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# Locus of control, parents involvement and college disability accommodations

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**LOCUS OF CONTROL, PARENTS INVOLVEMENT AND COLLEGE  
DISABILITY ACCOMMODATIONS**

by

Olivia S. Aquino

A Thesis

Submitted to the  
Department of Educational Services and Leadership  
College of Education

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Thesis Chair: Terri Allen, Ph.D.

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## **Dedications**

I would like to dedicate this manuscript to my mother, Katherine Aquino and father, Peter Aquino for always supporting my dreams, encouraging me to be passionate about whatever I choose to do in life and teaching me how to work hard.

I would also like to dedicate this to my younger sisters, Priscilla and Elyssa Aquino in hopes that I can motivate and inspire them to also work hard to reach their highest potential no matter how difficult it might be.

## **Acknowledgment**

I would like to thank Terri Allen, for mentoring me, providing me with assurance, support and confidence all year. I appreciate all of the guidance you offered throughout my struggles while still believing in my future success.

## **Abstract**

Olivia Aquino  
LOCUS OF CONTROL, PARENTS INVOLVEMENT AND COLLEGE DISABILITY  
ACCOMMODATIONS  
2015-2016  
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An increasing number of students with learning disabilities are enrolled in college and seek support services under ADA (Americans with Disabilities Act). According to U.S. Department of Education, National Center for Education Statistics (2015), Digest of Education Statistics, 2013 (2015-011), approximately 11% of students report having a disability. However, although more students attending post-secondary education are receiving accommodations and supports, the retention of these students remains a central concern. A student's ability to self-advocate seems to be one key to academic success. Self-determination and self-efficacy factors are frequently cited as essential to successful transition to college. The current study explored the relationship of locus of control, parental involvement, and student openness with regard to their disability. The results illustrated that in regards to the participant's perception of their disability, there was no significant difference between the students who reported an external locus of control versus the students who reported an internal locus of control.

## Table of Contents

Abstract.....	v
Chapter 1: Introduction.....	1
Need for Study.....	1
Purpose .....	1
Hypothesis One.....	1
Hypothesis Two .....	1
Operational Definitions .....	1
Assumptions .....	2
Limitations.....	2
Summary.....	3
Chapter 2: Literature Review .....	4
Disability Statistics .....	4
Purpose of an IEP and Accommodations .....	4
Controversy on the Topic of Disabilities .....	6
Effects and Reactions to Testing Accommodations .....	9
Factors Influencing Responses to Accommodations .....	11

**Table of Contents (Continued)**

Demographic Imbalance of Diagnoses Students ..... 12

Locus of Control ..... 13

Inconsistencies in Locus of Control Theory ..... 14

Parental Influence in One’s Locus of Control ..... 15

Past Research on Achievement Motivation ..... 16

Child Success and Failure Experiences as a Key Factor ..... 16

Academic Locus of Control ..... 18

Learning Disabled Self-Concept ..... 20

Core Self Evaluations ..... 20

Chapter 3: Methodology ..... 22

    Participants ..... 22

    Materials ..... 22

    Design ..... 25

    Procedure ..... 25

Chapter 4: Results ..... 27

Chapter 5: Discussion ..... 28



## Table of Contents (Continued)

Summary of Findings .....	28
Limitations.....	30
Future Directions .....	31
References .....	33
Appendix A: Perception of Disability Participant Questionnaire .....	40
Appendix B: Locus of Control Participant Questionnaire.....	43

## **Chapter 1**

### **Introduction**

#### **Need for Study**

Students with disabilities often need to advocate for themselves when they enter college to a greater degree than was required during their school years. This study can help induce students to strive to reach their highest potential regardless of a disability and their point of view on receiving extra accommodations.

#### **Purpose**

The purpose for this study was to determine if internal or external locus of control has any correlation with a student's involvement in receiving extra accommodations from their school due to a disability and their perception of the accommodations. The aim was to determine if one's internal or external locus of control has any correlation to their openness regarding their impairment, parental involvement, and self-efficacy.

#### **Hypothesis One**

Students with higher internal locus of control are more likely to report positive perceptions of their disability accommodations.

#### **Hypothesis Two**

Students with a higher internal locus of control are also, more likely to be open and verbal about their disabilities, report less parental involvement, and greater self-efficacy.

#### **Operational Definitions**

ADA: Gives civil rights protection to individuals with disabilities by requiring reasonable accommodations.

Academic Support: A wide variety of instructional methods, educational services, or school resources provided to students in the effort to help them accelerate their learning progress, catch up with their peers, meet learning standards or generally succeed in school.

Disability Accommodations: Modification or adjustment to a job or school environment that will enable a qualified individual with a disability to participate to their highest potential.

Locus of control: The orientation that a person holds as to where control over life events is relative to the self (internal or external meaning, self-control, or other-controlled).

Self-Efficacy: Is the belief that one is capable of accomplishing something successfully.

### **Assumptions**

I assume that all participants answered the questions honestly. I believe that the students were open to expose their true feelings about their disability and the accommodations they receive. I also assume that most participants received extra help in their adolescent school years in addition to their college experience.

### **Limitations**

There is a limited population of college students who are eligible to participate in the study. There may have been a lack of diversity within the population sample. Specific questions or boundaries regarding the topic may not be accessible due to the theme of the study. The participant may have felt reluctant to answer the questionnaires honestly due to confidentiality.

## Summary

High statistics of students who suffer from a disability are one of the incentives as to why accommodations have become significant in the process of a student's educational experience. It is critical that young adults have awareness of the resources created by past laws that are available to them due to their disability. It is also important to have an understanding of the overall criteria a student needs to be qualified for accommodations at their school. There are various types of appropriate accommodations that are available to individual students depending on their circumstance. Regardless of the beneficial laws that were created to help solve specific issues, there are still different types of controversies that are brought to the surface on this topic. This study focused on what influences may motivate or discourage students on seeking the extra help entitled to them. Locus of control demonstrates two types of personalities in which an internal or external perception may be a factor to why or how students feel/act towards the option of accommodations and disabilities. It is possible that a student's locus of control may have a correlation to their openness and self-efficacy about their disability to their peers. Studies such as these contribute to the general progression teachers, school psychologist and counselors need to help educate students on the resources available to them. These types of studies can also help such leaders motivate students in becoming more open to their peers about their disabilities and the help they receive. A priority of teachers, school psychologists and counselors, in addition to this study's goal contribution, is to facilitate students on reaching their highest potential and develop a positive self-efficacy.

## **Chapter 2**

### **Literature Review**

#### **Disability Statistics**

According to Melana Vickers who wrote the article entitled “Accommodating College Students with Learning Disabilities: ADD, ADHD, Dyslexia” (2010) two out of every hundred students who go to a college or a university in the U.S. will have ADD, ADHD, or dyslexia. In statistics to follow, in 2012 the U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics (2015)*, reported approximately eleven percent of students having a disability, however these students are given the opportunity to accomplish their true capabilities because of specific academic treatment. Some of these students were diagnosed with ADD/ADHD or a Learning Disability (LD), which includes dyslexia; the impaired ability to understand and/or use language (Vickers, 2010). Difficulty in staying focused, paying attention, controlling behavior and hyperactivity are all the symptoms of ADHD disorder, which also meets the criteria of a learning disability. Federal laws mandate that disabled students must be provided with accommodation services such as monitoring, assessment and other aspects of treatment in funded education (Vickers, 2010). These accommodations are essential to help students in the classroom so they can rise to their highest potential academically.

