University Honors Program

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What are Classmates Thinking when it comes to Post-Secondary Educational Accommodations for Students with Disabilities?

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WHAT ARE CLASSMATES THINKING WHEN IT COMES TO POST-SECONDARY EDUCATIONAL ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES?

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By
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HONORS THESIS ABSTRACT

There have been several legislative pieces (e.g., Rehabilitation Act of 1973, Americans with Disabilities Act of 1990, Higher Education Opportunity Act of 2008) that has mandated students with disabilities are provided equitable educational opportunities within post-secondary educational institutions. Previous research has displayed that students with disabilities have a graduation rate of 34.7% compared to 51.2% for students without disabilities. One barrier in the limited request or use of college educational accommodations provided to students with disabilities. Previous research has demonstrated that students with disabilities have positive attitudes with disability support services, and that college peers have positive attitudes towards students requesting educational accommodations. However, previous research has not yet explored (a) how the race of the student requesting these accommodations play in peer evaluations of how deserving they are, and (b) what role does disability status (i.e., participant has a disability, participant does not have a disability) have on the perception of whether a student is deserving of college educational accommodations. A Logistic Regression Analysis revealed that races were not a significant predictor of whether a student deserved educational accommodations. Additionally, participants that disclosed that they had a disability thought the student in the disability-related case scenarios were more deserving of accommodations compared to participants that did not disclose having a disability. Discussion and implications are provided.
What are Classmates Thinking when it comes to Post-Secondary Educational Accommodations for Students with Disabilities?

The Rehabilitation Act of 1973 prohibits disability discrimination for programs receiving federal financial assistance, in federal employment, employment practices of federal contractors, and programs run by federal agencies (Parker & Patterson, 2012). The Vocational Rehabilitation Act of 1973, section 504, mandates education programs to accommodate students with physical or mental disabilities (29 U.S.C. § 701). Since these laws have been put in place there has been an increase of people with disabilities obtaining a bachelor’s degree or have received some college education (U.S. Department of Education, 2016). During the 2007-2008 academic year, 10.9 percent of the students enrolled in a post-secondary institution reported having a disability. During the 2011-2012 academic year, approximately 11.1 percent reported having a disability (U.S. Department of Education, 2016). Other data has revealed that approximately 25% of students with disabilities attend college after graduating high school (Dallas, Upton, & Sprong, 2014; Wagner, Newman, Cameto, Garza, & Levine, 2005), with approximately 9% having a documented disability (Dutta, Kundu, & Schiro-Geist, 2009). Other pieces of legislation that has been useful in increasing access to higher education for students with disabilities include the Higher Education Opportunity Act (HEOA) of 2008 [established support to students with disabilities in higher education], and the Americans with Disabilities Amendment Act of 2008 [provided more comprehensive coverage to include students with disabilities in higher education].

As a result of the aforementioned legislation, the enrollment of students with disabilities in higher education has increased nationwide. This augmented enrollment has also resulted in an
increase in gainful employment and a higher standard of living for people with disabilities. In fact, individuals with disabilities are experiencing greater access to higher education and are therefore entering professional employment with an increased opportunity to bolster earning capacity (National Council on Disability [NCD], 2003). Despite this increased access to higher education for students with disabilities, research also indicates many of these students enroll but fail to graduate. Students with disabilities have a graduation rate of 34.7% compared to 51.2% for students without disabilities (Dallas et al., 2014; Wagner et al., 2005). Due to this increased enrollment of students with disabilities, there is a corresponding need to identify types of disabilities and to provide appropriate support services and educational accommodations in the classroom (NCD, 2003).

