

How Do College Students with Disabilities Do? Law, Self-determination, Self-advocacy, and Campus Resources

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Abstract: This survey study investigated understanding and use of the Americans with Disabilities Act (ADA), self-advocacy, self-determination, and campus resources by college students with disabilities. Thirty-one students registered with a student disability office at a Midwestern state university completed an anonymous survey. Thirty-two percent of participants reported that they knew how to advocate for their own education before beginning college. A majority of participants displayed strong understanding of self-determination, self-advocacy, and campus resources, but reported a weak understanding about the ADA. Participants reported stronger agreement on their use of self-determination and self-advocacy skills than on campus resources. Their lowest score was for their use of self-advocacy skill when their legal rights had to be voiced. These students' lack of understanding of their legal rights and limited self-advocacy skills in protecting their legal rights suggest implications for both transition services in high school and support services at the college level.

Keywords: Self-advocacy, Americans with Disabilities Act, self-determination, campus resources, college students with disabilities.

There is an increasing need for more research on factors that influence the success of students with disabilities in college (Krebs, 2019). Although high schools have implemented transition services from secondary school to postsecondary education settings and colleges have improved the training and accessibility of services to students with disabilities and provided training and resources for faculty and staff to accommodate the needs of these students, they continue to face numerous challenges (American Psychological Association, 2018; Banks, 2014; Garrison-Wade, 2012; Hong, 2015; Pingry O'Neill et al., 2012). College students with disabilities face many transitions from high school to higher education institutions as they navigate the daunting and unfamiliar demands of a higher education system that demands much more self-direction and self-initiative (McCarthy, 2007). They must undertake the responsibilities of their parents and teachers who had previously been the ones to obtain information, provide accommodations, and advocate for them in all aspects of their education.

The Americans with Disabilities Act (ADA) has enhanced the rights of students with disabilities and aids in mitigating the barriers to higher education and presented high school students with an optimistic outlook on attending college (U.S. Department of Education, Office for Civil Rights, 2011). Attending college can help students with disabilities to secure their future employment and career path. College graduates with disabilities are 63% more likely to have a job than their peers without a college degree (Dutta et al., 2009). In recent years, more students with disabilities are enrolling in colleges and universities. Compared to 11% in 2007 and 2008, about 20% of undergraduates enrolled in postsecondary institutions in 2015 and 2016 were documented as having a disability (National Center for Education Statistics, 2022).

Yet, despite the support of the ADA, which stresses accessibility and non-discrimination in college, students with disabilities enter college at a lower rate. In addition, students with disabilities who do go to college graduate at significantly lower rates than their peers without disabilities

(Mamiseishvili & Koch, 2012; Pingry O'Neill et al., 2012). Among students with disabilities who begin college, 25% could not pass their freshman year and 51% could not pass their third year (Mamiseishvili et al., 2012). In a longitudinal study, Knight et al. (2018) found that the presence of a disability did not influence their graduation rates, but students with disabilities took longer to complete their degrees than students without disabilities. This could be simply a result of the additional work that students with disabilities have to take on in order to navigate college environments that are not designed for their learning and daily needs (Wessel et al., 2009).

College students with disabilities are often not ready for the changes they experience in college and encounter difficulties in transitioning from high school to higher education institutions (Barnard-Brak et al., 2009; Hong et al., 2007). College students who report their disability are more likely to use and benefit from academic assistance and accommodations. However, according to the National Center for Education Statistics (2022), only about 12.5% of college students with disabilities reported their disability to the university.

Common barriers for students with disabilities in college have been reported (Scott, 2019). For example, they largely experience challenges with university-related matters, such as the perception and ability of faculty to provide appropriate accommodations, the lack of accessibility of university services, and documentation and determination of accommodations, as well as disability-related matters, such as poor self-advocacy skills and understanding of the laws mandating appropriate services (Keenan et al., 2019; Krebs, 2019). More specifically, based on previous literature (Garrison-Wade, 2007; Stodden et al., 2005), Garrison-Wade (2012) identified four barriers for college students with disabilities: architectural/access (e.g., public transportation, driving lessons), programmatic (e.g., inadequate university services), informational (e.g., lack of understanding of ADA and campus services), and attitudinal (e.g., negative attitude among faculty toward students with disabilities).

Support Factors for Positive College Experiences

Our extensive literature review revealed four specific support factors that are essential for the successful college experience of students with disabilities: students' knowledge and use of the ADA, self-advocacy, self-determination, and campus resources (Hong et al., 2007; Schreiner, 2007).

Knowledge of the ADA

It is extremely important that students understand the laws that affect and protect them in college, specifically the Americans with Disabilities Amendments Act of 2008 (ADA), Section 504 of the Rehabilitation Act of 1973, the Higher Education Opportunity Act, and the Post-9/11 Veterans Education Act. The increase in the number of students with disabilities in college is partly due to federal legislation that ensures equal access and nondiscrimination in post-secondary education for students with disabilities. Once in college, students with disabilities are no longer covered under the Individuals with Disabilities Education Act (IDEA), but receive services under the ADA, a landmark civil rights legislation. Under IDEA, advocates (e.g., parents, teachers, administrators) are responsible for all the critical decisions and implementations of the service plans. In college, students with disabilities are expected to obtain necessary information and advocate for themselves, but they are unfortunately not prepared suitably to advocate for their own educational rights (Keenan et al., 2019; Squires et al., 2018).

According to the ADA, students with disabilities have a responsibility to inform their college about their disability, provide assessment results, and seek out reasonable accommodations. Colleges are prohibited from making it overly difficult to establish proof of a disability, and students have the right to reveal their disability to college officials if they want services. Colleges have the responsibility

to provide reasonable accommodations and modifications to make courses and campus accessible so that college students with disabilities can participate in all the programs of a college, including extracurricular activities, without unnecessary obstacles, but colleges are not allowed to proactively seek out students with disabilities.

The ADA is an essential starting point for protecting the legal rights of college students with disabilities. However, as these students take on numerous new responsibilities in a new learning environment that is significantly different from high school, knowing and exercising their legal rights under the ADA can be a great challenge (McCarthy, 2007). The research about students' understanding of their legal rights under the ADA and how they use their understanding in protecting their educational rights on college campuses is limited and outdated. Recently published articles (i.e., Keenan, 2019; Krebs, 2019; Paranal, 2021; Singh, 2019) on the ADA and educational rights of college students with disabilities are mostly informational, offering summaries of key provisions and interpretations of the ADA that colleges and students with disabilities should know. They have not explored what college students with disabilities actually know and how they exercise their legal rights on university campuses.

