

## *Original Paper*

# College Students' Access to Academic Accommodations Varies as a Function of School Type, Selectivity, and Cost

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### **Abstract**

*Students with disabilities face many challenges in their pursuit of higher education. Academic accommodations and other educational supports can allow these students to learn, and to demonstrate their learning, in a manner similar to their classmates without disabilities. The purpose of this study was (1) to determine the percent of students classified with disabilities and receiving accommodations in college and (2) to see if students' access to accommodations varies as a function of their college's type, selectivity, and cost. Overall 4.6% of undergraduate students are formally registered with their school's disability office. Contrary to expectations, the highest percentage of students with disabilities receiving accommodations are found in America's most selective and expensive private colleges and universities. The prevalence of students with disabilities at private, liberal arts colleges in particular is almost three times higher than the prevalence at two-year public (i.e., community) colleges. These findings suggest that public colleges should be more proactive in identifying and accommodating students with disabilities and private colleges should be more judicious in their accommodation granting. Colleges should also use principles of universal design to promote the academic success of all students, regardless of their disability status.*

### **Keywords**

*academic accommodations, college students, disabilities, postsecondary education*

### **1. Introduction**

Students with disabilities face many challenges in their pursuit of higher education. By definition, these students experience substantial limitations in major life activities compared to most people in the general population (Gordon, Lewandowski, & Lovett, 2016). For example, students with physical disabilities may have problems seeing instructional material, hearing lectures, or managing chronic pain during the

course of the semester. Students with learning disabilities may have difficulty with reading comprehension, math problem solving, or test-taking speed due to problems with cognitive processing. Students with attention-deficit/hyperactivity disorder (ADHD) may have difficulty taking notes in class, submitting assignments on time, or prioritizing academic tasks due to significant symptoms of inattention, hyperactivity, or impulsivity (American Psychiatric Association, 2013; Lewandowski, Lovett, & Gordon, 2017).

Postsecondary students with disabilities are entitled to academic accommodations under the auspices of the Americans with Disabilities Act Amendments Act (2008) and Section 504 of the Rehabilitation Act (1973). These civil rights laws are designed to protect adults with disabilities from discrimination by providing them with the same access to educational opportunities as their classmates without disabilities (Lovett, 2014). For example, students who are deaf or hard of hearing might be provided with a sign language interpreter during class. Students with learning disabilities might require additional time on tests to mitigate slow reading speed. Students with ADHD might complete exams in a separate, distraction-reduced setting to minimize errors caused by inattention or distractibility. Accommodations allow students with disabilities to learn, and to demonstrate their learning, in a manner similar to their peers (Lovett & Lewandowski, 2016).

Surprisingly little data are available regarding the number of students with disabilities who receive academic accommodations in college (Avellone & Scott, 2018). Between 11.6% and 21.9% of undergraduates report having at least one disability. Across studies, the most common disabilities are associated with ADHD, anxiety and mood disorders, specific learning disabilities, and physical or health-related problems (Bryan, Cooney, Elliott, & Richards, 2019; Eagan et al., 2017; Radwin et al., 2018).

Although many college students report having a disability, the percentage of students who receive formal accommodations is probably much lower. Whereas federal laws require primary and secondary schools to identify students with disabilities and to provide them with academic support and accommodations, colleges and universities do not bear these responsibilities (Lovett, Gordon, & Lewandowski, 2017). Instead, postsecondary students who want accommodations must disclose their disability status to their college or university and provide evidence that an accommodation is necessary to mitigate a limitation that affects their participation in school (Keenan, Madaus, Lombardi, & Dukes, 2019). Typically, students must discuss their condition with a disability professional at their college and provide documentation showing a disability or a need for accommodations. In practice, the documentation needed to obtain accommodations varies, with some professionals relying largely on students' self-reports of academic problems (Axelrod et al., 2019) and others requiring objective evidence of impairment from educational, medical, or psychological records (Lovett, Nelson, & Lindstrom, 2015). In any case, students with disabilities must advocate for themselves to obtain accommodations. However, many students are unwilling to disclose their disability status and request accommodations from their college (Lyman, Beecher, Griner, Brooks, Call & Jackson, 2016). In one large study, only 28% of

students with disabilities disclosed their disability status. Moreover, only 19% sought academic accommodations. The prevalence of students receiving accommodations at 4-year colleges and universities was especially low; only 11% of students with disabilities received accommodations in these educational settings (Newman et al., 2011).