Previous research (e.g., Dallas et al., 2014) has explored faculty attitudes towards educational accommodations and found that faculty generally have positive attitudes towards educational accommodations and inclusive teaching strategies. However, these findings conflict with other studies (e.g., Leyser, Greenberger, Sharoni, & Vogel, 2011), which found that some faculty are not willing to make changes to their curriculum in terms of providing college educational accommodations, and that 30% of students were still not comfortable with requesting accommodations from course instructors. However, other research (e.g., Reinschmiedt, Sprong, Dallas, Buono, & Upton, 2013) has investigated students’ satisfaction with Disability Support Services and found that majority of students (N = 116) reported satisfaction with the accommodations they received. Earlier research has also indicated that college students with more previous and direct disability contact have reported more favorable attitudes towards people with disabilities (Anderson & Antonak, 1992; Barrett & Pullo, 1993; Yuker, 1992). Upton and Harper (2000) found these results hold true in a study evaluating
general attitudes towards educational accommodations. Additionally, findings revealed that college students overall perceived classmates with different disabilities as deserving college educational accommodations with the exception of students with Spina Bifida, and the evaluation of classroom accommodations varied significantly across gender and years of college study. However, disability status of the student participants was not explored. Furthermore, race was not a factor that was modified within several disability-specific case studies presented to study participants. Despite the fact that students may feel uncomfortable in requesting an educational accommodation for fear of stigma from fellow classmates or the course instructor (Dowrick, Anderson, Heyer, & Acosta, 2005), students classified in minority racial backgrounds may be at more of a disadvantage in terms of acceptance from peers. One theory that has been proposed to explain this phenomenon is double-jeopardy discrimination.

The concept of **double jeopardy discrimination** can be explained when an individual has features or characteristics that place them into two subordinate statuses, that lead to some behavioral response (e.g., not being employed due to being a minority and having a disability). Research has demonstrated this occurrence while investigating women and disability in the workforce (e.g., Traustadottir, 1990; Habib, 1995), impact of race and disability in obtaining employment (e.g., Hudak, 1992), inequalities in mental health services for minority races (e.g., Alegria, Canino, Stinson, & Grant, 2006), and incongruence of drug testing among African-American employees compared to white employees in employment (e.g., Wozniak, 2011). Thus, students with disabilities who are of a minority status may experience greater stigmatization from peers. The importance of evaluating the construct of double jeopardy discrimination for students with disabilities who are also classified as of having a minority status may be valuable in developing interventions that are related to multicultural and diversity training related to race
in addition to disability. The purpose of this study was to explore the impact of race on the perception from peers on how deserving students with various disabilities are when requesting college educational accommodations, and to understand how the participants’ disability status and educational level influences the perception of how deserving students are of college educational accommodations. Specifically, the study will answer the following research questions:

**Research Question(s):**

1. How does the race of the student in each specific disability scenario, and gender, race, and disability status of the study participant predict how deserving of educational accommodations the student is?

2. Does having a disability influence the perception as to whether students with disabilities deserve educational accommodations?

3. Does level of education (i.e., undergraduate student, graduate student) influence the perception as to whether students with disabilities deserve educational accommodations?
Methods

Participants

All undergraduate and graduate students enrolled in a Midwestern University [N = 19,015] were contacted through mass email to participate in this study. Of these, 416 students agreed to participate in the current study and completed the research materials, thus resulting in a 2.19% response rate. A total of 139 students [33.4%] reported being of the male gender, 265 students [63.7%] reported being of the female gender, 5 students [1.1%] reported being non-binary transgendered, and 1 student [.2%] reported being agender [missing data: n = 6]. In terms of racial identity, 304 students reported being white non-Hispanic [73.1%], 16 students reported being black or African American [3.8%], 13 students reported being Asian [3.1%], and 17 students reported being 2 or more races [4.1%]. Other races reported included Latino/Latina [n = 8; 1.9%], Arabian [n = 1, .2%], Korean [n = 1, .2%], Puerto Rican [n = 1, .2%], Mexican [n = 1, .2%], Italian [n = 1, .2%], Middle Eastern [n = 1, .2%], Comanche [n = 1, .2%], Scandinavian [n = 1, .2%], and Irish [n = 1, .2%]. A total of 109 students reported having a disability, and 293 students reported that they did not have a disability.

