7 (4.2)	160 (95.8)	3.54 (.52)	1 (.8)	117 (99.2)
I think students with IDD will have a positive influence on other students in the classroom at the university.	3.37 (.55)	7 (3.5)	191 (96.0)	3.21 (.51)	5 (4.1)	112 (92.6)
If students with IDD attend university classes, I think they would require more of the staff/instructor's support than other students.	3.13 (.68)	21 (12.5)	147 (87.5)	2.80 (.56)	35 (29.7)	83 (70.3)
I would be willing to be a peer support for a student with IDD who is enrolled at my university.	3.16 (.80)	32 (19.3)	134 (80.7)	2.83 (.78)	35 (29.9)	82 (70.1)
I would like to receive training on how to support students with IDD to succeed in college.	3.04 (.80)	40 (24.0)	127 (76.0)	2.84 (.78)	38 (32.8)	78 (67.2)

Table 3

Chi-Squared Results on Perceptions of Students with IDD

Participant Characteristics	Can obtain a job of their choice			Should have the same educational opportunities			Should receive education at special schools			Can succeed at the university			Should have the opportunity to advance their education			Should participate in all aspects of university life		
	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value
Age																		
18-29 years	177 (68.6)	81 (31.4)	.040*	246 (95.3)	12 (4.7)	.751	94 (37.0)	160 (63.0)	.758	238 (92.2)	20 (7.8)	.334	250 (96.9)	8 (3.1)	.001*	250 (97.3)	7 (2.7)	.920
30+ years	11 (44.0)	14 (56.0)		24 (92.3)	2 (7.7)		8 (30.8)	18 (69.2)		21 (84.0)	4 (16.0)		23 (92.0)	2 (8.0)		25 (96.2)	1 (3.8)	
Gender																		
Female	112 (69.1)	50 (30.9)	.090^	153 (93.9)	10 (6.1)	.536	63 (39.1)	98 (60.9)	.460	145 (89.5)	17 (10.5)	.350	157 (96.9)	5 (3.1)	.591	157 (96.9)	5 (3.1)	.905
Male	69 (60.5)	45 (39.5)		110 (96.5)	4 (3.5)		36 (31.9)	77 (68.1)		107 (93.9)	7 (6.1)		108 (94.7)	6 (5.3)		111 (97.4)	3 (2.6)	
Transgender/Other	5 (100.0)	0 (0.0)		5 (100.0)	0 (0.0)		2 (40.0)	3 (60.0)		5 (100.0)	0 (0.0)		5 (100.0)	0 (0.0)		5 (100.0)	0 (0.0)	
Race																		
Racial/Ethnic Minority	30 (69.8)	13 (30.2)	.639	42 (97.7)	1 (2.3)	.389	13 (31.0)	29 (69.0)	.389	42 (97.7)	1 (2.3)	.114	42 (97.7)	1 (2.3)	.638	39 (92.9)	3 (7.1)	.068^
White/Caucasian	158 (66.1)	81 (33.9)		227 (94.6)	13 (5.4)		89 (37.6)	148 (62.4)		216 (90.4)	23 (9.6)		230 (96.2)	9 (3.8)		235 (97.9)	5 (2.1)	
School																		
Business, Tech, Law	24 (68.6)	11 (31.4)	.801	32 (91.4)	3 (8.6)	.406	18 (52.9)	16 (47.1)	.016*	29 (82.9)	6 (17.1)	.290	33 (94.3)	2 (5.7)	.834	32 (91.4)	3 (8.6)	.151
Health Sci, Nurse, Pharm	38 (70.4)	16 (29.6)		51 (92.7)	4 (7.3)		22 (40.7)	32 (59.3)		49 (90.7)	5 (9.3)		53 (98.1)	1 (1.9)		52 (96.3)	2 (3.7)	
Education, Social Work	30 (62.5)	18 (37.5)		45 (93.8)	3 (6.3)		11 (22.9)	37 (77.1)		46 (95.8)	2 (4.2)		46 (95.8)	2 (4.2)		48 (100.0)	0 (0.0)	
Environ/Natural Sciences	23 (71.9)	9 (28.1)		32 (100.0)	0 (0.0)		16 (50.0)	16 (50.0)		29 (90.6)	3 (9.4)		30 (93.8)	2 (6.3)		32 (100.0)	0 (0.0)	
