

Degree Duration among Undergraduate Students with Disabilities

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Abstract

Students with disabilities are an underrepresented group that often experience several barriers that can impede or prevent them from obtaining a college degree. Additionally, prior studies indicate that the longer it takes a student to finish degree requirements, the less likely they are to graduate. Thus, indicating it is imperative to analyze degree duration among students with disabilities. The purpose of this study is to determine if students with disabilities take longer to graduate than other student demographics. Using the 2015 wave from the Baccalaureate and beyond dataset, chi-square testing and a linear regression were applied in order to determine variables that influenced the number of months it took students to complete degree requirements for their bachelor's degree. In order to focus on students with disabilities, disability status was used as a moderating variable in the linear regression. The findings demonstrated that despite the accommodations students with disabilities receive; they are still taking longer to graduate than all other student groups. The study concluded that having a disability resulted in a longer degree duration time in comparison to other student demographics.

Keywords: disability; undergraduate education; degree achievement, special education, academic achievement, adult learning

A college education is becoming an essential asset in order to ensure that adults have ample career opportunities in the United States (Juszkiewicz, 2017; Hein, Smerdon, Lebow, & Agus, 2012). In fact, studies have shown that individuals who have a undergraduate degree make on average 20,000 dollars more than those without a college degree (Fontenot, Semega, & Kollar, 2018). Unfortunately, individuals with disabilities are an oppressed population that has struggled with lower college education attainment in comparison to other student groups (Grigal, Cooney, & Hart, 2019; Hein et al., 2012). Other studies have shown that among the general population, being on a longer degree completion plan can negatively impact the odds of earning a degree. In order to promote education equality for this oppressed population, it is essential for educational researchers to study if degree duration is impacting students with disabilities the opportunity to complete their degree.

The Americans with Disabilities Act (ADA) and the Department of Education have made substantial advancements in special education. These advancements have resulted in more students with disabilities receiving a high school diploma and attending postsecondary education (Alverson, Lindstrom, & Hirano, 2019; Hong, 2015; Plotner & Marshall, 2014; Leake & Stodden). Thus, emphasizing the need for to analyze the barriers experienced among students with disabilities perusing college degree. The purpose of this study is to determine if students with disabilities are taking longer to graduate in comparison to other student groups.

Literature Review

Defining Disability

Students who have disabilities are a diverse population that's college enrollment has been steadily increasing over the past 10 years (Hong, 2015; Leake & Stodden, 2014; Plotner & Marshall, 2014).

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According to the U.S. Department of Education, National Center for Education Statistics [NCES] (2019), approximately 19% of undergraduate students reported having a disability. The Americans with Disabilities Act (1990) defines having a disability as,

“A person who has a physical or mental impairment that substantially limits one or more major life activity” (Americans with Disabilities Act [ADA], 1990). Adolescents and Teenagers who fall within this definition are provided with individualized education plans (IEP’s) in order to promote equality and equity in the classroom environment. The different categories of disabilities include intellectual, physical, psychiatric, and developmental (Bills, 2017). Additionally, each of these disability categories can range from mild to severe. Typically, students who have mild/moderate disabilities are able to obtain a college degree (Hong, 2015; Bills, 2017). Unfortunately, many of these students are often unable to finish their degree within the time frame goal they have set due to limitations associated with their disability (O’Shea & Meyer, 2016).

Increasing College Retention among Students With Disabilities

In order to increase college attendance among individuals with disabilities, The Individuals with Disabilities Education Act (IDEA) has set in place several policies to assist with the transition from high school to postsecondary training (Hong, 2015; Chan, 2016). The IDEA of 1990 required that transition plans be included in Individualized Education Plans (IEP) of students with disabilities who were 16 and older to increase postsecondary readiness so they achieve equal opportunities in higher education (Chan, 2016). In 1997, this policy was changed and required that the transition planning started by the age of 16. Due to these advancements in special education policy and practice, the enrollment numbers of college students who have a disability has been rapidly increasing in recent decades (Hong, 2015; Barnard-Bark, Letchtenberger, & Lan, 2010). However, the retention rate among first-year students with disabilities is much lower than first-year students without disabilities (Spenceley, Wood, Valentino, & Lewandowski, 2019). Despite the dramatic increase in individuals with disabilities attending college, students who have a disability are still less likely to obtain a college degree in comparison to other student populations (O’Shea & Meyer, 2016). As the number of students with disabilities attending postsecondary school continue to rise, it is essential for education researchers to understand barriers individuals with disabilities are facing in college.

Disability Accommodations

The barriers students with disabilities face in regards to completing graduation requirements on time in high school often persist when pursuing a college degree (Grigal et al., 2019; Hein et al., 2012). To promote equity and equality, University’s are required to provide the disability accommodations documented in this IEP. For example, several students with disabilities are often allotted extra time on tests and quizzes to help eliminate constraints caused by their disability (Holmes & Silvestri, 2019; Spenceley, Wood, Valentino, Lewandowski, 2019). For students who have physical disabilities, they may require extra time or assistance to maneuver around campus and in between classes (Bills, 2017). Despite these mandated accommodation requirements, it is possible that students with disabilities may struggle with graduating on time.