Materials

A total of 10 disability-specific scenarios were obtained with permission from Upton and Harper (2002) and were modified for purposes of this study. These disability-specific scenarios included the following disability types: (1) Learning disability, (2) spina bifida, (3) hearing impairment, (4) diabetes, (5) cerebral palsy, (6) manic-depressive disorder, (7) brain injury, (8) spinal cord injury, (9) blindness, and (1) attention deficit hyperactivity disorder [ADHD]. Within each scenario, the race (i.e., Caucasian, African American, Hispanic) of the student was modified. After students were presented with each disability-specific scenario, they were asked
to indicate whether the student was deserving of educational accommodations (i.e., yes/no). If students indicated yes, they were presented with 10 types of educational accommodations (see Table 1) in which study participants could respond with “yes, this student deserves this educational accommodation” or “no, this student does not deserve this educational accommodation.”

Table 1. Types of Educational Accommodations (N = 10)

1. Testing Alternatives (for example extended time for tests or alternative test formats)
2. Assistive Technology (for example closed-captioning or voice-activated computer)
3. Alternative Instructional Materials (for example Braille texts or books on tape)
4. Classroom Flexibility (for example flexible due dates for assignments or flexible class attendance policy)
5. Learning Aids (for example additional faculty assistance or copy of faculty notes)
6. Special Administrative Privileges (for example priority registration, late withdrawal-after deadlines)
7. Course Substitution (for example course substitution for foreign language requirement or course substitution for math requirement)
8. Disability-Specific Needs (for example unannounced classroom exits due to limited bladder control or alternate seating and standing to manage pain)
9. Referral to University Support Services (for example referral to university counseling services or university tutoring services)
10. Different Grading Criteria (for example oral reports instead of written reports or take-home exams instead of in-class exams). The following scenarios describe college students having different disabilities.

**Procedures**

Prior to collecting data from students enrolled in a Midwestern University, approval to conduct research was obtained from the Institutional Review Board of the primary author (HS16-
Data collection procedures for the study included a mass email that was sent to all undergraduate and graduate students enrolled for academic year 2016-2017. Students were informed that we were investigating college students’ perspective on classmates with disabilities and their request of educational accommodations and that they would need to review 10 short scenarios. Students could choose to participate in the study by clicking a Qualtrics link. Qualtrics is a password-protected online survey application software that was utilized to create the survey and allow participants to complete the survey.

After participants clicked on the link, a welcome paragraph appeared, explaining their rights when participating in the study. The welcome paragraph described the purpose of the study, their role in the study, the right to discontinue the survey at any time, and confidentiality assurance. A button appeared at the bottom of the page (i.e., click here to continue to the survey), and by clicking the button, participants were randomly assigned to one of three conditions (i.e., Caucasian, African American, Hispanic) for each disability-specific scenario (i.e., learning disability). After reviewing each scenario, students were instructed to choose a yes or no response to the following statement, “The student in the case scenario deserves educational accommodations.” If students selected yes, they were presented with the 10 types of educational accommodations as aforementioned. After completing this section for each scenario, students were presented with the next disability-specific scenario (e.g., spina bifida). If students selected no for any of the disability-specific scenario, they were automatically presented with the next scenario. As shown in Table 2, a frequency distribution is provided to display the final distribution of participants per race condition. After participants completed these materials, it was requested that they complete several demographic and supplemental questions. Once
participants completed this demographic and supplemental question survey, they were thanked for their participation in the study.

Table 2. Frequency distribution of study participants per condition for race of the student within each disability-specific scenario.

