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COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Students' Perception on the Relative Fairness of Selected Educational Accommodations

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ABSTRACT

The purpose of this study is to assess the relative fairness of selected educational accommodations provided to peers who have disabilities. This study utilized two scales developed by Upton (2000) which quantifies the relative fairness that students perceive towards the provision of selected educational accommodations. The findings of this study yielded evidence to support that level of education at a university level might have an influence on the students' perceptions about educational accommodations offered to the students with disabilities. These surveys were distributed to around 409 students at a mid-size southern public university in the United States. Implications of these findings and suggestions for future research are provided.

Keywords: students with disabilities; educational accommodations

INTRODUCTION

Attending college can be a stressful time for anyone; it can be more so for those who live with a disability. Research has shown a heightened level of psychological distress including anxiety and depression in students with disabilities (specifically Attention Deficit Hyperactivity Disorder) when compared with the general student population (Kettmann, 2008). Negative attitudes can hinder individuals with disabilities from attaining their personal and professional goals in life (Antonak & Livneh, 2000). In the academia, the label of a learning disability can make others form preconceived and negative perceptions about those individuals (Arceneaux, 2008). Research has found a correlation between the label of a learning disability and the level of stigma faced by those with the learning disability (Osterholm, Nash, & Kritsonis, 2007). Research on students with psychiatric disabilities suggests that they were

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not offered adequate information to enable them to contact disability services on their campus (Yorgason, Linville, & Zitzman, 2008).

The focus of this study is to quantify the degrees of students' acceptance and/or intolerance toward educational accommodations at a mid-size university in the southern part of the United States. The specific types of disabilities considered in this study include any disability that requires educational accommodations in a postsecondary setting. This study utilized two surveys presented to students that questioned their personal feelings of fairness toward educational accommodations offered to their peers with disabilities.

These effects may continue throughout those individual's college career, and it is highly dependent upon faculty disability attitudes that may impact student's academic success.

Research articulates that instructors' attitudes toward educational accommodations were influenced by several factors including: (a) the gender of the instructor, (b) years of teaching experience, and (c) the academic preparation of the instructor (Leyser, Greenberger, Sharoni, & Vogel, 2011). More specifically, the more frequently the instructor had provided accommodations in the past, the more accepting the instructor would be in offering the accommodations in the future; and individuals who held a doctorate degree were more likely to be provided with accommodations than individuals who held a master's degree. Moreover, instructors within the field of education are more likely to be accepting of accommodations than instructors from other disciplines (Barr & Bracchitta, 2008).

There are numerous studies conducted in the area of educational accommodation provision for students with disabilities in higher education. One study held that a majority of the students surveyed encountered a lack of support in gaining access to educational accommodations from the administrators, faculty, staff, and other students (West, Kregel, Getzel, Zhu, Ipsen, & Martin, 1993). In another similar study by Elacqua (1996) found that faculty members had lack of knowledge and awareness on persons with disabilities in general and Disability Support Services provided by the university. However, the majority of students surveyed reported they had received sufficient information on the aspects of the accommodation process at the university.

As supported by research, increased contact with persons with disabilities elevates general disability attitudes (Osterholm et al., 2007; Upton & Harper, 2002; Upton, Harper, & Wadsworth, 2005). Osterholm et al. (2007) have validated the importance of interpersonal contact (e.g.., friendships, working relationships, and social relationships) in fostering the development of positive attitudes toward students with disabilities and in creating a more inclusive environment for all students.

There were differences between the students' attitudes towards educational accommodations and their education level, undergraduate major, and prior contact or relationship with persons with a disability. Previous studies have found similar correlations between the level of education (Upton & Harper, 2002; Pruett & Chan, 2006), undergraduate or graduate major (Tervo, Palmer, & Redinius, 2004), and whether or not one has contact with an individual with a disability (Fichten, Schipper, & Cutler, 2005; Nabors & Lehmkuhl, 2005; Tervo et al., 2004).

OBJECTIVE OF THE STUDY

This study is done to understand the perception of relative fairness students hold toward educational accommodations that are offered to fellow students with disabilities.

METHODOLOGY

Participants

The total undergraduate population is approximately 10,000 and the graduate student population is around 900. The campus is in close proximity to a large military establishment with many student are connected with. Therefore, the student body includes a large non-traditional student population in the United States.