Self-advocacy

Self-advocacy is the ability to speak up for one's needs, make requests, and deal with difficult situations to meet their needs. The importance of self-advocacy has been emphasized more than ever as many students with disabilities enter college not knowing how to effectively communicate their needs and evaluate their own strengths and weaknesses (Hong et al., 2007). Moreover, these students tend to be dissatisfied with their own capability to articulate their requests and accommodations to instructors and personnel in college. Students with disabilities who lack self-advocacy skills have a hard time transitioning to college (Garrison-Wade, 2012; Gilles, 2006) and developing a sense of belonging and community (Nistro et al., 2015; Vaccaro et al., 2015).

Students with disabilities benefit academically and socially from positive relationships and interactions with their professors that allow them to communicate their needs and ask questions in a risk-free environment (Squires et al., 2018). In addition, meeting with academic advisors is one of the factors positively related to persistence, along with high GPA, high level of aspiration, and full-time enrollment (Mamiseishvili & Koch, 2012). However, college students with disabilities often do not discuss their needs with professors due to the fear of negative reactions to this disclosure (Fleming et al., 2017; Scott, 2019). Mamiseishvili and Koch reported that 73% of students with disabilities in their study had never had an informal meeting with a faculty member and 59.9% had never participated in a study group. This lack of communication and involvement in interactions with fellow students and professors keeps them from practicing their self-advocacy skills, receiving appropriate accommodations (e.g., testing in a quiet place, preferential seating, large-letter handouts, and assistive technology devices), and achieving their maximum educational potential.

IDEA requires high schools to prepare students with disabilities for postsecondary education. However, Schreiner (2007) surveyed adolescents with disabilities on their own understanding of self-advocacy, reported their lack of understanding, and suggested that students should be explicitly taught about self-advocacy skills and how to handle important and sensitive issues that may arise in classes due to their disability. Student disability offices in colleges are not always equipped with capable staff and resources to train students on self-advocacy skills (Abreu et al., 2016; Summers et al., 2014). Moreover, instructors and staff in various supporting programs have frequently failed to meet the legal obligations toward college students with disabilities due to lack of knowledge and resources for ADA requirements, limited or no training on how to make appropriate adaptations to their instruction and instructional activities, and their own negative perceptions toward students with disabilities (Dowrick

et al., 2005; Hong, 2015; Layden et al., 2021; Squires et al., 2018). In a self-directed higher education system, research on students' current level of understanding and use of self-advocacy skills is important to support students with disabilities in an effective and timely manner.

Self-determination

Self-determination covers a broad range of behaviors showing one's capability to make decisions free from unnecessary influence or interference, know how to identify accommodations based on one's strengths and weakness, and understand and defend one's rights. It also reflects self-efficacy or confidence in one's abilities, self-awareness, self-advocacy, independence, and self-management skills (e.g., time management, organization, and study skills; Walker et al., 2011). Self-determination is a predictor of college success for students with disabilities (Herbert et al., 2014). Without strong self-determination, these students can struggle with significant social, behavioral, emotional, and learning challenges. Self-determination strategies help students with disabilities transition from high school to college, have an easier change, and remain in college. A higher level of self-determination is associated with better outcomes in later life.

There is no debate that understanding themselves and their disability and recognizing their strengths and weaknesses are important for students with disabilities. However, it can be hard for them to know whether they are being sufficiently assertive and proactive for their own learning when they face challenges. A large survey study of 541 college students, including 45 students with disclosed disabilities, revealed that college students with disabilities lack self-determinations skills (Squires & Countermine, 2018). These skills need to be taught early and explicitly as they can lead to improved self-advocacy (Hong et al., 2007; Schreiner, 2007; Summers et al., 2014). Once students with disabilities know themselves well, they are more likely to make proper choices and decisions about the accommodations and adaptations they need to meet their individual and unique needs, know how to use the resources around them, and communicate their challenges and special needs with their professors and supporting personnel.

Campus Resources

Colleges have addressed external barriers of students with disabilities through providing various services on campus, such as student disability offices, tutoring centers, writing centers, and peer mentoring programs. Nevertheless, it is unclear what college students with disabilities know about and how effectively they use these campus resources. Herbert et al. (2014) investigated 27 databases and approximately 200 articles, dissertations, books, and website links about college and students with disabilities and found only a few studies on how disability-related services affect these students. Among campus services, a student disability office is an essential resource for college students with disabilities, as it is intended to advocate for students, help them navigate the new learning environment, provide training on success factors and challenges, and support them to receive the proper adaptations for academic and non-academic activities. Such supports are necessary as these students might not know their responsibilities in seeking supports on campus or how to obtain legally protected adaptations (Hong et al., 2007).

Ineffective and inefficient services for college students with disabilities have been continuously documented (Squires et al., 2018). Discovering what college students with disabilities know about campus services and their experience with them can provide insights about how to support them more effectively. In particular, improved services from student disability offices have been called for to better prepare these students for challenging college experiences. Fleming et al. (2017) surveyed students with disabilities in three university settings and found that they had mixed feelings about the

services provided by these offices. Even though an increasing number of students with disabilities qualify for accommodations in college classes and have access to a student disability office, more than half who initially sought out services through the office did not continuously receive these services (Herbert et al, 2014). Moreover, Banks (2014) revealed that college students with disabilities reported feeling ashamed to disclose their disability and thus did not receive services provided by the on-campus disability office.

Current Study

A growing body of research on college students with disabilities and their needs has emphasized that these students need to understand the ADA, have self-advocacy and self-determination skills, and be familiar with campus resources to receive the services they deserve (Fleming et al., 2017; Keenan et al., 2019; Pingry O’Neill et al., 2012; Squires et al., 2018). Nevertheless, little is known about how well college students with disabilities know and use these success factors, and there is a lack of studies investigating their knowledge and use across multiple success factors to highlight those that require more attention and training efforts. The present study examined the self-reported understanding and use of the ADA, self-determination, self-advocacy, and campus resources among college students with disabilities for their access and participation in higher education institution. The survey study also sought suggestions from these students on how first-year college students with disabilities could succeed in college life. The following research questions guided the study:

1. What is the self-reported level of readiness of students with disabilities to advocate for themselves before entering college?
2. What is the self-reported level of understanding of college students with disabilities about the ADA, self-determination, self-advocacy, and campus resources?
3. How do college students with disabilities use their knowledge about the ADA, self-determination, self-advocacy, and campus resources on campus?
4. What advice do college students with disabilities have for upcoming first-year students with disabilities to achieve success in college life?