Although the IDEA and ADA have instilled strict accommodation requirements that University’s must abide by, students with disabilities still are still experiencing the lowest retention rate out of any other student group (Connor, 2013). It is possible that despite IDEA and ADA Policy advances, students with disabilities are still taking longer to complete undergraduate degree requirements in comparison to other student groups. Since past research has demonstrated that students who take longer to complete graduation requirements are more likely to drop out (Ishanti, 2006), it is essential for researchers to analyze what factors can impact a student’s degree duration. In order to help students with disabilities successfully complete degree requirements, it is imperative for researchers to determine if having a disability impacts the amount of time it takes a college student to complete degree requirements.

Physical Accessibility

While every postsecondary institution is unique, they all share one common factor. They cannot discriminate against those who classify as having a disability. According to the US Department of Education, “One’s postsecondary school is required to provide appropriate academic adjustments as necessary to ensure that it does not discriminate on the basis of disability” (U.S Department of Education, 2011).” It is the responsibility of every postsecondary institution to make their campus buildings, courses, activities, housing and other campus related facilities accessible to those who identify as having a disability.

While academic adjustments will vary based upon the disability and individual needs, it is important to know it is a right of the students to utilize these services.

Academic adjustments may include academic requirements being modified to ensure the level of learning is equal to that of a nondisabled student, allowing first access for course registration purposes, reducing a student's course load, providing assistance within the classroom (e.g. such as the need for note takers), devices capable of recording, sign language interpreters, additional allotted time for testing purposes, an making sure school computers have read aloud text, voice recognition, or other aids needed in order to ensure the student is receiving an equal opportunity to learn.

Academic adjustments are essential for those with a disability and rely on services to help aid in furthering their education, but campus accessibility is equally important. If a post secondary institution provides housing to those who do not classify as having a disability, they must provide the same or comparable to students with disabilities at the same cost.

In addition to adequate housing at the same cost, postsecondary institutions have to have an accessible pathway for students with disabilities to utilize if they chose to do so. A prime example of this would be housing with stairs and a wheelchair accessible ramp. However, even with disabled students having rights they are entitled to and academic adjustments, the rate at which they are graduating compared to those who are not disabled are low.

Length of Time in Degree Program and Graduation Success

There are several factors that can influence the success of a college student. Several researchers have determined that the length of time a student spends in school completing degree requirements is often a contributing factor that can dictate whether a student will complete their degree or not (Ishitani, 2006;Juszkiewicz, 2017). In nationally represented data collected by the National Student Clearing House, it was found that full-time college students had a 59.7% completion rate, while part-time students had a 25.6% completion rate (Juszkiewicz, 2017). Prior research indicates that those full time students have higher graduation rates than part-time students (Ishitani, 2006; Juszkiewicz, 2017). Additionally, other researchers have demonstrated that spending less time working toward a degree positively correlated with degree completion (Tentsho, McNeil, & Tongkumchum, 2019). In support of these studies, Ishanti (2006) found that for every additional year spent in undergrad after four years, the odds of graduating decrease. Since the length of time spent working toward a undergraduate degree can be a predictor of degree completion, it is essential to determine if having a disability can have a moderating relationship with the amount of time it takes to graduate. The purpose of this study is to determine if students with disabilities are taking longer to graduate in comparison to other student groups.

The Social Problem and Purpose of this Study

The retention rates among undergraduate students with disabilities is extremely low in comparison to students without disabilities (O'Shea & Meyer, 2016; Bills, 2019).The purpose of this paper is to identify what variables cause undergraduate students to take longer to graduate. Specifically, this paper provides a focus on graduation length among undergraduate students with a disability. If researchers are able to identify if students with disabilities are taking longer to graduate, this education practitioners may be able to link the findings to this study as a potential explanation for this population's high dropout rates. Implications for future research and practice are discussed.

Methods

Data

The Baccalaureate and Beyond public dataset was used to explore factors influencing the amount of time it takes for undergraduate students with a disability to complete degree requirements. This dataset is anationally representative study conducted by the National Center for Education Statistics (NCES)in the United States. This dataset is in accordance with human subject guidelines and received Institutional Review Board approval.

Sample

The sample for this study was 8,900 ($N= 8,900$) undergraduate students. The participants were interviewed after enrolling in college in the year 2012. They then a follow-up interview was conducted in 2015 to track their academic progress. Of this sample, 42.6% identified as male and57.5% identified as female. When looking at disability

status, approximately 8.1% reported having a documented disability and 91.9% did not. The racial demographics were 73% White, 8.6% Black or African American, 9.2% Asian, 0.4% American Indian or Alaska Native, 0.4% Native Hawaiian/Pacific Islander, 2.5% multi-racial, and 0.2% other.

Analysis and Measures

A linear regression was conducted in NCES Power Stats, the online interface for NCES data analyses. Since this was an exploratory study, the overall model fit and each significance test was measured using a 0.05 significance level (Cohen, 1968).