#### **Purpose of an IEP and Accommodations**

The Individuals with Disabilities Education Act also known as IDEA, was made for students based on their unique needs, which are identified by an Individual Education Plan team (IEP), (IDEA, 1997). An IEP is a written statement of the educational plan designed to meet a child's individual needs in which will also provide how progress will

be measured. Every child who receives special education services must have an IEP, (Alizo, 2013, The Short-and-Sweet IEP Overview, para. 1). “Several people, including parents, are involved in creating the document. The entire process can be a great way to sort out your child’s strengths and weaknesses. Working on the IEP can help you figure out ways to help him succeed in school,” (Standberry, 2016, Understanding Individualized Education Programs, para. 2). The purpose of testing accommodations in particular is for the administration of a standardized test to provide students with disabilities the opportunity to demonstrate their knowledge and understanding of what is being measured without the interference of their disability. The accommodations are intended to influence the skills needed to access a test and give students with disabilities the educational boost that is appropriate to their needs (Lang, Elliott, Bolt, & Kratochwill, 2008).

There are many factors that are significant to consider on the subject of accommodations, for example the various types of disabilities, different accommodation packages, diverse approaches to determining and using accommodations and the different research designs, (Lang, Elliott, Bolt, & Kratochwill, 2008). In 1999, Stephen Elliott, Thomas Kratochwill, & Aleta Shulte created the Assessment Accommodations Checklist as a tool for educators to identify and document the use and effects of accommodations for students with disabilities. The 67 different types of accommodations fall under the eight accommodation domains: motivation, scheduling, setting, assistance prior to the administration of test, assessment directions, assistance during the assessment, equipment or assistive technology and changes in format (Lang, Elliott, Bolt, & Kratochwill, 2008). These different accommodations cater to each individual student’s needs.

As a student gets older, if they are having trouble overcoming the limitations that keep one from meeting the demands of a college or university, it is then that they must apply to the college disabilities offices in order to obtain these types of accommodations (Vickers, 2010). These services provide modifications like audio recordings, giving extended time on tests, alternative forms of tests, alternate locations for test, and even a lessened load of courses while having full-time status (Vickers, 2010). In order to obtain accommodations like these the student must first show the college disabilities office documentation of their disability and how it limits them as a student. The school will then evaluate the student on a case-by-case basis and decide if the student can qualify for disability services. Next a letter is written and sent to the student's relevant professors for the need of accommodations, however only the requirement of accommodations are disclosed, not the disability itself (Vickers, 2010). Due to the Family Educational Rights and Privacy Act of 1974 a student is not obligated to disclose their disability to their professor, which is why it is not noted on the accommodations paperwork. The disabilities office and teachers of a school are aware of the accommodations for their students but are not to speak to anyone about a student's status.

### **Controversy on the Topic of Disabilities**

The Americans with Disabilities Act of 1990 (ADA) defines a disability as a "physical or mental impairment that limits one or more life activities" (Vickers, 2010). The ADA has a broad definition of disability, which often leads to consequences in higher education. There is controversy on this topic because the issue within the court system and school system differ on the most central points where not all diagnoses or accommodations are seen as "legitimate" (Vickers, 2010). Administrators are caught

between a desire to serve the genuine needs of their disabled students and the need to avoid unfairness by granting accommodations to students who don't really need them. Disability accommodations is an assessment that is intended to maintain or facilitate the measurement goals so scores from the accommodated test would measure the same quality as scores from the unaccommodated test (Elliott, Kratochwill, & Shulte, 1999; Elliott, Braden, & White, 2001). Even though testing accommodations are intended to increase the legitimacy of the results made from a test score, sixty-seven percent of general education teachers rated testing accommodations as "not fair." This idea comes from the theory that all students would benefit from having some type of accommodation to their personal needs (Elliott, Kratochwill, Malecki, & McKeivitt, 2009). At some schools an individual disability expert or committee will make the decision on whether to grant a student their request depending on the most appropriate for their needs.

Disability accommodations don't only apply to students of adolescent ages and college students but employers as well. In 2008, the Americans with Disabilities Amendments Act (ADAAA) made a number of significant changes from the Americans with Disabilities Act (ADA). The ADAAA required organizations to provide reasonable accommodations to employees in addition to students with a broad range of disabilities to perform essential functions at their job. Even though the ADAAA made an attempt to make significant changes to eliminate some of the issues at hand, the final decision on whether a student or employee is granted their request of accommodation for a disability like depression and dyslexia still all depends on how the employer perceives it. Experts in these offices do not always apply consistent or legally thorough judgments for eligibility of accommodations. Due to the fact that the ADA's definition is so ambiguous, the



description of a disability is problematic (Oliver, 1983; Pfeiffer, 1998, 1999; Reisine & Fifield, 1992; Verbrugge, 1990). For example, while some may think chronic migraine is not debilitating and does not deserve accommodations, individuals who suffer with this disability would most definitely disagree. The ADA has resulted in courts due to adopting a narrow view of a “disability,” in which the circumstance become a legal point of view instead of a mental health standpoint (Ranseen, & Parks, 2005). This causes major confusion and disagreement over the definition of disability, however this antidiscrimination law was specifically designed to protect individuals in the workplace (Ranseen, & Parks, 2005). For example, the ADA is supposed to protect an individual who is not hired solely because he or she suffers from bipolar disorder. Nevertheless, there are occasions where unequal treatment based on prejudice, misinformation and stereotyping takes place when referring to an individual with a learning disability (Ranseen, & Parks, 2005). Due to the fact that the courts and judges interpret disabilities differently, evidence shows that some requests are unfairly denied based on feelings towards the requestor or their perceptions of the requestor’s disability (Carpenter & Paetzold, 2013). Refusal of a request may keep qualified individuals from performing their job, which is why it is important to provide training for managers or decision makers on how to properly and legally respond to a request for a reasonable accommodation (Carpenter & Paetzold, 2013). For instance, it is essential that managers become aware of their personal biases and perception of individuals with disabilities to avoid a scenario where a manager may unfairly deny a request because the accommodation generates a high financial cost instead of believing an accommodation is not necessary (Lee, 1996; McFarlin, Song & Sonntag, 1991). Unfortunately, due to the

fact that there has been little research done to examine how employers and educational experts perceive the validity and fairness of disability accommodations, the degree of these more common issues have grown significantly.

### **Effects and Reactions to Testing Accommodations**

In attempts to help eliminate some of the essential problems and reduce the controversial topics within the system, Lang, Elliott, Bolt, and Kratochwill (2008) examined the effects of testing accommodations on students' test performance and their reactions to the use of accommodations. The focus was on the students' reactions to testing accommodations and their perception on the fairness of these testing alterations for students with or without disabilities. Lang, Elliott, Bolt, and Kratochwill (2008) predicted that there should be an increase in test scores for students with disabilities and little or no increase in scores for students without disabilities.

Both fourth and eighth graders were given two math and two reading tests in addition to a questionnaire that consisted of 13 items, three of which were open-ended. The students were asked to indicate their preference and rating on the fairness of testing accommodations with a 5-point scale (Lang and Elliott, 2008). The data from this study supported their hypothesis by indicating that testing accommodations had a positive effect on a majority of students' scores for both categories. The study showed that the students indicated a preference for testing accommodations and did perceive the testing accommodations as being a fair way to accommodate students with disabilities.