Methodology

Participants and Setting

Participants ($N = 31$) were college students with disabilities registered at the student disability office at a regional, public four-year college in the Midwestern United States with approximately 14,000 undergraduate and graduate students. According to the director of the student disability office, approximately 200 students with disabilities were registered with their office at that time, but this number did not reflect how many students with disabilities were enrolled at the university due to the fact that many might have decided not to register for services. It was also unknown how many of the 200 students were active students currently taking classes. Moreover, some of these students might not have had an IEP in secondary education and may have registered for a specific accommodation that might have been temporary. According to the website of the student disability office, accommodations were determined on an individual basis, but could include: modified testing environment, sign language interpreters, and assistance obtaining books in audio format.

No demographic information or any information that would identify participating students was collected in order to protect their anonymity and confidentiality on a relatively small campus. Instead of the sample statistics, we offer the participating university information available at the time of the data collection. The university enrollment record by race showed 5% African American, 2%

Asian, 82% Caucasian, 5% Hispanic or Latino, and other races, including Native Hawaiian or Pacific Islander, and two or more races. There were 45% male and 55% female students.

Instrument

The self-administered online survey consisted of 21 questions, including 11 rating questions (See Table 1) and 10 open-ended follow-up questions. The contents and wordings of the survey were clarified through a review by the researchers and two faculty members in the special education program at the participating university. The survey was composed of questions encompassing three themes: knowledge, use, and advice. The first theme consisted of seven rating questions on the students' understanding of support factors (i.e., ADA, self-advocacy, self-determination, campus resources; See Table 1) and five open-ended follow-up questions. Participants answered the rating questions using a 5-point Likert scale (1 = weakest and 5 = strongest) to show the strength of their understanding. For example, after a rating question on students' level of understanding of the ADA, students were asked to write what they knew about the ADA in an open-ended follow-up question. Open-ended follow-up questions are "Which rights under the Americans with Disabilities Act are you aware of?"; "What kind of accommodations or services do you know the participating college provides? Which do you use? How was your experience with those accommodations or experiences?"; "Which strategies have worked for you?"; "What is your definition of self-advocacy?"; and "Where did you learn to advocate for yourself?"

The second theme consisted of four rating questions about students' use of these factors for their learning on campus (See Table 2) and four open-ended follow-up questions: "What would be your next step if your legal rights regarding your disability were violated?"; "Which services are you aware of?"; "Explain your response (I am comfortable talking to my professors about my disability)"; and "How do your strengths and weaknesses affect your decision-making?" Participants were asked to rate their agreement or disagreement using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

The third theme has one open-ended question ("What advice would you have for an incoming freshman with disabilities?") seeking participants' advice to future first-year college students with disabilities.

Procedures and Data Analysis

The Institutional Review Board (IRB) granted approval for this anonymous survey study. The researchers did not have direct or indirect contact with potential participants. The researchers provided the IRB-approved invitation emails and the survey link to the director of the student disability office. The student disability office on campus supported the recruitment of the participants and the distribution of the online survey link to potential participants. The director sent out a recruitment email to all students registered with the office using their Listserv. Approximately 200 registered students were included in the Listserv. The student disability office also sent out a reminder email to encourage students' participation. Participants could skip any questions or stop the online survey at any time. Participation was anonymous and voluntary. The data for this study were collected before the recent COVID-19 pandemic, which disrupted the education of college students with disabilities as the internet/online learning environment posed additional social, emotional, and learning challenges (Paranal, 2021).

The quantitative data were analyzed using descriptive statistics (i.e., frequencies, percentages) for each survey item. Qualitative data gathered through the open-ended survey items were analyzed by the two researchers using Glaser and Strauss's (1967) constant comparative method. To establish

inter-rater reliability, each researcher read the participants' responses to the open-ended questions independently, noting key topics in the form of potential categories. The category codes for the open-ended questions went through several drafts until the researchers achieved 100% agreement for codes of each of the open-ended questions. Using the agreed-upon category codes, the two researchers coded participant responses independently for each open-ended question, compared the coding results, and reanalyzed the responses through face-to-face discussion until 100% inter-rater agreement was reached.

Results

Thirty-one college students with disabilities completed the anonymous online survey. The response rate calculated based on the total number of the registered students with disabilities at the Midwestern state university where the study took place is about 15%. Tables 1 and 2 show the percentage and frequency of participants' ratings of each item.

Level of Understanding of College Students with Disabilities

Knowing the Law: The Americans with Disabilities Act

Participants' understanding about the ADA received the weakest rating ($M = 1.80$, $SD = 1.19$) among the four success factors. Most participants rated themselves as having a very weak (56.67%, $n = 17$), weak (23.33%, $n = 7$), or moderate understanding (10%, $n = 3$) about the ADA, and only a few indicated having a strong (3.33%, $n = 1$) or very strong understanding (6.67%, $n = 2$). In an open-ended follow-up question, 10 participants (38.46%) reported that they did not know about or were unaware of the ADA. One student had an inaccurate understanding (i.e., "I have a right to remain silent") about the ADA. Rights participants believed they have under the ADA were access to course materials and buildings (34.62%, $n = 9$) and nondiscrimination toward them (15.38%, $n = 4$).

Self-advocacy

Participants reported their understanding of whether they knew how to advocate for themselves before beginning college ($M = 2.60$, $SD = 1.38$). About 70% of participants had a very weak (32%, $n = 8$), weak (16%, $n = 4$), or moderate understanding (20%, $n = 5$) of self-advocacy before attending college, while some reported a very strong (8%, $n = 2$) or strong understanding (24%, $n = 6$). When asked in an open-ended question where they learned to advocate for themselves, participants ($n = 27$) listed college environments (e.g., syllabus and student disability office; 25%, $n = 7$), local organizations (e.g., Army, hospital, or neurological rehabilitation centers; 17.86%, $n = 5$), real-life experiences (14.29%, $n = 4$), and family members (10.72%, $n = 3$).

Participants reported the strength of their understanding of helpful academic strategies for their learning ($M = 3.50$, $SD = 1.41$). Approximately half rated themselves as having a very strong (33.33%, $n = 10$) or strong understanding (20%, $n = 6$) of academic strategies they needed, while other participants reported a moderate (23.33%, $n = 7$), weak, (10%, $n = 3$), or very weak understanding (13.33%, $n = 4$). Effective academic strategies reported in an open-ended question included communication or speaking with instructors (41.72%, $n = 15$), sitting at the front of the class (44.83%, $n = 13$), and note taking (6.90%, $n = 2$).