It is also likely that the percentage of college students receiving accommodations for disabilities varies across postsecondary schools (Mamboleo, Dong, & Fais, 2020). Prospective, longitudinal data indicate that students with disabilities often have histories of academic problems and disproportionately enroll in less selective and less expensive colleges (Madaus, Gelbar, Dukes, Faggella-Luby, Glavey, & Romualdo, 2020; Newman & Madaus, 2015).

The National Longitudinal Transition Study - 2 (NLTS-2) followed a large, nationally representative sample of students with disabilities from early adolescence through early adulthood. All students in the sample had well-documented disabilities beginning in early childhood. On average, students were first identified as having a disability at age 5.8 years and began participating in special education at age 7.4 years. Students' primary disabilities reflected the distribution of the 12 federal disability categories for which children may qualify for special education services. Most students were classified with a specific learning disability. The study relied on school records to evaluate students' outcomes (Burghardt et al., 2017).

In high school, the students in the NLTS-2 struggled. They earned fewer credits than their classmates, especially in the math, science, and foreign language. They completed 21% fewer academic courses in high school and 36% more non-academic or vocational courses than their peers. They earned more than one-third of their academic credits in special education courses rather than in regular education classes. Students with disabilities also earned significantly lower GPAs than their classmates overall ( $M = 2.30$ ) and in academic courses specifically ( $M = 1.90$ ). Approximately 23% earned a cumulative GPA below 1.75 and 11% earned a cumulative GPA below 1.25. Two-thirds of students with disabilities failed at least one academic course. On average, students with disabilities failed 7 courses during high school (Newman et al., 2011).

Students with disabilities were also less likely to attend college than students in the general population. Students with disabilities who attended college were twice as likely as other students to enroll in a 2-year (i.e., community) college, and one-half as likely as other students to enroll in a 4-year college or university. Students with disabilities from low-income families were three times more likely to select 2-year over 4-year colleges. Once in college, students with disabilities completed fewer academic credits than other students and were less likely to complete their degrees. The primary reasons for non-completion were the high cost of college, the need for employment, and low grades (Newman et al., 2012).

The findings of the NLTS-2 converge with the results of more recent, nationally representative surveys of students with disabilities. Students with disabilities report earning lower grades, taking more remedial courses, and completing fewer advanced academic courses in high school than their classmates.

Moreover, students with self-reported disabilities tend to disproportionately enroll in 2-year public colleges and come from lower-income families (Bryan et al., 2019; Radwin et al., 2018).

The purpose of our study was to determine the prevalence of students with disabilities receiving academic accommodations in college. What percent of undergraduate students receive academic accommodations for a disability and does this percentage vary as a function of the characteristics of their postsecondary institution? Based on the results of previous research, we expected that the percentage of postsecondary students receiving formal accommodations would be substantially lower than the percentage of students who report a disability. Moreover, we expected the prevalence of students receiving accommodations to be highest at 2-year, less selective, and less expensive postsecondary institutions.

To test our hypotheses, we conducted a descriptive, quantitative study in which we relied on institutional-level data provided by the National Center for Education Statistics. These data reflect all federally funded postsecondary institutions in the United States. Rather than rely on students' self-reports, these data include objective information regarding the percent of students at each institution formally registered with its disability office and receiving accommodations. The data also allowed us to categorize postsecondary institutions based on objective criteria including type (e.g., public vs. private, 2- vs. 4-year), selectivity, and socioeconomic factors. We then conducted between-group analyses to investigate differences in students' access to accommodations across postsecondary schools.

The results of our study would provide normative data regarding the prevalence of students with disabilities who are receiving academic accommodations in college. Our findings would also allow us to determine if the provision of accommodations is uniform across postsecondary institutions or, as we expect, greater among students attending less selective and expensive schools.

## **2. Method**

### *2.1 Postsecondary Schools*

Data were collected from the Integrated Postsecondary Education Data System (IPEDS), a federal database maintained by the US Department of Education's National Center for Education Statistics (2020). IPEDS consists of data collected from several independent federal studies administered annually by the US Department of Education and integrated at the institutional level. Every postsecondary institution that participates in the federal student financial aid program is required to submit data under the Higher Education Facilities Act Amendment (2008). The data cover nine broad content areas: institutional characteristics, financial aid, admission, human resources, graduation rates, completions, enrollment, finance, and library resources.