The moderating independent variable of interest was student disability status. Disability status was measured dichotomously with “yes, student has a disability” or “no, student does not have a disability.” Additional independent covariates included in the model were: parents’ education level, institution type (public or private), and gender. The dependent variable was the number of months it took to complete bachelor’s degree requirements after their high school graduation. These independent variables were empirically and theoretically supported covariates related to degree completion among college students (Ishanti, 2006).

Results

When observing the descriptive statistics output, the average amount of months it took for students with a disability to complete degree requirements was approximately 103 months ($M = 103.4$). The mean for a student without a disability was approximately 88 months ($M = 87.8$). Descriptively, it appears undergraduate students with disabilities often take longer to complete degree requirements in comparison to undergraduate students without a disability.

The linear regression model was statistically significant ($R^2 = 0.179$, $F[11, 190] = 46.075$, $p = 0.001$). The model explained 17.9% of variance related to the number of months it took for students with disabilities to complete their bachelor’s degree. Having a disability accounted for an 11.5 month increase in amount of time it took to graduate ($b = 11.532$, $p = 0.016$). Other significantly associated variables included: having guardians with a college degree ($b = -22.170$, $p < 0.001$) and attending a public University ($b = 14.238$, $p = 0.001$). Meaning, having guardians with a college degree duration resulted in a 22.17 month decrease of how long it takes to graduate. Attending a public University vs. a private University resulted in a 14.24 month increase in the length it takes to graduate (See Table 1).

Table 1:

Linear Regression Model

Variable	<i>B</i>	95% <i>CI</i>	<i>t</i>	<i>p</i>
Disability Status (Ref = Yes)	11.532	2.213, 20.852	2.440	*.0016
Parents’ education level	-22.072	-26.881, 20.852	-9.052	*<.001
University Type (Ref = Public)	14.583	9.765, 19.401	5.969	*<.001
Gender (Ref = Female)	-4.573	-9.798, 0.651	-1.726	.086
R^2	.0179, 95% CL[11, 190]			
F	46.075 ($p < .001$)			

Discussion

Disability literature demonstrates that college students who have disabilities face several barriers when pursuing postsecondary education. These barriers to accessible education are often attributed to the physical limitations and cognitive struggles relating to their disability (Tentsho et al., 2019; 2016; Bills, 2017). However, prior higher education literature indicates that the more time a student spends working toward a college degree; the less likely they are to graduate (Tentsho et al., 2019). Thus emphasizing the vitality of analyzing the length of time it takes for students with disabilities to complete degree completion. When connecting the results of Ishanti (2006) to the results found in this analysis, it possible that the length of time a student with disabilities to graduate is hindering the success of this marginalized student population.

The findings of this study suggest that the length of time it takes students to complete bachelor degree requirements are an additional barrier experienced by college students who have disabilities. When descriptively comparing students with disabilities to all other student groups, students with disabilities took the longest amount of time to complete degree requirements. The average time it took a student with a disability to complete degree requirements was approximately 103 ($M = 103.4$) months in comparison to their non-disabled counterparts that took approximately 88 ($M = 87.8$) months.

When analyzing the linear regression model, having a disability was statistically significant ($b = 11.532$, $p = 0.016$), meaning that having a disability accounted as a variable that impacted the length of time it takes students to graduate.

Limitations

As all studies, this study was not without limitations. The most predominate limitation to this study is it was not a primary data collection by the researcher. This study utilized the Baccalaureate and Beyond dataset, a public dataset provided by the National Center for Education Statistics. Additionally, the most critical limitation identified is that disability status was used as a binary variable (yes/no), rather than a categorical variable. Thus, not allowing the study to determine if the different disability types impact degree duration at different rates.

Implications for Future Research and Practice

Past education and disability research focus on the specific academic barriers faced by students who have disabilities (Holmes & Silvestri, 2019; Connor, 2013). Many of these specific barriers relate to accessibility, academic performance, and socio-emotional aspects (Grigal et al., 2019; Hein et al., 2012; Connor 2013). However, past literature reflects that there are few studies that analyze the length of time it takes students with disabilities to complete undergraduate requirements in comparison to their non-disabled peers. This study adds to past literature by demonstrating that having a disability does have moderating relationship with the amount of time it takes to complete degree requirements. This poses a social problem because past research has indicated that the longer it takes a student to complete degree requirements, their likelihood of graduating decreases (Ishanti, 2006; Tentsho et al., 2019). Since students with disabilities are more likely to take longer to graduate, it is imperative for future education and disability researchers to determine what factors are causing this student group to take longer. Additionally, researchers must also analyze what consequences taking longer to graduate have on college students with disabilities.

Conclusion

To be an effective educator for college students with disabilities, it is imperative for researchers to recognize their potential education barriers. As demonstrated by these findings, students with disabilities are likely to take longer to graduate in comparison to other diverse backgrounds. Implications for practice include improving accommodations that not only promote equality at the college level, but also equity in regards to the length of time it takes students with disabilities to graduate in comparison to other student groups. If education practitioners can establish mitigating factors are causing students with disabilities to take longer to graduate, then new accommodations can be implemented in order to close the degree completion time gap. Lastly, education practitioners may be able to connect the findings of this study to past studies in order to have a clearer understanding of a possible contributing factor to the low completion rates among undergraduate students with disabilities.

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