Lang, Elliott, Bolt, and Kratochwill (2008) findings also demonstrated the importance of a student's perception of the accommodations program. While some may feel the accommodations are helpful, others may regard it in a negative way. The open-

ended questions revealed that the students felt the accommodations had both positive intended consequences and negative unintended consequences (Lang, Elliott, Bolt, and Kratochwill, 2008). While some students expressed feeling “less stupid,” less pressure and more relaxed, as they took the exam, others felt “dumb” or that the accommodations were unnecessary, distracting and slowed down the testing process (Lang, Elliott, Bolt, and Kratochwill, 2008). These responses provided indication that a student’s perception of accommodations can have potential effects on their performance in a self-efficacy or psychological aspect. With a resource that is suppose to benefit students in a positive way, it is important to prevent the opposite effect from occurring (Lang, Elliott, Bolt, and Kratochwill, 2008).

Lang, Elliott, Bolt, and Kratochwill’s (2008) study provided insight for future studies on the importance of examining a student’s preferences or perceptions of testing accommodations before administrating the test. This will prevent students from feeling less motivated or confident, which can ultimately affect their behavior during the exam. This study also provided awareness on other factors that could potentially affect a future study’s results. Lang, Elliott, Bolt, and Kratochwill’s (2008) study did not have enough information about the student’s academic history for the study to have a diverse sample of students. Additional information on specifying what disabilities each student has can help give the appropriate accommodations needed to each student for the study to be more valid. By providing academic history, this information can identify if any of the students in the “generalized population sample” included advanced students who are in a gifted and talented program. Without this information the study’s results can be skewed (Lang, Elliott, Bolt, and Kratochwill, 2008).

## **Factors Influencing Responses to Accommodations**

Nichelle Carpenter and Ramona Paetzold (2013) studied core problems regarding refusal of requests. Their study, “An Examination of Factors Influencing Responses to Requests for Disability Accommodations” provided evidence that psychiatric and cognitive impairments tend to be less likely perceived as legitimate disabilities compared to physical impairments (Lee, 1996). Physical impairments are perceived in a more positive way in which the person is not at fault, however cognitive impairments can be seen as self-caused and invisible to others (Gething, 1991; Koser, Matsuyama, & Kopelman, 1999; Miller & Werner, 2005; Stone & Sawatzki, 1980; Tringo, 1970). The purpose of the study was to examine factors that influence responses to requests of accommodations for an individual with a disability. This study used 240 students in which forty-three percent had some type of learning disability, mental illness or headache on regular basis. In the study, the students were introduced to “Amy”, the main character who was a student with a learning disability. The participants were presented with several scenarios where Amy had different learning impairments. The responses from the students were measured to expose the perceptions the students had towards Amy, her learning disability and the different aspects of disability accommodations, (Carpenter & Paetzold, 2013). Their reactions towards the requestor were measured by the participant’s empathy, sadness, personal distress and fairness (Batson, Fultz, & Schoenrade, 1987). Once the study was over it was evident that many of Carpenter and Paetzold’s initial predictions were supported.

Feelings of empathy toward the requestor, the requestor’s cause of impairment and whether the impairment was viewed as a disability were all found to predict the

participant's intentions to allow the requestor the accommodation that was asked. Carpenter & Paetzold's (2013) results showed that intentions to grant the requestor's accommodation changed depending on the impairment. More accommodations were granted with impairments of dyslexia and less with chronic headache. Results also indicated that prior accommodation decisions affected future intentions to grant future accommodations. Evidence was provided that empathy positively influenced responses to accommodations. Individuals who are distressed by someone's disability are motivated to alleviate their discomfort by helping the other person. Carpenter & Paetzold's (2013) results brought awareness on how significant it is to avoid stigmatizing or having a negative perception (such as "not pulling their weight") towards those who receive accommodations. Simple changes such as employers taking steps to ensure all employees understand that an accommodation neither reduces the expected amount of work completed, nor increases the possible rewards obtained, could certainly provide the positive alterations needed from employers (Carpenter & Paetzold, 2013).

### **Demographic Imbalance of Diagnoses Students**

According to Melana Vickers's (2010) "Accommodating College Students with Learning Disabilities: ADD, ADHD, Dyslexia" about fifty-one percent of LD or ADD students receive services at their college or University. Of these fifty-one percent, the majority of these students diagnosed are white males from upper-income. Statistics like these lead us to question, why are so many white males diagnosed with these disorders, but minorities show a lower percentage? A question like prompts speculation with regard to over-diagnosis for some of the population and under-diagnosis for others. Minority and economically disadvantaged students may be entitled to disability diagnoses but may

not receive them because their high school doesn't offer the services that would lead to a diagnoses or financial factors prevent a private alternative way for their child to be diagnosed (Vickers, 2010). This demographic imbalance is unfair and awareness of these controversial topics direct us to investigate various studies in order to potentially provide resolutions needed. Issues such as these are reasons for non-disabled students to view accommodations as unfair, particularly because they feel accommodations are granted too freely or subjectively. Faculty members on panels that consider initial applications for accommodations need to consider academic quality and fairness before being so quick to grant a student's request for disability accommodations (Vickers, 2010). Strict standards for determining eligibility could be the start for schools to better address this growing problem. Vickers's (2010) suggestion of obtaining statistics that produce data on the percentage of accommodations granted, refused and appealed each year will force openness on the subject without crossing any boundaries on the privacy of disabled students (Vickers, 2010). It is studies such as these that contribute to an optimistic view that future research will potentially fix and eliminate some of the significant core issues regarding this topic.

### **Locus of Control**

The research on the locus of control is one of the most prolific areas of study in psychology with literature pertaining to personality, clinical, developmental & social psychology over the last 15 years (Reid, 1985). According to A.P. MacDonald's (1971) "Internal-External Locus of Control: Parental Antecedents," the theory of locus of control refers to the nature of perceiving reinforcements as consequences of one's own behavior or as due to extrinsic factors. Locus of control has been proven to be extremely useful in

the prediction of a variety of behaviors (MacDonald, 1971). One's LOC is established during childhood ages and shows a small increase from the third to twelfth grade (MacDonald, 1971). To be internally controlled one must exercise control over their destiny, while externally controlled is considered to reinforce control by luck, chance, fate, or powerful others (Rotter, 1996). One's LOC was measured by the "Intellectual Achievement Responsibility" questionnaire as well as data collected through observing and questioning patients (Chance, 1965; Good, 1967). These different assessments measure the extent to which children accept responsibility for success and failure in school-related achievement (Rotter, 1996).

The theory of locus of control is related to theoretical constructs similar to learned helplessness, personal causation, efficacy, alienation and hardiness (Reid, 1985). Could it be possible that the paradigm of the LOC has a correlation to a student's reasoning and involvement with requesting disability accommodations at school? Is it a possibility that a student's LOC personality type has a correlation to their perception and openness about their disability and the accommodations they receive? If research is done on the correlation between the two, the results could potentially give us more insight on the topic of disability accommodations and ultimately bring us one step closer to reducing some of the existing negative controversies and perceptions on the topic.