Lib Arts, Psych, Music	73 (63.5)	42 (36.5)		111 (96.5)	4 (3.5)		35 (31.0)	78 (69.0)		107 (93.0)	8 (7.0)		111 (96.5)	4 (3.5)		112 (97.4)	3 (2.6)	
Role																		
Undergraduate Student	145 (66.8)	72 (33.2)	.748	206 (94.9)	11 (5.1)	.809	80 (37.6)	133 (62.4)	.526	199 (91.7)	18 (8.3)	.891	208 (95.9)	9 (4.1)	.652	212 (97.7)	5 (2.3)	.359
Graduate Student	44 (64.7)	24 (35.3)		66 (95.7)	3 (4.3)		23 (33.3)	46 (66.7)		62 (91.2)	6 (8.8)		66 (97.1)	2 (2.9)		65 (95.6)	3 (4.4)	
Student Course Load																		
Part-Time	80 (72.7)	30 (27.3)	.069^	108 (97.3)	3 (2.7)	.171	37 (33.6)	73 (66.4)	.420	101 (91.8)	9 (8.2)	.908	106 (96.4)	4 (3.6)	.877	108 (98.2)	2 (1.8)	.423
Full-Time	109 (62.3)	66 (37.7)		164 (93.7)	11 (6.3)		66 (38.4)	106 (61.6)		160 (91.4)	15 (8.6)		168 (96.0)	7 (4.0)		169 (96.6)	6 (3.4)	
Has Accommodations																		
Yes	27 (67.5)	13 (32.5)	.864	37 (92.5)	3 (7.5)	.410	15 (38.5)	24 (61.5)	.698	36 (90.0)	4 (10.0)	.698	40 (100.0)	0 (0.0)	.172	38 (97.4)	1 (2.6)	.921
No	162 (66.1)	83 (33.9)		235 (95.5)	11 (4.5)		88 (36.2)	155 (63.8)		255 (91.8)	20 (8.2)		234 (95.5)	11 (4.5)		239 (97.2)	7 (2.8)	
Parent Education																		
High School or Less	49 (55.1)	40 (44.9)	.019*	85 (94.4)	5 (5.6)	.901	36 (40.4)	53 (59.6)	.350	79 (88.8)	10 (11.2)	.502	84 (94.4)	5 (5.6)	.525	86 (95.6)	4 (4.4)	.466
College (One parent)	57 (74.0)	20 (26.0)		73 (94.8)	4 (5.2)		23 (29.9)	54 (70.1)		72 (93.5)	5 (6.5)		74 (96.1)	3 (3.9)		75 (98.7)	1 (1.3)	
College (Both parents)	83 (70.3)	35 (29.7)		113 (95.8)	5 (4.2)		43 (37.4)	72 (62.6)		109 (92.4)	9 (7.6)		115 (97.5)	3 (2.5)		115 (97.5)	3 (2.5)	
Knows Someone w/ IDD																		
Yes	173 (66.0)	89 (34.0)	.953	250 (95.1)	13 (4.9)	.796	93 (35.9)	166 (64.1)	.873	239 (91.2)	23 (8.8)	.677	252 (96.2)	10 (3.8)	.749	256 (97.7)	6 (2.3)	.007*
No	10 (66.7)	5 (33.3)		14 (93.3)	1 (6.7)		6 (40.0)	9 (60.0)		14 (93.3)	1 (6.7)		14 (93.3)	1 (6.7)		13 (86.7)	2 (13.3)	
Sense of Belonging																		
Yes	154 (66.4)	78 (33.6)	.962	223 (95.7)	4 (7.5)	.321	83 (36.1)	147 (63.9)	.748	213 (91.8)	19 (8.2)	.769	224 (96.6)	8 (3.4)	.451	50 (96.2)	2 (3.8)	.616
No	35 (66.0)	18 (34.0)		49 (92.5)	10 (4.3)		20 (38.5)	32 (61.5)		48 (90.6)	5 (9.4)		50 (94.3)	3 (5.7)		227 (97.4)	6 (2.6)	
Engaged with Peers																		
Yes	81 (73.0)	30 (27.0)	.058^	108 (96.4)	4 (3.6)	.110	48 (42.9)	64 (57.1)	.073^	103 (92.8)	8 (7.2)	.556	108 (97.3)	3 (2.7)	.418	110 (98.2)	2 (1.8)	.401
No	108 (62.1)	66 (37.9)		164 (94.3)	10 (5.7)		55 (32.4)	115 (67.6)		158 (90.8)	16 (9.2)		166 (95.4)	8 (4.6)		167 (96.5)	6 (3.5)	
Free to Choose Life Path																		
Yes	161 (69.1)	72 (30.9)	.035*	225 (96.2)	9 (3.8)	.081^	93 (40.1)	139 (59.9)	.007*	214 (91.8)	19 (8.2)	.732	227 (97.4)	6 (2.6)	.017*	229 (97.9)	5 (2.1)	.142
No	28 (53.8)	24 (46.2)		47 (90.4)	5 (9.6)		10 (20.0)	40 (80.0)		47 (90.4)	5 (9.6)		47 (90.4)	5 (9.6)		48 (94.1)	3 (5.9)	