Following human subject approval, ten instructors were approached and asked for student participation in their courses. Fifteen classes were selected to request volunteer participation. Data were gathered from 409 participants, of which 401 were used for the purpose of data analysis. Each participant was given the following items: (a) a research participation consent form which includes information about confidentiality, voluntary nature of participation, and a human subject statement; (b) a personal information questionnaire; and (c) a copy of the *General Attitudes toward College Educational Accommodation Scale* (GACES) [see Table 1] and the *Equitable Evaluation of Selected Types of Accommodations* (EESTA) instruments [see Table 2].

Materials and Procedures

Antonak and Livneh (2000) recommended the use of an existing scale to measure individual's attitude toward persons with disabilities. Two instruments were used in this study: (a) *General Attitudes toward College Educational Accommodations Scale* (GACES) [see Table 1] and (b) *Equitable Evaluation of Selective Types of Accommodations* (EESTA) [see Table 2]. Both instruments were developed by Upton (2000). Since 2002, these instruments have been used in studies concerning perceptions of disability-specific attitudes among college students (Upton et al., 2002) and faculty member populations (Alghazo & Upton, 2008).

The GACES instrument has 7 questions and was designed to evaluate the student's perception toward general educational accommodations offered to students with disabilities. An example of question asked is "Educational accommodations should be provided to college students with disabilities." Each question is followed by a Likert Scale (1 = strongly disagree, 2 = slightly disagree, 3 = slightly agree, 4 = strongly agree). Each participant was required to read the question and rate their attitude concerning the specific statement.

The EESTA instrument provided more specific educational accommodations, including testing alternatives and classroom flexibility. The participant was asked to rate their perception of "fairness" or "unfairness" toward the accommodation. This instrument uses a similar Likert scale (1 = unfair, 2 = somewhat unfair, 3 = somewhat fair, 4 = fair). These scales have an internal consistency of .942 and a Cronbach's alpha of .87 (Alghazo & Upton, 2008).

This study utilized a cross-sectional survey design to measure individuals' attitudes toward educational accommodations. Furthermore, this study included a personal information, questionnaire to collect personal information, such as, level of education, undergraduate major, and whether the individual personally has had prior contact with an individual with a disability. This demographic information was then paired with the participant's scaling on each survey.

The qualitative factors included in this study were designed to provide a general idea of the attitudes of participants who reported having prior contact with a person who has a disability. This question was developed specifically for this study. The statement in the personal information questionnaire specifically requested that participants provide details of how their attitudes may have changed or altered after

knowing this individual with a disability. The findings obtained from this qualitative data were beyond the scope of this paper and therefore not included.

RESULTS

Scoring of both scales involved obtaining the sum of the participant's answer on the Likert scale. This sum produced a score for the GACEA between 7 and 28, and a score for the EESTA between 10 and 40. These scores represented the participant's viewpoint of the use of educational accommodations by persons with disabilities. A higher score indicates a favorable attitude toward educational accommodations. Eight participants failed to complete the surveys as instructed and their data were not used in the analyses.

All the data collected were converted into the Statistical Package for the Social Sciences (SPSS) 19.0 data for further analysis. One-way analysis of variance (ANOVA) and t-test were used to analyze the data in this study. Post hoc evaluations were performed using the Fisher's Least Significant Difference (LSD) procedure to examine specific group differences. Analyses were conducted to answer the following questions: (a) Does education level significantly affect students' perceptions about educational accommodations provided at this university?; (b) Does a student's undergraduate major significantly affect his/her perceptions about the educational accommodations offered at this university?; and (c) Does prior contact with persons with disabilities significantly affect their perceptions about educational accommodations at this university?

Education Level

For level (year) of college study, participants were reported as Freshman (54.9%), Sophomore (18.5%), Junior (13.7%), Senior (11.7%) and others (1.2%).

Year of college study and the GACES scores. ANOVA results indicated that there was a significant difference between year of college study and the GACES scores, $F(4,396) = 3.996$, $p = .003$ (as shown in Figure 1). Means were as follows: Freshman (M=3.50), Sophomore (M=3.61), Junior (M=3.66), Senior (M=3.80), and other levels (M=3.74). Post-hoc comparisons indicated that there were significant differences between Freshman and Junior; and between Fresh-