Table 1. Percentages and Frequencies of the Responses of College Students with Disabilities: Understanding.

Survey Questions (Factors)	1 Weakest	2	3	4	5 Strongest	Mean	<i>SD</i>	<i>N</i>
1. Understanding of my own disability (Self-determination)	10.00% (3)	0% (0)	3.33% (1)	26.67% (8)	60.00% (18)	4.27	1.23	30
2. Self-esteem or self-confidence (Self-determination)	23.33% (7)	3.33% (1)	16.67% (5)	10.00% (3)	46.67% (14)	3.53	1.66	30
3. Academic Strategies (what helps you succeed in your college courses, such as sitting up front or getting to know your instructors) (Self-advocacy)	13.33% (4)	10.00% (3)	23.33% (7)	20.00% (6)	33.33% (10)	3.50	1.41	30
4. Accommodations or services available on campus (Campus Resources)	10.00% (3)	23.33% (7)	16.67% (5)	13.33% (4)	36.67% (11)	3.43	1.45	30
5. Self-advocacy (making decisions about your accommodations or talking to your instructors about your disability). (Self-advocacy)	16.67% (5)	10.00% (3)	27.67% (8)	20.00% (6)	26.67% (8)	3.30	1.42	30
6. I knew how to advocate for myself before beginning college. (College Readiness)	32.00% (8)	16.00% (4)	20.00% (5)	24.00% (6)	8.00% (2)	2.60	1.38	25
7. College students with disabilities' rights under Americans with Disabilities Act (Law)	56.67% (17)	23.33% (7)	10.00% (3)	3.33% (1)	6.67% (2)	1.80	1.19	30

Participants reported the strength of their understanding of what self-advocacy is ($M = 3.30$, $SD = 1.42$). Approximately half of participants reported a very weak (16.67%, $n = 5$), weak (10%, $n = 3$), or moderate understanding (27.67%, $n = 8$) of self-advocacy skills for communicating about and receiving accommodations based on their disability; some had a very strong (26.67%, $n = 8$) or strong understanding (20%, $n = 6$). In answer to an open-ended question about definitions of self-advocacy, 20 participants (68.97%) provided correct definitions, such as asking for help, articulating needs and rights, trying to work with professors, standing by requests, and speaking up for themselves. Three participants (10.34%) gave definitions that were somewhat correct, and three (10.34%) provided incorrect definitions (e.g., being independent).

Self-determination

Overall, the self-determination items received the highest mean rating scores. Participants scored the highest on knowing about their own disability ($M = 4.27$, $SD = 1.23$), with the majority reporting a very strong (60%, $n = 18$) or strong understanding (26.67%, $n = 8$) of their own disabilities. Some had a moderate (3.33%, $n = 1$) or very weak understanding (10%, $n = 3$). On the self-esteem or self-confidence item, the mean rating score was 3.53 ($SD = 1.66$), which was the second-highest mean rating among survey items. More than half of participants rated their understanding of self-esteem or self-confidence to be very strong (46.67%, $n = 14$) or strong (10%, $n = 3$). Other participants reported a very weak (23.33%, $n = 7$), weak (3.33%, $n = 1$), or moderate understanding (16.67%, $n = 5$) of self-esteem or self-confidence.

College Resources

Participants reported their level of understanding about accommodations or services available at college ($M = 3.43$, $SD = 1.45$). Half of participants reported that they had a very strong (36.67%, $n = 11$) or strong understanding (13.33%, $n = 4$) of accommodations and services available at college, while the other half reported a very weak (10%, $n = 3$), weak (23.33%, $n = 7$), or moderate understanding (16.67%, $n = 5$). In the responses to an open-ended question, the campus-level accommodations or services students knew about and actually used included the student disability office (60%, $n = 18$), extra time (23.33%, $n = 7$), assistive technology devices (13.33%, $n = 4$), recording (10%, $n = 3$), notetaker (10%, $n = 3$), books in PDF (6.67%, $n = 2$), the writing center ($n = 2$), absence leniency ($n = 2$), and having tests and materials read to them ($n = 2$).

Level of Reported Use of Support Factors by College Students with Disabilities

Americans with Disabilities Act

Participants' rating of their experience showed that nearly half of them strongly disagreed (37.50%, $n = 9$) or disagreed (12.50%, $n = 3$) that "*I speak out to make sure my legal rights are followed,*" while the other half expressed a mixed opinion (25%, $n = 6$), agreed (4.17%, $n = 1$), or strongly agreed (20.83%, $n = 5$) with the statement. In a follow-up open-ended question, the next steps students reported they would take if their legal rights were violated were to seek outside input (e.g., lawyer, government entity, consultant; $n = 6$), do nothing or accept ($n = 5$), ask the student disability office ($n = 3$), and find out more information on their own ($n = 3$).

Self-advocacy

Participants reported their use of self-advocacy skills: talking to their professors about their disability ($M = 3.68$, $SD = 1.18$). More than half of participants indicated that they strongly agreed (28%, $n = 7$) or agreed (32%, $n = 8$) that they were comfortable talking to professors, while other participants indicated a mixed opinion (28%, $n = 7$), disagreed (4%, $n = 1$), or strongly disagreed (8%, $n = 2$). When asked to specifically describe their comfort level when they were talking to their professors in an open-ended question, students responded that they were very comfortable (36.36%, $n = 8$), somewhat comfortable (40.91%, $n = 9$), and uncomfortable talking to professors (22.73%, $n = 5$). One explained:

When speaking to professors, a lot of them feel that we are a burden and regard us as such, when we need something, they hinder us more than help, I know of several DSS students who have been mistreated. So, this tells me to keep my eyes down and my mouth shut.

Another student mentioned mixed experiences with professors. “I get nervous talking to people and it can be a little hard for me. The professors who are very open and adaptive and check on me, I see to talk to them easier.” Other responses included “Most comply but usually we are treated like we are a kind of annoyance. We do more adjusting to the professors than they do for us” and “I have rather low self-esteem and have anxiety disorder which makes talking to them very difficult as I tend to start crying.”