### **Inconsistencies in Locus of Control Theory**

Studies have shown that maternal permissiveness, early independent training and a mother's flexibility are related to the internal control of a son, while mothers who are protective are associated with external locus of control (Chance, 1965). According to, Katkovsky, Crandall, & Good (1967) daughters whose father are especially affectionate

and nurturing are less inclined to believe that they have caused their own failures and are categorized as one who is externally controlled. Positive perceived internal controlled parents show behaviors that are warm, praising, protective and supportive towards their child, while dominance, rejection and criticism are negatively associated with beliefs in internal control (Katkovsky, Crandall, & Good, 1967). With all these different conclusions from previous studies on the theory of locus of control, inconsistencies between findings are anticipated (Chance, 1965). Due to all the different dimensions of LOC this theory has become more complicated to understand. For example, Herbert M. Lefcourt's (1985) "Locus of control: Current trends in theory and research written" believes this theory holds dimensions on control by social-political forces opposing to control by chance or fate. There are also certain types of LOC that can only be specific to certain kinds of situations, for example health locus of control versus educational achievement control (Lefcourt, 1985).

### **Parental Influence in One's Locus of Control**

To avoid conclusions that are contradictory, separate measures of protectiveness and nurturance need to be studied due to the fact that these variables operate independently (Devereux, Bronienbrenner, & Rodgers, 1969). MacDonald's (1971) study of "Internal-External Locus of Control: Parental Antecedents" was done in effort to provide data that might help clarify the relationship between control orientations and parent-child relationships. At West Virginia University, students participated in the use of the Rotter Internal-External Locus of Control Scale, gave short personal history forms and did a perceived parenting questionnaire. To get insight on these student's parents, these participants were given questions that best described the way in which their parents



behaved during the major portions of their childhood (MacDonald, 1971). In terms of locus of control, this study's results showed that internally controlled parents were more warm, nurturing, consistent, predictable and encouraging to reach their goals. As for externally controlled parents, results showed more over protectiveness, lack of privileges and affective punishment (MacDonald, 1971).

### **Past Research on Achievement Motivation**

According to Hisama (1976), there is an obvious need to investigate achievement motivation and locus of control within children with disabilities and behavior disorders as a factor of success in school settings. Hisama only had a few basic past approaches that were attempted for the research of achievement motivation. Atkinson (1966) had a theory test the hypothesis in which children with a disability expect failure rather than success when they perform difficult tasks, (Atkinson, 1966). Jordan and DeCharm (1959) tried another approach in which they used the McClelland nAch (Achievement Need) assessment, referring to an individual's desire for significant accomplishment, mastering of skills, control, and high standards. Jordan and DeCharm's (1959) results showed that the disabled students had a significantly lower achievement need than the normal learning students, (Jordan, & DeCharms, 1959). A final significant approach that contributed to this topic of research was the measurement of internal and external locus of control on Rotter's Scale (1966) as a predictor of achievement motivation, (Rotter, 1966).

### **Child Success and Failure Experiences as a Key Factor**

Hisama decided to hold his present study in order to investigate whether or not there is a difference in the locus of control between normal children and those with learning and behavior problems, (Hisama, 1976). He also attempted to explore the pattern

of achievement motivation in children with learning and behavior problems as it is related to the locus of control, (Hisama, 1976). Forty-eight children with learning and behavior problems and forty-eight normal children were tested, however no significant difference in performance was found. His work demonstrated that children with learning and behavior problems are not more externally oriented than the normal children, (Hisama, 1976). Hisama also originally assumed that children with external locus of control might show lower achievement motivation since they cannot control their own environment, however some of his research led him to consider the importance of child success and failure experiences as a key factor in achievement motivation instead, (Hisama, 1976).

Hisama proposed that teachers should know what kind of locus of control a child is because he believed that the externally- oriented children are more likely to be regarded as lazy due to the fact that they are easily turned off under failure conditions, (Hisama, 1976). The concept of a child's "laziness" could result in frustration for the teacher, unless the teacher understands basic concepts and mechanisms of locus of control. Hisama believed that helping a child change his LOC from an external to an internal direction can be accomplished by systematically providing him with successful experiences on educational tasks and leading him to realize that events are mainly the results of one's own actions, not an outside force, (Hisama, 1976). Some valuable games and activities such as the "Ring Toss game" and the "Origami game" developed by Alschuler and his colleagues (1971) can help assist Hisama's theory of changing a child's LOC. (Alschuler, Tabor, & McIntyre, 1971).

Frederic Boersma and James Chapman (1981) researched a similar concept to Hisama (2001) as they held a study that investigated one hundred and sixty-two students in grades three through six, of which eighty-one were disabled students. The study focused on three promising constructs: academic locus of control, academic self-concept, and self-expectations for future academic achievement, (Bloom, 1976; Hamacheck, 1978; Lefcourt, 1976; Phares, 1976; Brophy, 1977; Entwisle & Hayduk, 1978). When distributing the questionnaires for the study, the students were informed that the questions were designed to find out their feelings and attitudes towards school. Before Boersma & Chapman's study, little research had been conducted on academic self or academic self-expectations, however they created the Student's Perception of Ability Scale as an instrument for assessing academic self-perception particularly in elementary school children, (Boersma, & Chapman, 1977, 1979).

### **Academic Locus of Control**

As mentioned before, some past studies indicated that negative school related feelings and attitudes tend to arise from histories of school failure, (Bloom, 1976). Some researchers have even found that academic self-concept tend to be lower in older students because their accumulation of failure is greater, (Kifer, 1975). Other studies suggest that negative academic self-perceptions set limits on achievement levels by reducing motivation and task persistence, which is why it's evident how important the development of academic self-concept in children with learning disabilities is, (Brookover, Erickson, & Joiner, 1967). Given that academic achievement requires a degree of effort and persistence on tasks, it seems logical that there could possibly be a link between LOC and school learning, (Boersma, & Chapman, 1981). Academic LOC is

also seen as an important affective variable, influencing learning in which way individuals see their successes and failures, (Crandall, Katkovsky, & Crandall, 1965). Students categorized with internal LOC believe that their success and failure is because of their own ability to achieve higher levels of achievement, however students who attribute an external LOC personality type do not and tend to achieve at lower levels, (Lefcourt, 1976; Phares, 1976).

The results of Boersma and Chapman's (1981) study indicated that students with a learning disability reported relatively negative self-perceptions of ability, lower expectations of future success in academic tasks and lower external acknowledgment of responsibility for successful task outcomes. These learning disabled children showed a similar degree of responsibility for their failures as normal achieving children, however they show an inability to take credit for their successes, (Boersma, & Chapman, 1981). Similar to other past studies, Boersma and Chapman's results suggest that it is possible LD children may eventually give up on themselves. They may be more likely to quit due to their mindset of school success only being partially upon effort and ability, while viewing failures as a result of lacking effort and ability, (Gruen, Ottinger, & Ollendick, 1975). Despite LD student's normal range of capability, they develop strong doubts about their abilities to successfully complete academic tasks and their self-perception is significantly lower on all subscales, (Gruen, Ottinger, & Ollendick, 1975). These LD children "not only show negative self-perceptions of ability in reading, spelling and math but also indicate more negative attitudes and less confidence with respect to their academic abilities in general," (Boersma, & Chapman, 1981).