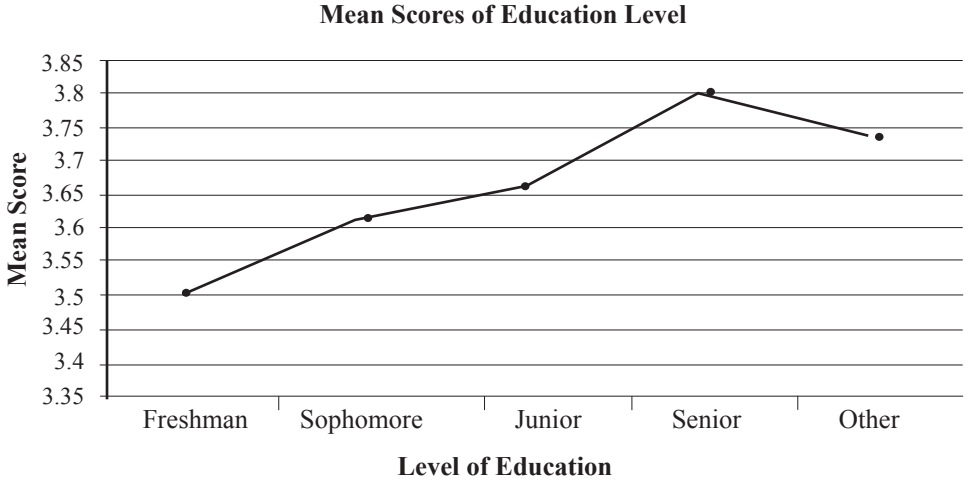

Figure 1: Mean values of the year of education among participate surveyed. Results indicated that there were significant differences between year of college study and the GACES scores

man and Senior (as shown in Figure 1).

Year of college study and the EESTA scores. The result indicated that there was no significant relationship between year of college study and the EESTA scores, $F(4,396) = 2.025$, $p > .05$ existed. The means for the college levels of education were as follows: Junior (M=3.35), Senior (M=3.32), Sophomore (M=3.24), freshman (M=3.18), and other levels (M=3.02).

Undergraduate Major

Analyses between colleges were undertaken. The colleges examined were the School of Technology and Public Management (N=7), the College of Arts and Letters (N=67), the College of Behavioral Sciences and Health Sciences (N=174), College of Sciences and Mathematics (N=75), the College of Education (N= 23), the College of Business (N= 26) and a few students were not enrolled in a college (Undecided (N=47)).

College and GACES scores. The results indicated there were no significant differences between college and students' attitudes toward the provision of educational accommodation, $F(6, 394) = 1.859$, $p > .05$. Means were as follows: School of Technology and Public Management (M=3.71), College of Arts and Letters (M=3.70), College of Behavioral Sciences and Health Sciences (M=3.59), Undecided (M=3.57), College of Sciences and Mathematics (M=3.52), College of Education (M=3.48), and College of Business (M=3.34).

College and the EESTA scores. An examination of students' perceptions of equitable evaluation of educational accommodations for type of college resulted in the following means: Undecided (M=3.34), College of Arts and Letters (M=3.33), College of Education (M=3.32), College of Behavioral and Health Sciences (M=3.20), College of Science and Mathematics (M=3.17), College of Business (M=3.08), and School of Technology and Public Management (M=2.90). An ANOVA analysis showed that the differences were significant, $F(6,394) = 2.318$, $p = .033$ (Figure 2). Post hoc analyses using the LSD post hoc criterion for significance indicated that there were significant differences between students from College of Arts and Letters and College of Business; College of Arts and Letters and School of Technology and Public Management; College of Business and Undecided; College

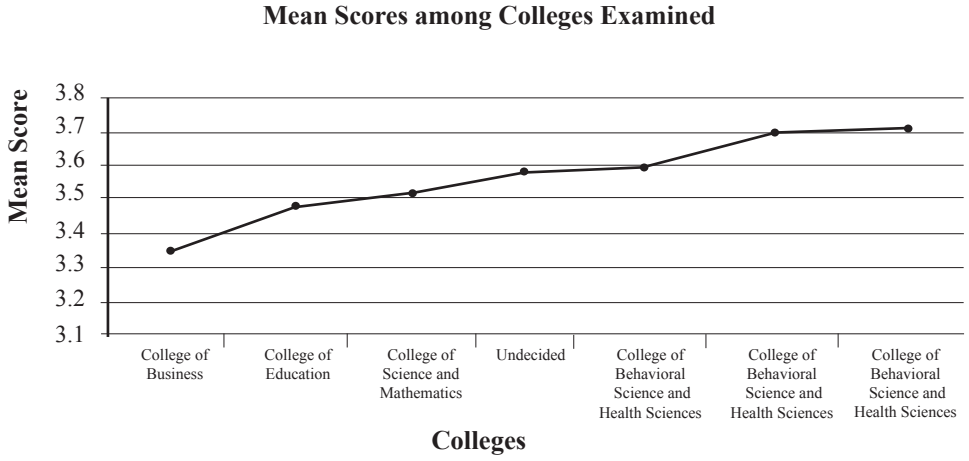

Figure 2: Mean values among all the colleges of education at the university that this study was conducted. Results indicated that there were significant differences between the various colleges and the EESTA scores