Three inclusionary criteria were used for our study. First, schools must operate within the United States. Branch campuses of US institutions in foreign countries were not included. Second, schools must be degree-granting institutions; that is, they must offer an associate, bachelors, masters, doctoral, or first professional degree. Institutions that grant only certificates, awards, or continuing education or training

were not included. Third, schools must have an undergraduate enrollment  $\geq 400$  students. Because we wanted to determine the percent of undergraduates with disabilities at each institution, we excluded schools with no or low undergraduate enrollment (e.g., medical schools, law schools, very small colleges).

Postsecondary schools that exclusively serve students with disabilities (e.g., Beacon College, Landmark College) were excluded from the study. However, schools with programs for students with disabilities were retained. The final dataset included 2355 degree-granting, postsecondary institutions.

## 2.2 Variables

### 2.2.1 Students with Disabilities

Each institution reported the percent of current undergraduate students who are formally enrolled as a person with a disability through the institution's office of disabilities (or an equivalent office) and receiving accommodations. The percent reflects both full- and part-time undergraduate students. Schools with very low percentages (i.e.,  $< 3\%$ ) were not required to submit a value to protect students' privacy. In these instances, a median value of 1.5% was imputed to reflect this low percentage.

### 2.2.2 Type of College

Two variables were used to categorize colleges by type. Each institution was categorized based on sector, a composite variable that reflects the institution's control (i.e., directed by publicly or privately elected or appointed officials) and level (2- or 4-year programs). Because of the small number of private 2-year colleges, all 2-year colleges were combined into a single category. Consequently, colleges were divided into three mutually exclusive sectors: public 4-year institutions ( $n = 642$ ), private 4-year institutions ( $n = 889$ ), and public and private 2-year institutions ( $n = 824$ ).

Each institution was also categorized by Carnegie classification, which reflects the institution's educational orientation and highest granting degree. Classifications were assigned in IPEDS and included associate colleges ( $n = 1040$ ), general baccalaureate colleges ( $n = 303$ ), liberal arts baccalaureate colleges ( $n = 204$ ), masters colleges and universities ( $n = 558$ ), and doctoral/research universities ( $n = 250$ ).

### 2.2.3 Selectivity

The selectivity of each college was determined by the percent of undergraduate applicants admitted. Colleges were divided into four groups: high selectivity (i.e., 1-33% admitted,  $n = 93$ ); moderate selectivity (i.e., 34-66% admitted;  $n = 499$ ); low selectivity (i.e., 67-99% admitted,  $n = 704$ ); and open admission ( $n = 1055$ ). Schools with an open admission policy accept all eligible students who apply.

Colleges were also divided into quartiles based on their median standardized entrance exam scores for first-time, undergraduate students. Specifically, ACT composite ( $n = 1089$ ), SAT reading and writing ( $n = 1063$ ), and SAT math ( $n = 1066$ ) scores were used. Note that only colleges that require or accept entrance exam scores as part of the application process provided data.

### 2.2.4 Socioeconomic Factors

Two variables were used to categorize colleges by socioeconomic factors. Colleges were divided into quartiles based on the average net price for first-time, full-time undergraduate students. IPEDS calculates average net price by subtracting the average amount of federal, state, and local grants and scholarships from the total cost of attendance. Total cost of attendance reflects tuition, fees, room, board, books, and other expenses. Average net price, therefore, reflects the mean annual out-of-pocket cost for undergraduate students.

Colleges were also divided into quartiles based on the percent of undergraduate students receiving Pell grant aid. The Pell grant program (i.e., Higher Education Facilities Act Amendment, 2008, Title IV, Part A, Subpart I) provides monetary assistance to undergraduate students with demonstrated financial need to help meet educational expenses. Students from families with an adjusted gross income  $\leq$  \$26,000 are typically eligible for maximum funding. Pell grant percentage, therefore, serves as a proxy for the percent of undergraduate students from low-income families enrolled at each institution.

## 3. Results

### 3.1 Type of College

Descriptive statistics indicated that approximately 4.55% ( $SD = 4.14\%$ ) of undergraduate students are formally classified with disabilities. Prevalence ranged from 1.5% to 32% of students.

We conducted a one-way analysis of variance (ANOVA) to examine differences in the frequency of students with disabilities as a function of sector. The independent variable was sector with three levels: public 4-year, private 4-year, and 2-year institutions. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(2, 2352) = 118.56, p < .001, \eta^2 = .092$ . Results indicated heterogeneity of variances; consequently, we used Dunnett's C to explore all differences across levels of the independent variable. These post-hoc tests (Table 1) indicated significant differences between all three sectors, with the highest percentage of students with disabilities at 4-year private colleges and the lowest percentage at 2-year colleges.