Self-determination

On participants’ use of self-determination skills focusing on their strengths and weaknesses before making goals for their career, the mean rating was 3.71 ($SD = .86$) with split responses between mixed opinion (41.67%, $n = 10$), agreement (33.33%, $n = 8$), strong agreement (20.83%, $n = 5$), and disagreement (4.17%, $n = 1$). In an open-ended question, participants reported on how their strengths and weaknesses affected their decision-making. Five students (22.73%) commented that they focused on strengths when making decisions and five students (22.73%) noted that they considered both strengths and weaknesses, followed by focusing on only weaknesses (18.18%, $n = 4$).

Campus Resources

Participants reported whether they sought out services on campus when they struggled in class ($M = 3.04$, $SD = 1.24$). Their responses were split between mixed opinion (36%, $n = 9$), followed by strongly agree (16%, $n = 4$), strongly disagree (12%, $n = 3$), disagree (20%, $n = 5$), and agree (16%, $n = 4$). In an open-ended follow-up question, participants identified the specific services they used when they were struggling. The most frequently reported service was tutoring or the math help center (47.37%, $n = 9$), followed by the writing center (36.84%, $n = 7$), the student disability office (26.32%, $n = 5$), meeting their professors during office hours or conferences (15.79%, $n = 3$), teaching assistants (10.53%, $n = 2$), and the instructional technology office (10.53%, $n = 2$). Two participants indicated that they were not aware of any services on campus.

Table 2. Percentages and Frequencies of Responses of College Students with Disabilities: Use.

Survey Questions (Factors)	1 Strongly Disagree	2 Disagree	3 Mixed Opinion	4 Agree	5 Strongly Agree	Mean	<i>SD</i>	<i>N</i>
1. I consider my strengths and weaknesses before I make goals for my career. (Self-determination)	0% (0)	4.17% (1)	41.67% (10)	33.33% (8)	20.83% (5)	3.71	.86	24
2. I am comfortable talking to my professors. (Self-advocacy)	8.00% (2)	4.00% (1)	28.00% (7)	32.00% (8)	28.00% (7)	3.68	1.18	25
3. I seek out services on campus if I am struggling in class. (Campus Resources)	12.00% (3)	20.00% (5)	36.00% (9)	16.00% (4)	16.00% (4)	3.04	1.24	25
4. I speak out to make sure my legal rights are followed. (Law and Self-advocacy)	37.50% (9)	12.50% (3)	25.00% (6)	4.17% (1)	20.83% (5)	2.58	1.56	24

Advice to Incoming First-year Students with Disabilities

The last open-ended question asked participants to offer advice to incoming first-year student with disabilities to be successful in college. Making use of campus and community services (e.g., student disability office; 24%, $n = 6$) was the most frequently offered advice (40%, $n = 10$), followed by practicing self-advocacy skills (32%, $n = 8$; e.g., “*I would implore you to ask questions. The answers never hit you in the face*” and “*Don’t be afraid to ask for help*”), having self-determination (28%, $n = 7$; e.g., “*Concentrate, stay with it, do what makes you happy, and have a lot of heart to make it through*” and “*Plan ahead. Preparation is more important than anything. If possible, work ahead that way when things go wrong, because you know they will, you have time to deal with it*”), and knowing the legal rights of students with disabilities (8%, $n = 2$). One participant advised that the first-year students need to “*Learn to smile and say yes sir or ma’am. It’s sad, but do not have any issues and keep a low profile. Don’t ask more than three questions per week to the professors.*” Another participant reported that returning students with disabilities experienced a lack of available support compared to traditional first-year students with disabilities. One student concluded the advice by indicating college life would “*not be easy,*” yet was “*well worth the effort in the end.*”

Discussion

The aim of this study was to examine the knowledge and use of four support factors (i.e., knowledge of the ADA, self-advocacy, self-determination, and campus resources) among college students with disabilities. The results of this study revealed logical connections between students’ strength of knowledge on these factors and their use of this knowledge in educational situations. The majority of participants reported a very weak understanding of the ADA, but a strong understanding of other support factors (i.e., self-advocacy, self-determination, and campus resources). Their use of the support factors paralleled the strength of their knowledge about those factors. Such a parallel may suggest that when students understand the factors, they are more likely to use them to maximize the quality of their education. Consistently, participant responses to open-ended questions further clarified and supported their ratings on their knowledge and use of supporting factors.

Knowledge and Use of Supporting Factors

Americans with Disabilities Act

The ADA details and protects the legal rights of students with disabilities in higher education and has increased the accessibility of college while decreasing discrimination against them (Singh, 2019). However, the participants in this study reported a weak understanding of the ADA. Furthermore, 10 students stated that they had no or incorrect understanding of the ADA. Consequently, the most challenging behavior for the students in this study was to speak out for their legal rights for accessible, reasonable, and nondiscriminatory educational services and accommodations. Failure to speak up for themselves may be due to the fear of possible negative consequences that might result, such as embarrassment or negative reactions from instructors (Fleming et al., 2017).

The present study documented a discrepancy between what college students with disabilities actually need and what they believe they need. Even though the majority of participants both lacked understanding of their legal rights and were unable to speak up for their rights, only two provided advice to incoming first-year students with disabilities to know and use their rights under the ADA. It is possible that these students did not sense an urgent and serious need to know their legal rights. In addition, their incomplete or incorrect understanding of the ADA might have left them feeling uncertain about whether or not their legal rights were violated and whether or not their professors or

university staff had fulfilled their moral and legal duties to support them. It is also possible that the participants did not clearly understand the ways and the degrees to which the ADA can protect them from discrimination and accessibility restrictions and did not realize the potential positive influences of those protections on their academic success that eventually leads to more promising job security in the future.

The difficulty college students with disabilities experience in taking advantage of the provisions of the ADA is unfortunate as it often leads to additional barriers. Because of their lack of understanding of the ADA's key provisions (e.g., accessibility provision, non-discrimination) as well as their inaccurate understanding about the ADA revealed in this study, these students might not advocate for the necessary accommodations and services that universities are legally obligated to provide to them (e.g., accessible course materials, closed captioning, assistive technology devices). Such a concern should be recognized by universities and taken into consideration when planning and providing quality training and service programs for students with disabilities, instructors, and staff. This finding may help to explain previous findings that the graduation rates of college students with disabilities are significantly lower compared to their peers without disabilities (Banks, 2014; Garrison-Wade, 2012; Pingry O'Neill et al., 2012).