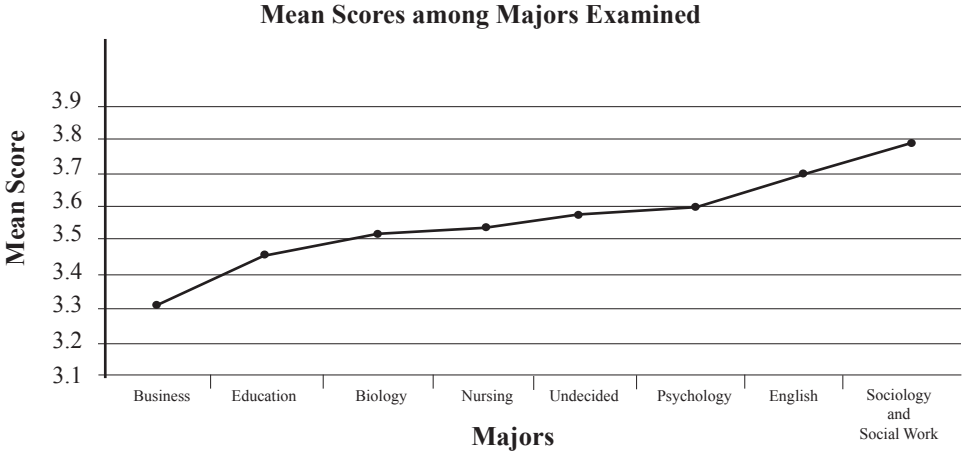

Figure 3: Mean values among Majors participants had indicated. Results indicated that there was a significant relationship between students' major and their scores on the EESTA scores

of Education and School of Technology and Public Management; and School of Technology and Public Management and Undecided (as shown in Figure 2).

For undergraduate majors, the number of participants were reported as follows: Sociology and Social Work (*N*=31), English *N*=22), Undecided (*N*=47), Education (*N*=21), Psychology (*N*= 43), Nursing (*N*=60), Biology (*N*=27), Business (*N*=21) and all other majors not included in the prior groups (*N*= 129).

Major and the GACES scores. There were no significant differences between college and the GACES scale, $F(8, 392) = 1.734$, $p > .05$. Means for the following analysis were as follows: Sociology and Social Work (*M*=3.78), English (*M*=3.70), Psychology (3.59), Undecided (*M*=3.57), Nursing (*M*=3.54), Biology (*M*=3.51), Education (*M*=3.46), Business (*M*=3.31), and all other majors not included in the prior groups (*M*=3.60).

Major and the EESTA scores. The means were as follows: Sociology and Social work (*M*=3.48), English (*M*=3.38), Undecided (*M*=3.34), Education (*M*=3.32), Psychology (*M*=3.19), Nursing (M=3.16), Biology (*M*=3.15), Business (*M*=3.07), and all other majors not included in the prior groups (*M*=3.18). The results indicated that there were significant differences between students' major and their scores on the EESTA, $F(8,392) = 2.56$, $p = .01$ (as shown in Figure 3). Post-hoc comparisons indicated that there were significant differences between Biology and Sociology and Social Work major; Business and English major; Business and Sociology and Social Work major; Business and Undecided; Nursing and Sociology and Social Work major; Nursing and Undecided; Psychology and Sociology and Social Work major; Sociology and Social Work and other majors; and those who were undecided about their major and other majors.

Personal Connection with Individuals with Disabilities

Of the 401 participants included in this study, 52.9% reported prior contact with individuals with disabilities (*N*=189). 15% of the participants reported that they had friends with disabilities (*N*=60). 3.2% reported having a child with disability (*N*= 13), 21.9% reported having a relative with disability (N=88) and 1% indicated to have a neighbor with disability (*N*=4). 11.7% have not mentioned the specific type of relationship they had with individuals with disabilities (*N*=47).