<table>
<thead>
<tr>
<th>Disability-Specific Scenario</th>
<th>Caucasian</th>
<th>African American</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Disability</td>
<td>145</td>
<td>145</td>
<td>126</td>
</tr>
<tr>
<td>Spina Bifida</td>
<td>139</td>
<td>145</td>
<td>132</td>
</tr>
<tr>
<td>Hearing Impairment</td>
<td>149</td>
<td>135</td>
<td>132</td>
</tr>
<tr>
<td>Diabetes</td>
<td>142</td>
<td>134</td>
<td>140</td>
</tr>
<tr>
<td>Cerebral Palsy</td>
<td>136</td>
<td>138</td>
<td>142</td>
</tr>
<tr>
<td>Manic-Depressive Disorder</td>
<td>150</td>
<td>135</td>
<td>131</td>
</tr>
<tr>
<td>Brain Injury</td>
<td>138</td>
<td>147</td>
<td>131</td>
</tr>
<tr>
<td>Spinal Cord Injury</td>
<td>136</td>
<td>138</td>
<td>142</td>
</tr>
<tr>
<td>Blindness</td>
<td>144</td>
<td>141</td>
<td>131</td>
</tr>
<tr>
<td>ADHD</td>
<td>129</td>
<td>136</td>
<td>151</td>
</tr>
</tbody>
</table>

Data Analysis

A regression analysis is a statistical process for estimating the relationships among variables. Where correlational analysis provides the strength and direction of a relationship, a regression analysis determines how an incremental change in the intercept will influence the slope of the regression analysis ($\hat{Y} = b_o + bX$). With multiple regression, you are examining how multiple predictor variables influence the slope of the regression model ($\hat{Y} = b_o + bX_1 + bX_2 + \text{etc.}$). In these types of regression analyses, the dependent variable (i.e., outcome or response variable) is continuous in nature. However, in some instances a researcher may be interested in using a predictive analysis when the dependent variable is categorical in nature. When the dependent variable is binary, a logistic regression analysis is used to determine how predictor variables influence the dependent variable. If there are more than two levels of the dependent variable, and is nominal in nature, then a multinominal logistic regression analysis is used.
(Howell, 2009). However, if the dependent variable has more than 2 levels and is ordinal in nature, then an ordinal logistic regression analysis is used. As recommended by Aldrich and Nelson (1984), the subsample for the regression analysis needed is at least 50 cases per explanatory variable. For purposes of this study, as will be discussed, logistic regression analysis and will be used when conducting predictive analysis.

**Results**

Prior to conducting statistical analyses to answer the aforementioned research questions, Logistic Regression analysis assumptions were evaluated to determine if this statistical analysis was appropriate to use. The first assumption of the logistic regression is to determine if the response variable is binary (Howell, 2009). In each research question, the response variable was dichotomous. The second assumption is that there must be one or more predictor variables that are continuous (i.e., interval or ratio) or categorical (i.e., ordinal or nominal). In each research question, there is at least one predictor variable. The third assumption is that there should be an independence of observations. Students were randomly assigned into 1 of 3 conditions for each disability-specific scenario. The fourth assumption is that the predictor variables are not linear combinations of each other (collinearity). The other assumptions include no extraneous variables are included and no important variables are omitted.

**Research Question 1: How does the race of the student in each specific disability scenario, and gender, race, and disability status of the study participant predict how deserving of educational accommodations the student is?**

A logistic regression was performed to ascertain the effects of the race in each specific disability scenario, and the gender, race, and disability status of the study participant on the likelihood that the student described in each specific disability scenario is deserving of an educational accommodation. The logistic regression model was not statistically significant for
the scenario(s) relating to learning disability, spina bifida, hearing impairment, diabetes, cerebral palsy, manic depressive disorder, brain injury, spinal cord injury, blindness, and ADHD.

**Research Question 2: Does having a disability influence the perception as to whether students with disabilities deserve educational accommodations?**

Each question that requested students to indicate whether the student in each of the disability-specific scenarios were summed to obtain a total score. An independent samples t-test was conducted to compare the total score for participants reporting that they had a disability (n = 109) and participants reporting that the did not have a disability (n = 293). There was a significant difference in the scores participants reporting that they had a disability (M = 8.61) and participants reporting that they did not have a disability (M = 7.90), t(400) = 3.478, p = .001.