Self-advocacy Skills

About half of the participants reported having a weak understanding of how to advocate for themselves before attending college, even though IDEA requires school systems to determine postsecondary school goals for high school students with disabilities and provide individualized transition services to achieve these goals. One-fourth of participants in this study reported that they learned self-advocacy skills in college classes through diverse experiences. This finding shows that transition services in high school and college may not effectively support students with disabilities to be competent in documenting and reporting their disabilities to the student disability office, securing effective accommodations, and protecting their legal rights in a self-directed system (White et al., 2014).

The participants in the study overall rated themselves high on the level of their understanding of self-advocacy, which was confirmed in their own definition of self-advocacy. The majority of them reported that they felt comfortable talking to their professors, even though half of them admitted that they did not speak up at all when their legal rights were not being fulfilled. This may suggest that their lack of understanding of their legal rights under the ADA combined with ineffective and overestimated self-advocacy skills in a student-driven college learning environment might be barriers to receiving protections from discrimination in their education and gaining equal access to education through appropriate accommodations. Some college students with disabilities in this study who indicated their discomfort in speaking to their professors might have been affected by their previous negative experiences and attitudes toward requesting accommodations (Barnard-Brak et al., 2009).

Consistent with previous studies (Fleming et al, 2017; Mamiseishvili & Koch, 2012; Scott, 2019; Squires et al., 2018), students with disabilities in this study expressed various concerns about their interactions with professors. (e.g., their disabilities being considered as burdens or annoyances by instructors, finding it hard to talk to professors). Scott (2019) identified several barriers for students with disabilities to access and participation on university campus, including lack of awareness of campus resources and services, negative interactions with faculty, negative interactions with fellow students, stigma of disability, and the added work of seeking support and accommodations for their disabilities. In light of these barriers, the results of the present survey are not surprising and support that college students with disabilities have serious barriers in communicating sensitive and fundamental topics about themselves with instructors (Schreiner, 2007).

Self-determination Skills

Self-determination is a strong predictor of success for college students with disabilities (Hadley, 2018; Summers et al., 2014). Students with poor self-determination skills are less likely to graduate from college (Herbert et al., 2014). The majority of participants in this study reported a clear understanding of self-determination by expressing a strong understanding of their own disability as well as self-esteem and indicated that they considered their own strengths and weaknesses before they made decisions and career goals. The results of the present study are inconsistent with findings in previous studies that college students with disabilities lack understanding about their disability to the extent that they did not effectively share their disabilities and associated challenges with others (Garrison-Wade, 2004; Squires et al., 2018). The present study offered encouraging findings on the self-determination of college students with disabilities.

Campus Resources

Both the rating and the open-ended responses on the use of campus resources showed that about half of participants in this study did not fully use various campus resources such as the student disability office even when they struggled in classes, in spite of their awareness of these resources. The use of the student disability office has been positively associated with GPA, yet the service was underutilized by students with disabilities (Abreu et al., 2016). Possible reasons for this underutilization of the campus services can be students' lack of knowledge of existing campus services or dissatisfaction with their quality and effectiveness (Hong, 2015; Squires et al., 2018). For all students with disabilities, especially strongly determined students, it is critical to be aware of the existing campus services and to know how to choose appropriate services, how to use them effectively, and how to communicate with their professors to make courses accessible (Keenan et al., 2019). In this way, students with strong self-determination skills do not have to just try to cope on their own when they face various challenges in college.

Advice to Incoming First-year Students with Disabilities

The advice offered by college students with disabilities in this study was categorized in the order of the highest to the lowest frequency: identifying and using campus resources, advocating for yourself, exercising self-determination, and knowing your legal rights. These advice categories are in parallel with documented support factors for the successful college experience of college students with disabilities (Schechter, 2018). The most frequently offered advice was consistent with the finding of Fleming et al. (2017) that over half of the students with disabilities acknowledged campus resources as a vital source of positive college experiences.

When reviewing specific advice among campus services, one thing to note is that only about 24% of participants specifically advised incoming students to use the student disability office, even though 60% of them reported that they knew about this service. This would suggest that even though the student disability office was available and acknowledged by students, they did not always find its services beneficial to their education and campus life (Fleming et al., 2017; Herbert et al., 2014; Pingry O'Neill et al., 2012). Yet, according to Schechter (2018), a student disability office was considered to be the most important support factor affecting the transition and success of students with disabilities in college.

Another noteworthy finding among the offered advice was that only two of the college students with disabilities in this study advised the first-year students with disabilities to understand their legal rights under the ADA. This might be related to another finding in this survey study that the

mean score on their knowledge about the ADA was the lowest among the four support factors. One possible reason for this disconnect between what they know and what they need to know could be that the participants did not adequately understand their responsibilities to receive accommodations under the ADA or its legal and ethical impacts on their rights, especially the obligations of college administrators, staff, and faculty to provide a wide range of services for them in higher education settings (Keenan et al., 2019; Krebs, 2019).

Implications for Practice

Training

The findings of the present study have implications for both transition services in high school and supports at the college level for students with disabilities. How to empower students with disabilities has been receiving increasing attention in both high schools and higher education institutions (Hawkins, 2019; Summers et al., 2014). The alarming statistics on low college entrance and graduation rates highlight the need to support these students by explicitly teaching them information and skills that can enable them to successfully complete college. The current findings revealed that college students with disabilities lack an understanding of their legal rights, and the strong self-advocacy skill among them reported was diminished when a legal rights issue occurred. The 2004 IDEA reauthorization required that transition services include a plan for postsecondary education. Children with disabilities who are currently in K-12 schools will benefit from systematic and continuous training and emphasis on their legal rights in college as well as the essential skills they will need to advocate for themselves and for supportive learning environments where they can feel comfortable disclosing their disability and requesting and using appropriate services and resources without being stigmatized (Hamblet, 2014; Knight et al., 2018; Squires et al., 2018).

The present findings emphasize that it is critical for college students with disabilities to be fluent in self-advocacy skills, such as how to speak up for their needs and rights and how to effectively communicate them to their professors (Squires et al., 2018). College students with disabilities who succeed in academic achievement reveal their disability to the university and request appropriate accommodations (Barnard-Brak et al., 2009; Scott, 2019). Providing training to students on the specific knowledge and skills needed in a student-directed higher education learning environment would support them to apply their self-determination and self-advocacy skills to obtain services and have a sense of belonging, which is especially important to marginalized groups of students (Phillippe et al., 2021; Vaccaro et al., 2015).