We conducted a second ANOVA to examine differences in the frequency of students with disabilities as a function of Carnegie classification. The independent variable was Carnegie classification with five levels: doctoral, masters, liberal arts, general bachelors, and associate. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(4, 2350) = 96.34, p < .001, \eta^2 = .141$ . Post-hoc tests (Table 1) indicated the highest percentage of students with disabilities at liberal arts colleges and the lowest percentage at associate colleges, with doctoral, masters, and general bachelors degree-granting institutions falling midrange.

**Table 1. Percent of Students with Disabilities as a Function of Institutional Type**

Independent Variable	<i>M</i>	<i>SD</i>	<i>n</i>
Sector			
Private 4-year	6.12 <sub>a</sub>	5.18	642
Public 4-year	3.96 <sub>b</sub>	3.06	889
All 2- year	3.30 <sub>c</sub>	2.89	824
Carnegie Classification			
Liberal Arts	8.97 <sub>a</sub>	6.18	204
Doctoral	5.39 <sub>b</sub>	3.78	250
Masters	4.82 <sub>b,c</sub>	3.97	558
Bachelors	4.46 <sub>c</sub>	4.01	303
Associates	3.35 <sub>d</sub>	3.07	1040

*Note.* Means with different subscripts differ significantly at  $p < .05$ .

### 3.2 Selectivity

We conducted an ANOVA to examine differences in the frequency of students with disabilities as a function of each college's admission rate. The independent variable was admission selectivity with four levels: high, moderate, low, and open enrollment. The dependent variable was the percent of students with disabilities. The ANOVA was significant  $F(3, 2346) = 91.27, p < .001, \eta^2 = .105$ . Post-hoc tests (Table 2) indicated the highest percentage of students with disabilities in the most selective group of schools and the lowest percentage of students with disabilities in schools with open enrollment.

We conducted another ANOVA to examine differences in the frequency of students with disabilities as a function of each college's median ACT composite score. The independent variable was ACT composite score quartile. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(3, 1085) = 38.52, p < .001, \eta^2 = .096$ . Post-hoc tests (Table 2) indicated the highest percentage of students with disabilities in schools with the highest ACT composite scores and the lowest percentage of students with disabilities in schools with the lowest scores.

We conducted a third ANOVA to examine differences in the frequency of students with disabilities as a function of each college's median SAT reading and writing score. The independent variable was SAT reading and writing score quartile. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(3, 1059) = 36.97, p < .001, \eta^2 = .095$ . Post-hoc tests (Table 2) indicated significant differences between all quartiles, with the highest percentage of students with disabilities in schools with the highest SAT reading and writing scores and the lowest percentage of students with disabilities in schools with the lowest scores.

We conducted a final ANOVA to examine differences in the frequency of students with disabilities as a function of each college's median SAT math score. The independent variable was SAT math score

quartile. The dependent variable was the percentage of students with disabilities. The ANOVA was significant,  $F(3, 1062) = 30.74$ ,  $p < .001$ ,  $\eta^2 = .080$ . Post-hoc tests (Table 2) indicated significant differences between all quartiles, with the highest percentage of students with disabilities in schools with the highest SAT math scores and the lowest percentage of students with disabilities in schools with the lowest scores.

**Table 2. Percent of Students with Disabilities as a Function of Institutional Selectivity**

Independent Variable	<i>M</i>	<i>SD</i>	<i>n</i>
<b>Selectivity</b>			
High (4-33% admitted)	8.13 <sub>a</sub>	5.80	92
Moderate (34-66% admitted)	5.29 <sub>b</sub>	4.59	499
Low (67-99% admitted)	5.61 <sub>b</sub>	4.69	704
Open (100% admitted)	3.18 <sub>c</sub>	2.59	1055
<b>ACT Composite Quartile</b>			
1 Lowest 25%	3.88 <sub>a</sub>	3.62	266
2 Next 25%	4.63 <sub>a,b</sub>	3.69	269
3 Next 25%	5.59 <sub>c</sub>	4.31	285
4 Highest 25%	7.61 <sub>d</sub>	5.25	269
<b>SAT Reading/Writing Quartile</b>			
1 Lowest 25%	3.74 <sub>a</sub>	3.67	253
2 Next 25%	4.74 <sub>b</sub>	3.57	274
3 Next 25%	5.80 <sub>c</sub>	4.41	278
4 Highest 25%	7.56 <sub>d</sub>	5.36	258
<b>SAT Math Quartile</b>			
1 Lowest 25%	3.91 <sub>a</sub>	3.63	252
2 Next 25%	4.79 <sub>b</sub>	4.11	270
3 Next 25%	5.71 <sub>c</sub>	4.11	285
4 Highest 25%	7.41 <sub>d</sub>	5.33	259