## **Learning Disabled Self-Concept**

According to Rotter (1954), he is not surprised that the LD children express comparatively pessimistic predictions regarding future school performance and less expectation for the future. This logic stems from the concept that older LD children have accumulated a greater number of failure experiences than younger LD children and have gained negative school related feelings and attitudes, (Rotter 1954). According to Leon Festinger (1954), “estimates of self-worth are formed mainly on the basis of comparisons with individuals in the immediate peer reference group”. In regards to this logic, Strang, Smith, and Rodges (1978) have found differences in self-concepts of LD children, depending on whether they were isolated with similar LD peers growing up or whether they were mainstreamed with normally achieving children. “As numerous writers have pointed out, successful school learning requires a positive belief in students that they have sufficient ability to successfully complete most tasks (Brookover et al., 1967), that they expect to be successful (Bandura, 1978), and that their successes are seen as due primarily to their own efforts and abilities rather than being caused by external and uncontrollable factors, (Rotter, 1954).” All of these past studies have made it clear that it is essential to design remedial strategies to restore confidence and credibility in LD student’s abilities, (Boersma, & Chapman, 1981).

## **Core Self Evaluations**

Core self evaluations are held as a fundamental assessment to establish a baseline that colors how one may view their environment and experiences as well, (Judge, Locke and Durhan 1997). These evaluations have also proven to be a useful person-based predictor of not only job satisfaction but also other work- related behaviors and attitudes

(Chang, Ferris, Johnson, Rosen & Tan, 2012). According to Judge, Locke, Durham & Kluger, (1998) high core self evaluations indicated by high levels of self-esteem. This self-esteem is generalized by self-efficacy, emotional stability and internal locus of control, which produces high job satisfaction from positive self-views and beliefs about their jobs. Johnson, Rosen, Chang, and Lin, (2015) held a study in which two hundred and twenty-five undergraduate business and psychology students, ages twenty years old were evaluated on core self traits. On days one through four, the participants provided data on one of the various traits per day: self- esteem, self- efficacy, emotional stability and LOC. On their fifth day and final day, all participants rated their life satisfaction, (Johnson, Rosen, Chang, & Lin, 2015). The results of this study, (2015) demonstrated that LOC might be an evaluation of the environment rather than of the self. According to the results, LOC is a broad assessment of the extent to which the environment is predictable and controllable, (Johnson, Rosen, Chang, & Lin, 2015). Studies such as these and the accumulation of the previous literature, various research and controversial topics gathered by all of the different theorists mentioned in this chapter has ultimately become the inspiration for my study, assumptions and hypothesis to the correlation between locus of control, parental influence and self-efficacy.

## **Chapter 3**

### **Methodology**

#### **Participants**

The target population was any male or female student who received additional resources provided by the Academic Success Center & Disability Office at a mid size, suburban, public university in the northeast region of the United States. Any documented student, eighteen years and above with a disability was able to participate if willing to. Thirty-four volunteers participated. The identities of the participants who completed the surveys were kept anonymous.

#### **Materials**

The participants in this study were instructed to take two questionnaires. One questionnaire was Rotter's (1966) Locus of Control Questionnaire (LOCQ) and contained thirteen questions measuring the participant's locus of control, (Appendix B). For each statement there were two answers that they could choose from. Depending on which answers they chose, the results would demonstrate whether they fell on the internal locus of control part of the spectrum or the external locus of control. This LOCQ ranked each question via a two point system. The participant would earn one or two points depending on which answer they chose. If the participant chose an internal LOC answer he/she would receive one point, if the participant chose an external LOC answer he/she would receive two points. At the end of the questionnaire, the points accumulated would determine which end of the spectrum the participant would qualify for. Total scores on the questionnaire could range from thirteen to twenty-six.

The second survey titled Perception of Disability Accommodations Questionnaire (PODAQ) was developed by the investigator based on previous measures, as well as information gained from a small focus group of non-disabled and disabled graduate students. Although the measure appears to have face validity, statistical reliability and validity of this measure has not yet been established and the questionnaire is used in an exploratory manner, (Appendix A).

The PODAQ contained nineteen statements measuring the participant's perception of their disability, disability accommodations, parental influence and self-efficacy. This questionnaire provided four answers for the participants to choose from ranging from: strongly disagree, disagree, agree, and strongly agree. For example, the questionnaire contained statements such as, "I feel emotions of embarrassment when giving my professor my accommodations letter," to help measure the participant's perception and feelings towards their learning disability and the accommodations they receive. This questionnaire also possessed statements like, "My parents significantly influenced my decision on what college to attend," to help measure the parenting style and involvement of each participant's parents growing up. Statements such as, "I feel that I have less of an advantage compared to other people because of my disability," were provided in an attempt to measure the student's self-efficacy.

Numbers ranging from one to four, ranked the data collected from the Perception of Disability Accommodations Questionnaire (PODAQ). Similar to the LOCQ, each participant's answers would represent a number and the sum of all the numbers would result in a placement on the spectrum. Since there were three different themes within the Perception of Disability Questionnaire, (openness regarding their disability/



accommodations, their experience of parental involvement and their self-efficacy) the answers were scored in separate sections.

The questions regarding openness about their disability and the accommodations they receive were calculated from a four to one point system. These accumulated points determined if the participant stood on the “very open” side of the spectrum or the “private” side of the spectrum. If the participant answered the question with an answer that was categorized as most “open” on the spectrum their answer was worth four points, while the most “private” response would be worth one point. Total scores on the “openness” theme could range from twenty-four to six. The questions that measured the participant’s experience of parental involvement had the same format in which the score would determine where the participant fell on the spectrum. If the participant answered the question with the most “hands on” response their answer was worth four points, while an the most “independent” response was worth one point. If the participant scored a high number they were categorized as having very “hands on” parents, where as if the participant demonstrated a lower number they were categorized as an individual whom was more “independent” from their parents. Total scores on the “parent involvement” theme could range from thirty-two to eight. The last subject measured was the participant’s self-efficacy, which was also ranked by a four to one number system. When the participant answered the question with the most “embraced” response, their answer was worth four points, while the most “ashamed” answer was only worth one. If the participant showed a high score they were categorized as “embracing” their disability and accommodations they receive, however if they showed a low accumulative score they were categorized as more “ashamed” of their disability and their accommodations. Total

scores on the “self-efficacy” theme could range from twenty to five. An overall total score of the entire questionnaire could range from seventy-six to nineteen.

### **Design**

An independent samples t-test was used to compare the means the two groups, Internal Locus of Control and External Locus of Control on Perception of Disabilities Accommodations.

### **Procedure**

The participants only needed a writing utensil and the two questionnaires to participate in this study. If they chose to answer the questionnaires online, they were also given that option as well. The only cost necessary for this study was on the paper and ink of each consent form and the questionnaires used. There was also a cost for the candy that was given out to the volunteers as a gesture to show our appreciation for contributing to the study.

Due to confidentiality, the director of the Academic Success Center & Disability Resources Office assisted in the recruitment and enrollment of participants. The prospective participants received a cover letter via email containing a brief introduction about the study and the future benefits from the results. The participants were provided minimal information about the study in order to reduce bias. Participants were assured of the confidentiality of the study and that names would not be used. The participants were also informed that involvement in the study was voluntary, but strongly needed in order to be conducted. Questionnaires were submitted to the Academic Success Center & Disability Resources Office and no unknown characters had access to their answers. Once the participants agreed to partake in the study, the participants were given their

consent form by receiving an attachment via email or by picking up a hard copy from the Academic Success Center & Disability Resources Office. Once the consent form, and any questions the participant had was answered, the participant received the two questionnaires from the office as a hard copy, an attachment within an email, or by an emailed link to gain access to the questionnaires online. The participants were given the ability to decide which way they felt most comfortable to contribute to the study when answering the questionnaires. Once the participant submitted the questionnaires to the study, they were rewarded with candy as a token of appreciation.