It should be stressed that equal educational opportunities for students with disabilities are achieved through a collaborative effort among all stakeholders (Singh, 2019). Through meaningful and ongoing training and information-sharing opportunities focusing on positive aspects, faculty and staff can increase their awareness of the legal rights of students with disabilities and understand their obligation to support students who reveal their disabilities while respecting the students' privacy (Scott, 2019). An improved campus culture and climate in the context of inclusion of students with disabilities would likely enhance their college experiences and ultimately improve graduation rates (Abreu, 2016).

Sensible Services

Universities should look at the quality, focus, and effectiveness of their student support services, training programs, and campus environment for students with disabilities (Gaddy, 2013). Identifying the barriers and challenges these college students experience by using various assessment tools, such

as online surveys and focus group interviews, and empowering them with needed training and resources can help them graduate at higher rates and secure a better status in the job market. Addressing the internal barriers, such as self-determination and self-advocacy, and removing informational barriers to knowledge about the ADA and campus services can increase the access and participation of college students with disabilities on campus. According to Squires et al. (2018), when internal barriers (e.g., self-determination skills, self-advocacy skills, knowledge of campus services and laws) combine with external barriers (e.g., staff development, accommodations, support services), an ineffective college learning environment is a logical outcome for students with disabilities. In particular, the procedure students must follow to prove their own disability should not be overly complicated, as this is an essential starting point to receive appropriate services.

An important self-determination strategy is knowing how to identify accommodations that fit with their needs and use them effectively (Walker et al., 2011). It is unfortunate that strong-minded students, like the ones portrayed in this study, continue to encounter ineffective and incoherent services, a persistent issue in higher education (Squires et al., 2018), when they already have to cope with a plenty of new responsibilities in a new learning environment on their own. Colleges need to build a risk-free environment that encourages frequent and constructive communication and collaboration among college students with disabilities, their instructors, and student support staff so that functional services have an evident presence on campus, and students feel comfortable disclosing their disability and receiving the services they need.

Limitations

The findings of this study provide first-hand information about the strength of understanding of college students with disabilities about support factors as well as their use of these factors. However, several limitations may have affected the study's results. First, the study is limited by the small sample size and low response rate, as only about 15% of the students with disabilities who had registered at the student disability office completed the online survey. Participants in this study rated their self-determination skills as the strongest skill among the four support factors. It is possible that highly determined students with disabilities who paid attention to the announcement from the student disability office may have chosen to complete the survey, as the survey link was sent to registered students with disabilities by the director of that office. Follow-up interviews with college students with disabilities might produce useful data on their current knowledge and use of support factors and factors they want to know about and use more frequently, effectively, and correctly for better college experiences.

Second, the data were collected at one university. Thus, it is not possible to generalize our results to all universities in the U.S. Future research directions include replicating this study with a larger sample to validate and generalize the findings. To protect the anonymity and confidentiality of the participants on a relatively small campus, no identifiable information was collected in the present study. The absence of the actual sample characteristics of college students with disabilities (e.g., registration status and exact enrollment number of students with disabilities at the participating university) was a limitation of this study. The specific disability-related data was not available through the existing university student data system and in the present study. According to the National Science Foundation (2019) and Blaser and Ladner's report (2020), experts reported the issues with collecting disability status data, such as greater sensitivity of asking about a disability compared to asking about race or gender, confidentiality issues, issues with Institutional Review Board application, reluctance of self-reporting to disability services, no systematic data collection on disabilities at universities, and lack of a standard definition of disability. The present study was not alone in the challenge of collecting actual sample characteristics on disabilities. With a larger sample and elaborated disability questions

(“Do you identify as having a disability or other chronic condition?” “How would you describe your disability or chronic condition?”)(Blaser et al., 2020), demographic information such as gender, race, years of attendance at college, registration status, majors, or disability categories/conditions can be collected to see the differences among these demographic variables.

Third, as with any self-report study, the accuracy of the information cannot be verified. Future researchers should investigate whether college students’ reported knowledge and use correlate to their actual behaviors and available campus resources. For example, a future study could investigate whether college students with disabilities report having little access to campus resources even though there are multiple resources accessible to students on campus or whether college students with disabilities report having significant learning challenges in classes but they have not revealed their disabilities to the college and instructors and receive no accommodations. A review of information on disability-related services on campus and follow-up interviews with registered students and staff at a student disability office are some ways to obtain more in-depth information.

Conclusion

The findings of this study support the need for college students with disabilities to be confident about their legal rights and for preparing them with adequate self-advocacy and self-determination skills to proactively and assertively pursue and protect their own educational rights in college classrooms and services. Improvements and innovations in current transition services in both secondary education and post-secondary institutions and prevention of unnecessary obstacles should be in place in order to give college students with disabilities a stronger beginning of college life with fewer challenges, empower them to acquire the quality education they are promised by law, and graduate at higher rates. Explicit, systematic, and targeted support and training for these students are more valuable than ever to help them learn skills that are not innate but are necessary to achieve success in college life and a challenging, yet rewarding life beyond college.

References

- American Psychological Association. (2018). *For students: Adjusting to college resources and frequently asked questions for students with disabilities*. <https://www.apa.org/pi/disability/resources/student-college-guide>
- Abreu, M., Hillier, A., Frye, A., & Goldstein, J. (2016). Student experiences utilizing disability support services in a university setting. *College Student Journal*, 50(3), 323–328.
- Banks, J. (2014). Barriers and supports to postsecondary transition: Case studies of African American students with disabilities. *Remedial and Special Education*, 35(1), 28–39. <https://doi.org/10.1177/0741932513512209>
- Barnard-Brak, L., Davis, T., Tate, A., & Sulak, T. (2009). Attitudes as a predictor of college students requesting accommodations. *Journal of Vocational Rehabilitation*, 31(3), 189–198. <https://doi.org/10.3233/JVR-2009-0488>
- Blaser, B., & Ladner, R. E. (2020). *Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)*. Institute of Electrical and Electronics Engineers. IEEE Electronic Library. <https://ieeexplore.ieee.org/document/9272466>
- Dutta, A., Schiro-Geist, C., & Kundu, M. M. (2009). Coordination of postsecondary transition services for students with disabilities. *Journal of Rehabilitation*, 75(1), 10–17.
- Fleming, A. R., Oertle, K. M., & Plotner, A. J. (2017). Student voices: Recommendations for improving postsecondary experiences of students with disabilities. *Journal of Postsecondary Education and Disability*, 30(4), 309–326.