Table 1: General attitudes toward college educational accommodation

Responding to these items about college educational accommodation and the following scenarios requires that respondents clearly understand what **disability** and **educational accommodation** mean. This study defines **disability** as "having a mental or physical impairment (difference) that substantially limits one or more major life activities, having a record of such an impairment or being regarded as having such an impairment" (this includes physical, psychiatric, psychological, and emotional disabilities). **Educational accommodation** is defined as "the provision of any educational support that is needed for the person with a disability to access, learn, and benefit from educational services alongside peers without disability."

Directions: Please read the following items and circle the number you view as the best answer. For these items use the following key:

1 = strongly disagree; 2 = slightly disagree, 3 = slightly agree; and 4 = strongly agree.

1. Educational accommodations should be provided to college students with disabilities.
   1 2 3 4

2. Providing college educational accommodations to students with disabilities is fair to all students.
   1 2 3 4

3. Persons with disabilities should attend college if they want to.
   1 2 3 4

4. College students whose disability negatively impacts their lives should be provided with educational accommodations.
   1 2 3 4

5. College students with a personal history of disability should have access to educational accommodations.
   1 2 3 4

6. College students diagnosed with a disability who have physical limitations should be provided with educational accommodations.
   1 2 3 4

7. College students diagnosed with a disability who have cognitive limitations (mental and/or learning deficiencies) should be provided with educational accommodations**.**

   1 2 3 4

Table 2: Equitable evaluation of selected types of accommodations

Please assume that the following types of educational accommodation are available at this university. Rate how fair you view the provision of the following types of educational accommodation to college students with disabilities with regard to all students at this university by circling the number that best corresponds with your view. For this item use the following key:

1 = unfair, 2 = somewhat unfair, 3 = somewhat fair, 4 = fair.

Testing Alternatives (for example, extended time for tests or alternative test formats)
1 2 3 4

Assistive Technology (for example, closed captioning or voice-activated computer)
1 2 3 4

Alternative Instructional Materials (for example, read text for student or books on tape)
1 2 3 4

Classroom Flexibility (for example, flexible test schedule or flexible due dates for assignments)
1 2 3 4

Learning Aids (for example, note takers or additional faculty assistance)
1 2 3 4

Special Administrative Privileges (for example, priority registration or late withdrawal--after deadlines)
1 2 3 4

Course Substitution (for example, course substitution for foreign language requirement or course substitution for math requirement)
1 2 3 4

Disability-Specific Needs (for example, eat during class to control glucose level or alternate seating and standing to manage pain)
1 2 3 4

Referral to University Support Services (for example, referral to university counseling services or referral to university tutoring service)
1 2 3 4

Different Grading Criteria (oral reports in place of written reports or take home exams instead of in-class exams)
1 2 3 4

Personal connection and the GACES scores. The relationship between personal connection and the GACES scores was not significant, t (399) = .27, p > .05.

Personal connection and the EESTA scores. The result also indicated that there was no significant relationship between the personal connection with individuals with disability and the EESTA scores, t (399) = -1.760, p > .05.

DISCUSSION

The purpose of this study was to understand the perception of relative fairness students hold toward educational accommodations that are offered to fellow students with disabilities. The findings of this study yielded evidence to support that level of education at a university level might have an influence on the students' perceptions about educational accommodations offered to the students with disabilities. Second, the undergraduate major a student holds might have an influence on his or her perceptions of fairness toward educational accommodations. For example, results from the study reported that the participants from the College of Arts and Letters were likely to have more positive attitudes toward educational accommodations than the participants from the College of Business. Barr and Bracchitta (2008) found that there was a correlation between the students who had some specialized training in disability awareness and those with more positive perceptions about disability issues. However, these relationships are difficult to interpret without further research concerning factors such as personality or empathy toward others.

The last finding indicated that knowing an individual with a disability did not have any significant effects on the perceptions of fairness toward educational accommodations. This result contradicted with the previous research findings (Fichten et al., 2005; Nabors & Lehmkuhl, 2005; Tervo et al., 2004).

LIMITATIONS

There were some limitations in the study. One limitation was the use of convenient sampling as a means to recruit and select participants. The use of convenient sampling procedure might not allow researchers to derive a representative sample for this study.