## Chapter 4

### Results

The participants' self-reported locus of control, was evenly distributed between external and internal. Seventeen students (fifty percent) produced a total score within the Internal LOC range and seventeen students (fifty percent) produced a total score within the External LOC range. Although the sample size was small, there appeared to be a relatively normal distribution of scores.

Next an Independent Samples Test was conducted to compare the participant's answers to the total score on the Perception of Disability Questionnaire (PDOQ). Although the PDOQ contained subscales assessing level parental involvement, openness regarding one's disability, and self-efficacy, due to the small sample size and concerns about the reliability and the validity of the scale, only the total score was considered as a measure of a student's "positive" perception of his or her disability.

External Locus of Control and Internal Locus of Control "Perceptions of Disability" was compared using an independent samples t-test. This revealed that the mean Perceptions of Disability total score of External LOC ( $M = 18.8235$ ,  $SD = 3.90889$ ) was not significantly different than the mean for Internal LOC ( $M = 18.1176$ ,  $SD = 3.31441$ ) ( $t(32) = -.568$ ,  $p = .574$ ). There was no significant difference between the students who reported an external locus of control versus the students who reported an internal locus of control with regard to their perceptions of their disability.

## **Chapter 5**

### **Discussion**

#### **Summary of Findings**

The purpose for this study was to determine if internal or external LOC has any correlation with a student's involvement in receiving disability accommodations and their perception of the accommodations (openness, parental involvement and their self-efficacy). The first hypothesis was that students with higher internal locus of control are more likely to report positive perceptions of their disability accommodations. The second hypothesis was that students with a higher internal of locus control are also, more likely to be open and verbal about their disabilities, report less parental involvement, and greater self-efficacy.

Although the current study did not examine these hypothesis effectively due to concerns of the subscales reliability, previous research suggested that elimination of negative assumptions and thoughts surrounding the academic disability system and student's reactions to the use of accommodations could contribute to a positive perception of disability accommodations. Lang, Elliott, Bolt, and Kratochwill's (2008) study, reported student expression from testing accommodations that generated feelings of reduced pressure and more relaxed during an exam. However, this study also reported student's expression of feeling "dumb" and being distraction by the accommodations, which indicated that a student's perception of accommodations could have potential effects on their performance in a self-efficacy or psychological aspect. Both Lang, Elliott, Bolt, and Kratochwill's (2008) study and the present study find it is important to prevent negative effects occurring from a resource that is suppose to benefit students in a positive

way. Carpenter and Paetzold's (2013) study also contributed by providing evidence that psychiatric and cognitive impairments tend to be less likely perceived as legitimate disabilities. These negative outside opinions can also affect a student's self-efficacy and academic performance, which is the basis of research for this present study.

According to MacDonald (1971), locus of control has been proven to be extremely useful in the prediction of a variety of behaviors. An inference such as LOC contributes to the theory that internally LOC students exercise control over their destinies, accept responsibility for success and failure in school-related achievement but also potentially show more of a motivation to seek appropriate disability accommodations, strive to their highest academic potential, have an open perspective on the topic and have a higher self-efficacy. MacDonald's research contributes to the current study's hypothesis that LOC has a particular correlation or affect on a student academically.

When developing the method for this present study, MacDonald's (1971) research and procedures were kept in mind. Both the current study and MacDonald's study participated in the use of the Rotter Internal-External Locus of Control Scale, which instructed participants to answer questions regarding their perceived parent's involvement and collected data the students had of their parent's behavior during portions of their life. MacDonald's results demonstrated that external LOC students were more likely to have over-protective parents, similar to the current study's hypothesis of external LOC students having more involved parents who have an influence on the student's participation of the accommodations they receive. Both Hisama's (1976) and Strang, Smith, and Rodges's (1978) studies found differences in the self-efficacy of

students with a learning disability and external LOC. Hisama's (1976) theory of changing the "laziness" of an external LOC student to an internal LOC personality type in attempts to provide the student with successful experiences contributed to this present study's hypothesis. These educational tasks would lead he or she to realize that events are mainly the results of their own actions and ultimately change their self- efficacy and academic success. Within this logic, Strang, Smith, and Rodges's (1978) study also showed self- concepts of children with learning disabilities to have a lower self- efficacy because their successes are not primarily due to their own efforts and abilities, rather being caused by external and uncontrollable factors. As previously stated, these studies have made it clear that it is essential to design remedial strategies to restore confidence and credibility in students with learning disabilities. The accumulation of the previous literature, various research and controversial topics gathered by all of these theorists has ultimately become the inspiration for the current study, assumptions and hypothesis that suspect a correlation between locus of control, parental influence and self-efficacy.

### **Limitations**

The current study was hampered by a number of limitations. Limitations were anticipated, however additional limitations and the magnitude of these limitations were entirely unexpected. Concerns were acknowledged with regard to the sample population. The size of the sample was limited due to the inclusion criteria, "receiving services through the Academic Success Center and Disability Resources Office" and confidentiality concerns in order to access the population. Additionally, the sample was not diverse in that in that participants were drawn from one university in a suburban, northeast setting that is not representative of the general population.

Next, limitations are noted with regard to the materials. The Perceptions of Disability Accommodations Questionnaire is an exploratory measure developed by the researcher and requires further study in order to determine psychometric integrity. The reliability of the subscales or the total measure could not be established due to the small sample size but is worthy of further exploration.

Finally, there are inherent limitations to self-report measures as were used in this study. Sources of potential error related to respondent factors is well documented in the literature (Di Iorio, 2005), and may include response sets or bias, inaccurate recall of past events, fatigue or boredom, carelessness, or poor understanding of task. I assume that participants may have felt reluctant to participate and answer honestly to the questionnaires due to the possible breach of confidentiality factor. If face-to-face contact was obtainable when the students were introduced to the study, I believe the students would have felt more comfortable and open, which ultimately could have changed the end results.

### **Future Directions**

The relationship between locus of control and a students' perception of disability accommodations remains a promising area of future research especially given this study's exploratory finding that participants were equally distributed between those reporting an internal locus of control vs and external locus of control. Although the findings were based on a small sample size, it might be noteworthy that the LOC scores were divided equally among participants; external locus of control fifty percent and internal locus of control fifty percent. If locus of control is found to be equally distributed among students that receive disability accommodations, with more confidence in the reliability and



validity of the construct, future research may explore the impact of other factors in relation to locus of control. Perhaps more meaningful information may be gleaned by teasing out the subscale themes from the overall scale. Improving the reliability and validity of the factors would be helpful in exploring the relationship between locus of control and factors that may have an impact on how a student perceives disability accommodations.

Moving forward, it is important to remember the objective goal within this study, which is to help gain awareness and knowledge of how students with a disability may feel and perceive their disability and the accommodations they receive. With more knowledge of this topic from data collected on students with a disability, there is potential to change a variety of negative factors, controversies, assumptions and perceptions on the topic of academic disabilities and the accommodations provided for them. Improved knowledge and advocacy might enable teachers, school psychologists and counselors to provide better support in helping all students to strive to their highest academic potential regardless of disability.