- Gaddy, S. (2013). Use students' feedback to improve disability services practices. *Disability Compliance for Higher Education*, 18(8), 6.
- Garrison-Wade, D. F. (2012). Listening to their voices: Factors that inhibit or enhance postsecondary outcomes for students with disabilities. *International Journal of Special Education*, 27(2), 113–125.
- Hadley, W. (2018). Students with learning disabilities transitioning from college: A one-year study. *College Student Journal*, 52(4), 421–430.
- Hamblet, E. (2014). Nine strategies to improve college transition planning for students with disabilities. *Teaching Exceptional Children*, 46(3), 53–59
- Hawkins, D. (2019). Empowering students with disabilities: During the college transition. *Journal of College Admission*, 243, 22–23.
- Herbert, J. T., Welsh, W., Hong, B. S. S., Kurz, C. A., Byun, S., & Atkinson, H. A. (2014). Persistence and graduation of college students seeking disability support services. *Journal of Rehabilitation*, 80(1), 22–32.
- Hong, B. S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, 56(3), 209–226.
- Hong, B. S., Ivy, W., Gonzalez, H. R., & Ehrensberger, W. (2007). Preparing students for postsecondary education. *Teaching Exceptional Children*, 40(1), 32–38.
- Keenan, W. R., Madaus, J. W., Lombardi, A. R., & Dukes, L. L. (2019). Impact of the Americans with Disabilities Act Amendments Act on documentation for students with disabilities in transition to college: Implications for practitioners. *Career Development and Transition for Exceptional Individuals*, 42(1), 56–63. <https://doi.org/10.1177/2165143418809691>
- Knight, W., Wessel, R. D., & Markle, L. (2018). Persistence to graduation for students with disabilities: Implications for performance-based outcomes. *Journal of College Student Retention: Research, Theory & Practice*, 19(4), 362–380.
- Krebs, E. (2019). Baccalaureates or burdens? Complicating “reasonable accommodations” for American college students with disabilities. *Disability Studies Quarterly*, 39(3). <https://doi.org/10.18061/dsq.v39i3.6557>
- Layden, S. J., Anderson, A., & Hayden, K. E. (2021). Are librarians prepared to serve students with autism spectrum disorder? A content analysis of graduate programs. *Focus on Autism and Other Developmental Disabilities*, 36(3), 156–164. <https://doi.org/10.1177/1088357621989254>
- Mamiseishvili, K., & Koch, L. C. (2012). Students with disabilities at 2-year institutions in the United States: Factors related to success. *Community College Review*, 40(4), 320–339. <https://doi.org/10.1177/0091552112456281>
- McCarthy, D. (2007). Teaching self-advocacy to students with disabilities. *About Campus*, 12(5), 10–16. <https://doi.org/10.1002/abc.225>
- National Center for Education Statistics. (2022). *Fast facts: Students with disabilities*. <https://nces.ed.gov/fastfacts/display.asp?id=60>
- National Science Foundation. (2019). *Technical notes: Women, Minorities, and Persons with Disabilities in Science and Engineering*. <https://nces.nsf.gov/pubs/nsf19304/technical-notes>
- Nistor, N., Daxecker, I., Stanciu, D., & Diekamp, O. (2015). Sense of community in academic communities of practice: predictors and effects. *Higher Education*, 69(2), 257–273. <https://www.jstor.com/stable/43650112>
- Paranal III, C. C. (2021). The Internet as a public accommodation and its impact on higher education. *Asian-Pacific Law & Policy Journal*, 22(2), 143–199.
- Phillippe, L. K., Noble, N., Hendricks, B., Brendle, J., & Lock, R. H. (2021). The Americans with disabilities act implications for family counselors: Counseling students in higher education. *Family Journal*, 29(1), 29–36. <https://doi.org/10.1177/1066480720948869>

- Pingry O'Neill, L. N., Markward, M. J., & French, J. P. (2012). Predictors of graduation among college students with disabilities. *Journal of Postsecondary Education and Disability*, 25(1), 21–36.
- Schechter, J. S. (2018). Supporting the needs of students with undiagnosed disabilities. *Phi Delta Kappan*, 100(3), 45–50. <https://doi.org/10.1177/0031721718808264>
- Schreiner, M. B. (2007). Effective self-advocacy: What students and special educators need to know. *Intervention in School and Clinic*, 42(5), 300–384.
- Scott, S. (2019). *Access and participation in higher education: Perspectives of college students with disabilities. NCCSD Research Brief*, 2(2). Huntersville, NC: National Center for College Students with Disabilities, Association on Higher Education and Disability. Available at <http://www.NCCSDclearinghouse.org>
- Singh, D. K. (2019). Educational rights of college students with disabilities. *College Student Journal*, 53(2), 243–251.
- Squires, M. E., Burnell, B. A., McCarty, C., & Schnackenberg, H. (2018). Emerging adults: Perspectives of college students with disabilities. *Journal of Postsecondary Education and Disability*, 31(2), 121–134.
- Squires, M. E., & Counterline, B. (2018). College students with disabilities explain challenges encountered in professional preparation programs. *Exceptionality Education International*, 28(1), 22–44. <https://doi.org/10.5206/eei.v28i1.7757>
- Stodden, R. A., Dowrick, P. W., Anderson, J., Heyer, K., & Acosta, J. (2005). Postsecondary education across the USA: Experiences of adults with disabilities. *Journal of Vocational Rehabilitation*, 22(1), 41–47.
- Summers, J. A., White, G. W., Zhang, E., & Gordon, J. M. (2014). Providing support to postsecondary students with disabilities to request accommodations: A framework for intervention. *Journal of Postsecondary Education and Disability*, 37(3), 245–260.
- U.S. Department of Education, Office for Civil Rights. (2011). *Students with disabilities preparing for postsecondary education: Know your rights and responsibilities*. <https://www2.ed.gov/about/offices/list/ocr/transition.html>
- Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development*, 56(7), 670–686.
- Walker, A. R., & Test, D.W. (2011). Using a self-advocacy intervention on African American college students' ability to request academic accommodations. *Learning Disabilities Research & Practice*, 26(3), 134–144. <https://doi.org/10.1111/j.1540-5826.2011.00333.x>
- Wessel, R. D., Jones, J. A., Markle, L., & Westfall, C. (2009). Retention and graduation of students with disabilities: Facilitating student success. *Journal of Postsecondary Education and Disability*, 21(3), 116–125.
- White, G. W., Summers, J. A., Zhang, E., & Renault, V. (2014). Evaluating the effects of a self-advocacy training program for undergraduates with disabilities. *Journal of Postsecondary Education and Disability*, 27(3), 229–244.