The most notable limitation in relation to the design of this study is due to the fact that most of the results were based on the two self-reported surveys and demographic forms. The other known studies that made use of these surveys have included additional assessments and participant information for analysis. These materials included a more inclusive personal information form such as the use of the Scale of Attitudes Towards Disabled Persons (SAPD Form R; Antonak, 1992), and a scenario depicting a hypothetical disabled student and prompting participants to indicate their perception of specific educational accommodations to be offered to the hypothetical student (Alghazo & Upton, 2008; Upton & Harper, 2002; Upton et al., 2005).

CONCLUSION

This study can be used as a basis for further examination and understanding of how educational accommodations are viewed by students with learning disabilities. Future research should include the analysis of the personal experiences of students with disabilities in the postsecondary educational environments through focus group method.

Based on the findings of the study, it could be inferred that the perceptions toward educational accommodations might increase with years spent in college and different undergraduate majors might play some roles in influencing student's attitudes toward educational accommodations.

REFERENCES

Alghazo, R., & Upton, T. (2008). *Disability Attitudes of Postsecondary faulty members and perspective regarding educational accommodations*. (Doctoral dissertation) retrieved from: Proquest, UMI Number: 33110998.

Antonak, R. (1992). *Scale of attitudes towards disabled persons (SADP) Form R*. Durham, NH: University of New Hampshire.

Antonak, R. F., & Livneh, H. (2000). Measurement of attitudes towards persons with disability. *Disability and Rehabilitation*, *22*(2), 211-224.

Arceneaux, A. D. (2008). *It doesn't make any sense: Self and strategies among college students with learning disabilities*. Doctoral Dissertation. Columbia:University of Missouri.

Barr, J. J., & Bracchitta, K. (2008). Effects of contact with individuals with disabilities: Positive attitudes and majoring in Education. *The Journal of Psychology*, *143*(3), 225-243.

Elacqua, T. (1996). *Perceptions of classroom accommodations among college students with disabilities*. Washington, DC: EDRS.

Fichten, C. S., Schipper F., & Cutler, N. (2005). Does volunteering with children affect attitudes toward adults with disabilities? A prospective study of unequal contact. *Rehabilitation Psychology, 50*(2), 164-173.

Kettmann, J. J. (2008). Psychosocial changes of college student with a learning disability or attention-deficit hyperactivity disorder. Dissertation Abstracts International: Section B: *The Science and Engineering*. *68*, 6312.

Leyser, Y., Greenberger, L., Sharoni, V., & Vogel, G. (2011). Students with disabilities in Teacher education: changes in faculty attitudes toward accommodations over ten years. *International Journal of Special Education*, *26*(1) 162-174.

Nabors, L. A., & Lehmkuhl, H. D. (2005). Young adults' perception of children with cerebral palsy. *Rehabilitation Psychology*, *50*(3), 292-296.

Osterholm, K., Nash, W. R., & Kritsonis, W. A. (2007). Effects of labeling students "learning disabled" emergent themes in the research literature 1970 through 2000. *Focus on Colleges, University and Schools*, *1*(1), 1-11.

Pruett, S. R., & Chan, F. (2006). The development and psychometric validation of the disability attitudes implicit association test. *Rehabilitation Psychology*, *51*(3), 202-213.

Tervo, R. C., Palmer, G., & Redinius, P. (2004). Health professional student attitudes towards people with a disability. *Clinical Rehabilitation*, *18*(9), 908-915.

Upton, T. D. (2000). *College student attitudes toward educational accommodation*. Doctoral Dissertation. The University of Iowa. Iowa City, Iowa.

Upton, T. D., & Harper, D. C. (2002). Multidimensional disability attitudes and equitable evaluation of educational accommodations by college students without disabilities. *Journal of Postsecondary Education and Disability, 15*(2), 115-130.

Upton, T. D., Harper, D. C., & Wadsworth, J. (2005). Postsecondary attitudes toward persons with disabilities: A comparison of college students with and without disabilities. *Journal of Applied Rehabilitation Counseling*, *36*(3), 24-31.

West, M., Kregel, J., Getzel, E. E., Zhu, M., Ipsen, S. M., & Martin, E. D. (1993). Beyond Section 504: Satisfaction and empowerment of students with disabilities in higher

education. *Exceptional Children, 59*(5), 456-467.

Yorgason. J. B., Linville. D., & Zitzman, B. (2008). Mental Health among college students: Do those who need services know about and use them? *Journal of American College Health*, *57*(2), 173-181.