## References

- Alizo, M. (2013). Center for Parent Information and Resources. *The Short-and-Sweet IEP Overview*. <http://www.parentcenterhub.org/repository/iep-overview/>
- Alschuler, A. Tabor, D., & McIntyre, J. (1971). *Teaching Achievement-Motivation: Theory and Practice in Psychology Education*. Middleton, CT. iEducation Ventures.
- Atkinson, J. (1966). *A Theory of Achievement Motivation*. New York. John Wiley.
- Batson, C., Fultz, J., & Schoenrade, P. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality*, (55, 19-39).
- Bettschen, C., Winne, P., & Wideen, M. (1977). Self-concept: Generalizability of the Construct and its Relation to Achievement. *Paper presented at the annual meeting of the American Educational Research Association*. New York.
- Bloom, B. (1976). *Human Characteristics and School Learning*. New York. McGraw-Hill.
- Boersma, F. & Chapman, J. (1977). *The Student's Perception of Ability Scale*. Edmonton. University of Alberta.
- Boersma, F. & Chapman, J. (1979). *Manual for the Student's Perception of Ability Scale*. Edmonton. University of Alberta.
- Boersma, F. & Chapman, J. (1981). *Academic Self-concept, Achievement Expectations, and Locus of Control in Elementary Learning Disabled Children*. Ottawa, Canada. University of Alberta.
- Bono, J., & Judge T. (2003). Core Self- Evaluations: A Review of the Trait and its Role in Job Satisfaction and Performance. *European Journal of Personality*, (17, 5-18). <http://dx.doi.org/10.1002/per.481>.

- Brookover, W., Erickson, E., & Joiner, L. (1967). Self-concept of Ability and School Achievement: Relationship of Self-concept to Achievement in High School. *U.S. Office of Education, Cooperative Research Project No. 2831*. Michigan. East Lansing: Office of Research and Publications.
- Brophy, J. (1977). *Child Development and Socialization*. Chicago. SRA.
- Carpenter, N., Paetzold, R. (2013). An Examination of Factors Influencing Responses to Requests for Disability Accommodations. *Rehabilitation Psychology, (58, 1, 18-27)*. Champaign, IL. US: American Psychological Association.
- Chance, J.E. (1965). Internal Control of Reinforcements and the School Learning Process. *Society for Research in Child Development*. Minneapolis.
- Chang, C., Ferris, D., Johnson, R., Rosen, C., & Tan, J. (2012). Core Self- Evaluations: A Review and Evaluation of the Literature. *Journal of Management, (38, 81-128)*. <http://dx.doi.org/10.1177/0149206311419661>.
- Chapman, J., & Boersman, F. (1979). Learning Disabilities, Locus of Control, and Mother Attitudes. *Journal of Educational Psychology, (71, 2, 250-268)*. Canada.
- Chapman, J., & Boersma, F. (1979). Technical Data on the Student's Projected Performance Scale. *Unpublished manuscript (Available from the second author at the Department of Educational Psychology, T6G 2G5)*. Edmonton, Alberta. University of Alberta.
- Chen, G., Gully, S., & Eden, D. (2004). General Self- Efficacy and Self- Esteem: Toward Theoretical and Empirical Distinction Between Correlated Self- Evaluations. *Journal of Organizational Behavior, (25, 375-395)*. <http://dx.doi.org/10.1002/job.251>.
- Devereux, E., Bronienbrenner, U., & Rodgers, R. (1969). Child-rearing in England and the United States: A Cross-national Comparison. *Journal of Marriage and the Family, (31, 257-270)*.
- Di Iorio, C.K. (2005). *Measurement in Health Behavior*. San Francisco, CA: Jossey-Bass.

- Elliott, S., Braden, J., & White, J. (2001). Council for Exceptional Children. *Assessing One and All: Educational Accountability for Students with Disabilities*. Alexandria, VA.
- Elliott, S., Kratochwill, T., Malecki, C., McKeivitt, B. (2009). The Effects and Perceived Consequences of Testing Accommodations on Math and Science Performance Assessments. *School Psychology Quarterly*, (24, 4, 224-239). Omaha, NE. US: Educational Publishing Foundation.
- Elliott, S., Kratochwill, T., & Shulte, A. (1999). *Assessment Accommodations Checklist*. Monterey, CA.
- Entwisle, D. & Hayduk, L. (1978). Too Great Expectations: The Academic Outlook of Young Children. *The Johns Hopkins University Press*. Baltimore.
- Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations*, (7, 117-140).
- Gething, L. (1991). Generality vs. Specificity of Attitudes Towards People with Disabilities. *British Journal of Medical Psychology*, (64, 55-64).
- Gruen, G., Ottinger, D., & Ollendick, T. (1975). Probability Learnings in Retarded Children with Different Histories of Success and Failure in School. *American Journal of Mental Deficiency*, (79, 417-423).
- Hamachek, D. (1987). *Encounters with the Self*, (2). New York. Holt, Rinehart & Winston.
- Hisama, T. (1976). Achievement Motivation and the Locus of Control of Children with Learning Disabilities and Behavior Disorders. *Journal of Learning Disabilities*, (9, 58-63). Oregon. Sage Publications Inc.
- Johnson, R., Rosen, C., Chang, C., & Lin, S. (2015). Getting to the Core of Locus of Control: Is It an Evaluation of the Self or the Environment? *Journal of Applied Psychology*, (100, 5, 1568-1578). Michigan.

- Jordan, T., & DeCharms, R. (1959). *The Achievement Motive in Normal and Mentally Retarded Children*, (64, 456-466). Amer. I. Ment. Defic.
- Judge, T., & Bono, J. (2001). A Rose By Any Other Name: Are Self- Esteem, Generalized Self- Efficacy, Neuroticism, and Locus of Control Indicators of a Common Construct. In B. W. Roberts & R. Hogan (Eds.), *Personality Psychology in the Workplace: Decade of Behavior*, (93-118). Washington, DC. American Psychology Association. <http://dx.doi.org/10.1037/10434-004>.
- Judge, T., Locke, E., & Durham, C. (1997). The Dispositional Causes of Job Satisfaction: A Core Evaluations Approach. *Research in Organizational Behavior*, (19, 151-188).
- Judge, T., Locke, E., Durham, C., & Kluger, A. (1998). Dispositional Effects on Job and Life Satisfaction: The Role of Core Evaluations. *Journal of Applied Psychology*, (83, 17-34). <http://dx.doi.org/10.1037/0021-9010.83.1.17>.
- Katkovsky, W., Crandall, V., & Good, S. (1967). Parental Antecedents of Children's Beliefs in Internal-external Control of Reinforcements in Intellectual Achievement Situations. *Child Development*.
- Kifer, E. (1975). Relationships Between Academic Achievement and Personality Characteristics: A Quaslongitudinal Study. *American Educational Research Journal*, (12, 191-210).
- Koser, D., Matsuyama, M., & Kopelman, R. (1999). Comparison of a Physical and Mental Disability in Employee Selection: An Experimental Examination of Direct and Moderate Effects. *North American Journal*, (1, 213-222).
- Lang, S., Elliott, S., Bolt, S., & Kratochwill, T. (2008). Effects of Testing Accommodations on Students' Performances and Reactions to Testing. *School Psychology Quarterly*, (23, 1, 107-124). Nashville, TN. American Psychological Association.
- Lee, B. (1996). Legal Requirements and Employer Responses to Accommodating Employees with Disabilities. *Human Resource Management Review*, (6, 231-251).