*Note.* Means with different subscripts differ significantly at  $p < .05$ .

### 3.3 Socioeconomic Factors

We conducted an ANOVA to examine differences in the frequency of students with disabilities as a function of each college's net price. The independent variable was net price quartile. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(3, 2341) = 136.55$ ,  $p < .001$ ,  $\eta^2 = .149$ . Post-hoc tests (Table 3) indicated that the most expensive quartile of colleges had the



greatest percentage of students with disabilities whereas the 50% least expensive colleges had the lowest percentage of students with disabilities.

We conducted another ANOVA to examine differences in the frequency of students with disabilities as a function of percentage of Pell grant recipients at each college. The independent variable was Pell grant quartile. The dependent variable was the percent of students with disabilities. The ANOVA was significant,  $F(3, 2351) = 57.55, p < .001, \eta^2 = .068$ . Post-hoc tests (Table 3) indicated significant differences between all four quartiles; colleges having the smallest percentage of Pell grant recipients reported the largest percentage of students classified with disabilities.

**Table 3. Percent of Students with Disabilities as a Function of Socioeconomic Factors**

Independent Variable	<i>M</i>	<i>SD</i>	<i>n</i>
Net Price Quartile			
1 Lowest 25%	3.17 <sub>a</sub>	2.79	586
2 Next 25%	3.43 <sub>a,b</sub>	2.80	586
3 Next 25%	4.43 <sub>c</sub>	3.72	586
4 Highest 25%	7.21 <sub>d</sub>	5.39	587
Pell Grant Quartile			
1 Lowest 25%	6.21 <sub>a</sub>	5.06	597
2 Next 25%	4.64 <sub>b</sub>	3.76	541
3 Next 25%	4.08 <sub>c</sub>	3.47	615
4 Highest 25%	3.28 <sub>d</sub>	3.50	602

*Note.* Means with different subscripts differ significantly at  $p < .05$ .

#### 4. Discussion

Our study indicates that 4.6% of undergraduate students are formally registered with their college's disability services office and are eligible for accommodations and support. This percentage is much lower than the 11.6% to 21.9% of undergraduates who report having a disability. However, our data are consistent with the results of the NLTS-2 which showed that only 28% of students with disabilities disclosed their disability status to their college and only 19% sought formal accommodations.

Students with disabilities report several reasons for their reluctance to seek accommodations in college (Lyman et al., 2016; Thompson-Ebanks & Jarman, 2018; Smith, Woodhead, & Chin-Newman, 2020). Many postsecondary students with disabilities believe that they no longer need the accommodations they received in primary and secondary school. Other students do not want to be treated differently from their classmates without disabilities or to place a burden on their professors. Still other students question the fairness of receiving modifications to their assignments, exams, or curriculum. Finally, some students report a negative experience seeking accommodations in the past, making them less likely to request

them again in the future. The discrepancy between the percent of students who report disabilities and the percent who actually receive accommodations suggests that colleges should do more to encourage students to advocate for their needs and obtain the accommodations to which they are legally entitled.

Contrary to our expectations, the highest percentages of students receiving accommodations for a disability were found in America's most selective and expensive private colleges. With respect to college type, students attending private 4-year colleges and universities (especially liberal arts colleges) were significantly more likely to be classified with a disability and receive accommodations than students at other postsecondary institutions. In contrast, students at community colleges were least likely to be registered with their college's disability services office and receive formal academic support.

With respect to selectivity, students attending the most selective colleges and universities, with the highest ACT and SAT scores, were most likely to be classified with a disability and have access to accommodations. In contrast, students attending schools with open enrollment policies and the lowest test scores were least likely to have access to formal academic support.

Finally, with respect to socioeconomic factors, students attending the most expensive colleges and universities, with the fewest number of low-income pupils, were roughly twice as likely as students from the least expensive and least affluent schools to have access to accommodations and related services.