* = indicates p value < .05; ^ = indicates p value < .10

Table 4

Chi-Squared Results on Supports Needed for Students with IDD

Participant Characteristics	Students with IDD require more instructor support			Willing to be peer support for student with IDD			Willing to be trained to support students with IDD		
	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value	Agree [n (%)]	Disagree [n (%)]	p value
Age									
18-29 years	209 (81.0)	49 (19)	.488	196 (76.9)	59 (23.1)	.039*	187 (73.3)	68 (26.7)	.534
30+ years	20 (76.9)	6 (23.1)		20 (76.9)	6 (23.1)		17 (65.4)	9 (34.6)	
Gender									
Female	143 (87.7)	20 (12.3)	.001*	129 (80.1)	32 (19.9)	.067^	125 (77.2)	37 (22.8)	.096^
Male	81 (71.1)	33 (28.9)		79 (69.9)	34 (30.1)		74 (65.5)	39 (34.5)	
Transgender/Other	3 (60.0)	2 (40.0)		5 (100.0)	0 (0.0)		4 (80.0)	1 (20.0)	
Race									
Racial/Ethnic Minority	34 (79.1)	9 (20.9)	.788	34 (81.0)	8 (19.0)	.524	26 (63.4)	15 (36.6)	.125
White/Caucasian	194 (80.8)	46 (19.2)		182 (76.5)	56 (23.5)		179 (74.9)	60 (25.1)	
School									
Business, Tech, Law	31 (88.6)	4 (11.4)	.081^	25 (71.4)	10 (28.6)	.040*	20 (57.1)	15 (42.9)	.055^
Health Sci, Nurse, Pharm	49 (89.1)	6 (10.9)		47 (85.5)	8 (14.5)		45 (83.3)	9 (16.7)	
Education, Social Work	34 (70.8)	14 (29.2)		42 (87.5)	6 (12.5)		38 (79.2)	10 (20.8)	
Environ/Natural Sciences	27 (84.4)	5 (15.6)		20 (64.5)	11 (35.5)		21 (65.6)	11 (34.4)	
Lib Arts, Psych, Music	88 (76.5)	27 (23.5)		81 (71.7)	32 (28.3)		80 (70.8)	33 (29.2)	
Role									
Undergraduate Student	171 (78.8)	46 (21.2)	.221	159 (74.3)	55 (25.7)	.158	152 (70.7)	63 (29.3)	.244
Graduate Student	59 (85.5)	10 (14.5)		57 (82.6)	12 (17.4)		53 (77.9)	15 (22.1)	
Student Course Load									
Part-Time	96 (86.5)	15 (13.5)	.039*	91 (82.7)	19 (17.3)	.043*	82 (74.5)	28 (25.5)	.527
Full-Time	134 (76.6)	41 (23.4)		125 (72.3)	48 (27.7)		123 (71.1)	50 (28.9)	
Has Accommodations									
Yes	32 (80.0)	8 (20.0)	.943	32 (82.1)	7 (17.9)	.365	29 (76.3)	9 (23.7)	.565
No	198 (80.5)	48 (19.5)		184 (75.4)	60 (24.6)		176 (71.8)	69 (28.2)	
Parent Education									
High School or Less	67 (74.4)	23 (25.6)	.044*	72 (80.9)	17 (19.1)	.223	64 (71.9)	25 (28.1)	.965
College (One parent)	59 (76.6)	18 (23.4)		53 (69.7)	23 (30.3)		55 (72.4)	21 (27.6)	
College (Both parents)	103 (87.3)	15 (12.7)		91 (77.8)	26 (22.2)		86 (73.5)	31 (26.5)	
Knows Someone w/ IDD									
Yes	211 (80.2)	52 (19.8)	.338	204 (78.2)	57 (21.8)	.169	195 (74.7)	66 (25.3)	.018*
No	11 (73.3)	4 (26.7)		8 (57.1)	6 (42.9)		6 (42.9)	8 (57.1)	
Sense of Belonging									
Yes	189 (81.1)	44 (18.9)	.534	183 (79.6)	47 (20.4)	.008*	178 (77.1)	53 (22.9)	<.001*
No	41 (77.4)	12 (22.6)		33 (62.3)	20 (37.7)		27 (51.9)	25 (48.1)	
Engaged with Peers									
Yes	99 (88.4)	13 (11.6)	.006*	89 (81.7)	20 (18.3)	.095^	85 (76.6)	26 (23.4)	.211
No	131 (75.3)	43 (24.7)		127 (73.0)	47 (27.0)		120 (69.8)	52 (30.2)	
Free to Choose Life Path									
Yes	191 (81.6)	43 (18.4)	.276	178 (77.1)	53 (22.9)	.542	170 (73.3)	62 (26.7)	.501
No	39 (75.0)	13 (25.0)		38 (73.1)	14 (26.9)		35 (68.6)	16 (31.4)	

* = indicates p value < .05; ^ = indicates p value < .10