**Research Question 3: Does level of education (i.e., undergraduate student, graduate student) influence the perception as to whether students with disabilities deserve educational accommodations?**

Each question that requested students to indicate whether the student in each of the disability-specific scenarios were summed to obtain a total score. An independent samples t-test was conducted to compare the total score for undergraduate student participants (n = 278) and graduate student participants (n = 106). There was a significant difference in the scores for undergraduate student participants (M = 7.90) and graduate student participants (M = 8.49), t(382) = -2.762, p = .006.
Discussion

The purpose of this study was to explore the impact of race on the perception from peers on how deserving students with various disabilities are when requesting college educational accommodations, and to understand how the participants’ disability status and educational level influences the perception of how deserving students are of college educational accommodations. In terms of research question one, we were interested in examining how the race of the student who needed college educational accommodations influenced perceptions as to how deserving they were of these accommodations. Our findings revealed that race was not a predictor of whether a student deserves educational accommodations. This finding is incongruent when considering the double-jeopardy phenomenon. Specifically, since the student who has a disability is automatically placed in one subordinate status, adding another subordinate status (i.e., race: Hispanic or African American) should increase the negative stereotypes and thus result in being viewed as less deserving. Although we were initially comparing these conditions to a condition with a majority status (i.e., Caucasian), it would be beneficial to have a control group where just the disability is disclosed and race is not manipulated. One explanation as to why we did not find significant predictors could be that race was not a strong enough stimulus, or that disability was an overpowering stimuli that participants tended to focus on more (thus dismissing the race manipulation).

In terms of research question two, we were interested in investigating the disability status of the study participants and how this influenced the perception as to whether a student was deserving of a college educational accommodation. Upton and Harper (2000) found that female participants were more in favor of educational accommodations compared to male participants. However, the disability status of the participant was not considered. Our findings showed that
students with disabilities rated the student described in the disability-specific scenarios as more deserving of college educational accommodations than students without disabilities. One explanation that may explain this difference is that students with disabilities in post-secondary settings may be more aware of the unique challenges and obstacles that occurs within a classroom setting and may have more knowledge related to the appropriateness of an educational accommodation (e.g., it is not to get an unfair advantage but rather have an equitable educational experience) as mandated in the previous legislation aforementioned (e.g., 2008 ADA amendments).

Finally, in terms of educational level as a predictor of whether a college student is deserving of educational accommodations, we found similar findings to Upton and Harper results that higher education levels leads to favorable attitudes towards educational accommodations than those of lower educational levels. Upton and Harper attributed that more exposure to people with disabilities or experience (e.g., life experience, personal maturation, specific training) could be factors to explain this occurrence. Despite the fact that there were significant differences, both undergraduate and graduate students had high ratings in regard to the student from each disability-specific scenario as being deserving of college educational accommodations. Of course, the university of where the students attended require that all course syllabi include a disability accommodations statement. This may be a factor in students providing high rankings (the higher the ranking, the more deserving the student was of college educational accommodations).

**Study Limitations**

One study limitation includes social desirability. Despite the fact that study participants were informed that their responses would be anonymous, they may still have provided responses
that would be desirable among their peers. Another study limitation may have been participant fatigue. The average time to complete the study materials was 15.35 minutes. A final limitation is that we obtained participants from one university. When discussing external validity (ability to generalize to all college students at this university), we are limited since we obtained a low response rate.

Implications

The current research study is beneficial because it provides useful information pertaining to how race influences decision making in terms of bias towards students with disabilities. Even with the present findings, it is essential to continue to provide diversity-related training to all students with and without disabilities. Additionally, it is important to provide disability-related training to students in post-secondary educational institutions. Providing information related to the legislation is one mechanism, but also providing information related to the personal, philosophical, sociological, psychological, medical and legal perspectives of disability will help students understand how stigma impacts disability. Finally, enlightening students with disabilities on the positive attitudes that were collected in this study can impact their perception on requesting accommodations. Specifically, if students with disabilities believe that their peers are supporting them in requesting college educational accommodations, they may feel more inclined to request these. This may allow for a better learning environment in a post-secondary educational institution.
References


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