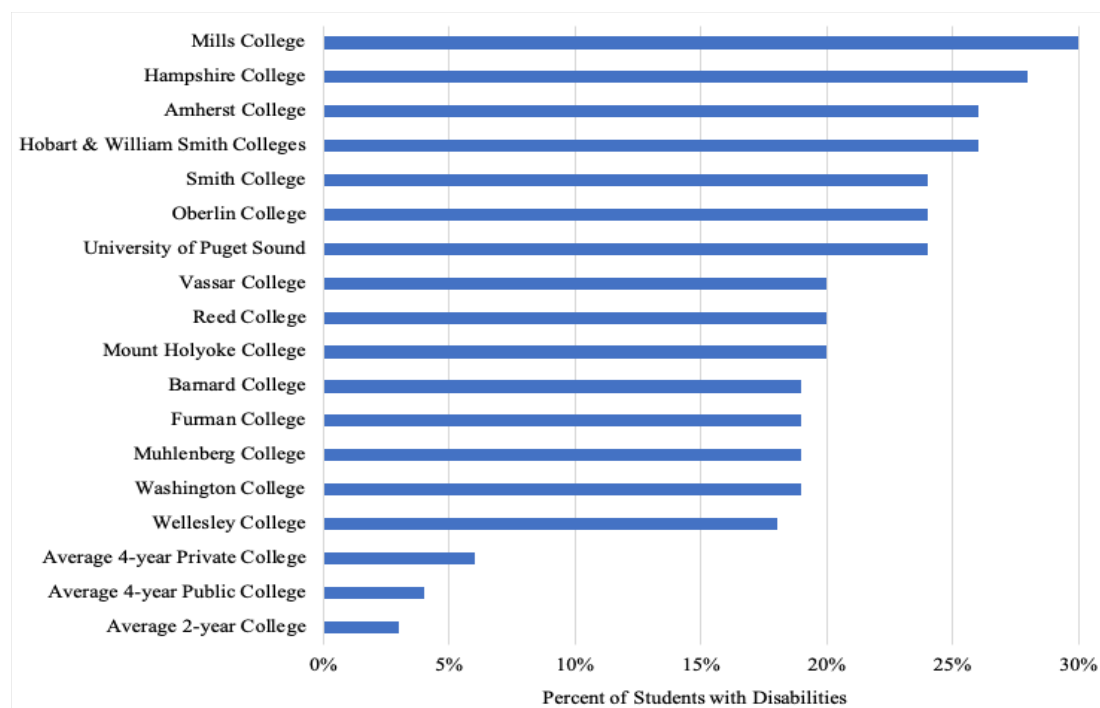
These findings are inconsistent with previous research showing that students with well-documented disabilities disproportionately enroll in less selective and expensive, 2-year public colleges. Students with disabilities are twice as likely to select 2-year public colleges over 4-year colleges and universities, perhaps because these students often have histories of academic problems and come from lower-income families (Newman et al., 2011). Indeed, survey data indicate that students with disabilities seek out community colleges because these colleges typically offer more intensive tutoring, guidance, and informal academic support; greater opportunities for remedial coursework; more flexible course delivery options to fit their work schedules; and the lowest cost (Madaus et al., 2020).

There are at least two explanations for the disparity in students' access to accommodations across postsecondary institutions. First, it is likely that some students receiving accommodations at selective, private colleges may not have disabilities or require the accommodations they receive. Previous research has shown qualitative differences between the developmental histories and academic functioning of students classified with disabilities at 2- and 4-year colleges (Weis, Sykes, & Unadkat, 2012; Weis, Speridakos, & Ludwig, 2014). Whereas students who receive accommodations at 2-year colleges often have well-documented and longstanding disability histories, most students at 4-year colleges and universities who receive accommodations were not diagnosed with a disability until after beginning college (Sparks & Lovett, 2009; Weis, Till, & Erickson, 2019; 2020). Moreover, the documentation submitted by students at 4-year colleges and universities to support their accommodation requests often lacks evidence that these students experience limitations that merit accommodations. In most cases, the academic functioning of these students is above average and indistinguishable from their classmates without disabilities (Lovett & Sparks, 2013; Weis, Erickson, & Till, 2017). Students attending

academically rigorous and selective colleges may feel the greatest need to acquire accommodations to help them achieve academic success (Lewandowski, Lambert, Lovett, Panahon, & Sytsma, 2014; Suhr, 2016). Furthermore, students attending more affluent schools may be best able to afford disability testing to obtain documentation to support their accommodation requests (Harrison & Edwards, 2010; Harrison, Green, & Flaro, 2012).

Private liberal arts colleges, in particular, should grant students' requests for accommodations more judiciously (Weis, Dean, & Osborne, 2016). At some private, liberal arts colleges, one in four students receives accommodations, a rate approximately five times higher than the national average (Figure 1). Many disability professionals rely predominantly on students' self-reports when rendering accommodation decisions (Axelrod et al., 2019). Empirical research has shown these reports to be prone to inaccuracies, especially when assessing students for psychological problems (Johnson & Suhr, 2019). Instead, professionals should supplement students' reports with objective evidence from students' educational, medical, and/or psychological records when rendering accommodation decisions (Lovett, 2014).

Although the provision of accommodations to students is well-intentioned, it is not without costs. The technology and support staff needed to administer instructional and test accommodations is expensive. Administering accommodations also takes considerable time. Perhaps most importantly, accommodations can alter the educational experiences of students who receive them and give students an unfair advantage over their classmates (AERA/APA/NCME, 2014). For example, waivers or substitutions for math or foreign language courses can fundamentally alter students' programs of study. Modifications to students' method of testing (e.g., no essay exams, access to notes during testing) or grading (e.g., no points taken off for grammatical errors) can cause problems when evaluating students' knowledge and skills. Students who receive additional time on exams, regardless of their disability status, tend to outperform students who complete tests under standard conditions (Julian, Ingersoll, Etienne, & Hilger, 2004; Lewandowski, Cohen, & Lovett, 2013). The indiscriminate provision of accommodations, therefore, can waste university resources, erode academic standards, and provide certain students with an academic advantage over their peers.



**Figure 1. Percent of Students with Disabilities at Selective Liberal Arts Colleges**

It is also likely that many community college students with disabilities are not receiving the accommodations they need and deserve. In addition to the barriers identified by previous researchers (Lyman et al., 2016), we believe two other factors limit community college students' access to accommodations. Some students may simply be unaware that accommodations are available in college or that it is their responsibility (rather than their school's) to request them. In particular, first-generation students and students from diverse social-cultural or linguistic backgrounds may lack the information needed to seek and obtain services (Lombardi, Murray, & Gerdes, 2012; Sirici, Banda, & Wells, 2019). Other students may lack documentation of their disability and be unable to afford the medical or psychological testing needed to obtain services (Keenan et al., 2019; Weis et al., 2014). Students from lower-income families, single parents, and other nontraditional students may be least financially able to provide this documentation and receive accommodations.

Community colleges must reach out to beginning students with disabilities to facilitate their access to accommodations. The early identification of students with disabilities and the provision of accommodations is critical to ensuring their civil rights. Accommodations also have real-world benefits for students who receive them. For example, students who disclose their disability and register for accommodations in their first year of college are significantly more likely to graduate than students who delay accommodations by one year. Furthermore, for each year accommodations are withheld, students' graduation is delayed by approximately 6 months (Hudson, 2013). Once students are registered with their college's disability services office and begin receiving accommodations, they tend to continue using accommodations throughout college (Mamboleo et al., 2020). Disability professionals should

proactively reach out through orientation programs, introductory courses designed for first-year students, academic advisor meetings, and informal gatherings (Newman et al., 2020). Colleges may also wish to contract with professionals who have expertise in psychological assessment to perform free or low-cost evaluations for students who require documentation to support their accommodation requests.

Finally, we believe that colleges should rely on principles of universal design to support *all* students, regardless of their disability status (Newman, Madaus, Lalor, & Javitz, 2020). Whenever possible, academic support services should be available to the entire student body so that all students may benefit from them. For example, if a professor is not interested in assessing a student's spelling or penmanship, all students should be allowed to use a word processor with spell check to complete exams. If a student's visual acuity or phonemic decoding skills are not relevant to a particular assignment, all students might be provided readings with optical character recognition, so that they can benefit from text-to-speech technology. If test-taking speed is not an essential component of an exam, all students might be awarded additional time to complete it. The universal provision of accommodations like these can effectively mitigate the limitations experienced by students with disabilities, improve the learning experiences of students without disabilities, and allow colleges to avoid rendering decisions regarding who should and should not be provided this important type of academic support.

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