- Lefcourt, H. (1976). *Locus of Control: Current Trends in Theory and Research*. Hillsdale, NJ. Lawrence Erlbaum.
- Lefcourt, H. (1985). Review of Locus of control: Current Trends in Theory and Research. *Canadian Psychology*, (26, 1, 69-70). Canada. Canada: Canadian Psychological Association.
- Macdonald, A. (1971). Internal-external Locus of Control: Parental Antecedents. *Journal of Consulting and Clinical Psychology*, (37, 1, 141-147). WV. US: American Psychological Association.
- McFarlin, D., Song J., & Sonntag, M. (1991). Integrating the Disabled into the Work Force: A Survey of Fortune 500 Company Attitudes and Practices. *Employee Responsibilities and Rights Journal*, (4, 107-123).
- Miller, B. & Werner, S. (2005). Factors Influencing the Inflation of Task Performance Ratings for Workers with Disabilities and Contextual Performance Ratings for their Coworkers. *Human Performance*, (18, 309-329).
- Oliver, M. (1983). *Social Work with Disabled People*. London, Macmillan.
- Pfeiffer, D. (1998). The ICIDH and the Need for its Revision. *Disability and Society*, (13, 503-523).
- Pfeiffer, D. (1999). The Problem of Disability Definition: Again. *Disability and Rehabilitation*, (21, 392-395).
- Phares, E. (1976). *Locus of Control in Personality*. General Learning Press. Morristown, NJ.
- Ranseen, J., & Parks, G. (2005). Test Accommodations for Postsecondary Students: The Quandary Resulting From the ADA's Disability Definition. *American Psychological Association*, (11, 1, 83-108).

- Reid, D. (1985). Review of Locus of control: Current trends in Theory and Research. *Canadian Psychology*, (26, 1, 69-70). Canada. Canadian Psychological Association.
- Rotter, J. (1954). *Social Learning and Clinical Psychology*. Englewood Cliffs, NJ. Prentice-Hall.
- Rotter, J. (1966). Generalized Expectancies for Internal Versus External Control of Reinforcement. *Psychological Monographs*.
- Reisine, S., & Fifield, J. (1992). Expanding the Definition of Disability: Implications for Planning, Policy, and Research. *Milbank Quarterly*, (70, 491-508).
- Spector, P. (1982). Behavior In Organizations as a Function of Employees' Locus of Control. *Psychological Bulletin*, (91, 482-497). <http://dx.doi.org/10.1037/0033-2909.91.3.482>.
- Standberry, K. (2016). Understood for Learning & Attention Issues. *Understanding Individualized Education Programs*. <https://www.understood.org/en/school-learning/special-services/ieps/understanding-individualized-education-programs>
- Stone, C., & Sawatzki, B. (1980). Hiring Bias and the Disabled Interviewee: Effects of Manipulating Work History and Disability Information of the Disabled Job Applicant. *Journal of Vocational Behavior*, (16, 96-104).
- Strang, L., Smith, M., & Rodges C. (1978). Social Comparison, Multiple Reference Groups, and the Self-Concepts of Academically Handicapped Children Before and After Mainstream. *Journal of Educational Psychology*, (70, 487-497).
- Tringo, J. (1970). The Hierarchy of Preferences Toward Disability Groups. *The Journal of Special Education*, (4, 295-306).
- U.S. Constitution Amendment 20. (1997). *Individuals With Disabilities Education Act*, (105-117).

U.S. Department of Education, National Center for Education Statistics. (2015). *Digest of Education Statistics, 2013, (Ch. 3)*.

Verbrugge, L. (1990). The Legacy of Longevity: Health and Health Care in Later Life. *The Iceberg of Disability, In S. M. Stahl (ED), (55-78)*. London: Sage.

Vickers, M. (2010). Accommodating College Students with Learning Disabilities: ADD, ADHD, and Dyslexia. *The John William Pope Center For Higher Education Policy, (1-16)*. [Popecenter.org](http://Popecenter.org)



## Appendix A

### Perception of Disability Participant Questionnaire

Choose the one option below:

1. When I submit my accommodation letter to my professor I wait until everyone leaves the room at the end of the class to speak to he/she about it.

*Always*                      *Often*                      *Sometimes*                      *Never*

2. Growing up, my parents were hands on when it came to school affairs (back to school night, parent teacher meetings, checking homework every night etc.)

*Always*                      *Often*                      *Sometimes*                      *Never*

3. My parents worry more than necessary.

*Always*                      *Often*                      *Sometimes*                      *Never*

4. If the topic of a disability came up in a conversation with peers, I would have no problem disclosing that I have a learning disability.

*Always*                      *Often*                      *Sometimes*                      *Never*

5. I feel embarrassed when I give my professor my accommodations letter.

*Always*                      *Often*                      *Sometimes*                      *Never*

6. When a peer has expressed his or her struggle in school to me, I volunteer information about my learning disability.

*Always*                      *Often*                      *Sometimes*                      *Never*

7. I follow the lead of my parents when making decisions.

*Always*                      *Often*                      *Sometimes*                      *Never*

8. I feel my disability prevents me from attempting an activity, job or task.

*Always*                      *Often*                      *Sometimes*                      *Never*

9. Growing up, my parents encouraged me to make decisions for myself.

*Always*                      *Often*                      *Sometimes*                      *Never*

10. I discuss my accommodations in private with my professor.

*Always*                      *Often*                      *Sometimes*                      *Never*

11. I feel ashamed about my disability.

*Always*                      *Often*                      *Sometimes*                      *Never*

12. I'm open to telling my fellow students that I receive disability accommodations if the topic were to come up in conversation.

*Always*                      *Often*                      *Sometimes*                      *Never*

13. I do feel I have control over my disability.

*Strongly Agree*      *Agree*                      *Disagree*                      *Strongly Disagree*

14. I feel that I have less of an advantage compared to other people because of my disability.

*Always*                      *Often*                      *Sometimes*                      *Never*

15. My parents trust my judgment.

*Always*                      *Often*                      *Sometimes*                      *Never*

16. I searched for help for my disabilities at my college completely on my own without my parents help.

*Strongly Agree*      *Agree*                      *Disagree*                      *Strongly Disagree*

17. My parents have minimal involvement in my college learning experience.

*Strongly Agree*      *Agree*                      *Disagree*                      *Strongly Disagree*

18. I considered my disability when applying to colleges.

*Strongly Agree*      *Agree*                      *Disagree*                      *Strongly Disagree*

19. My parents influenced my decision on what college to attend.

*Strongly Agree*

*Agree*

*Disagree*

*Strongly Disagree*

## Appendix B

### Locus of Control Participant Questionnaire

Choose one option below:

1. \_\_\_ Many of the unhappy things in people's lives are partly due to bad luck  
\_\_\_ People's misfortunes result from the mistakes they make.
2. \_\_\_ One of the major reasons why we have wars is because people don't take enough interest in politics.  
\_\_\_ There will always be wars, no matter how hard people try to prevent them.
3. \_\_\_ In the long run, people get the respect they deserve in this world.  
\_\_\_ Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
4. \_\_\_ The idea that teachers are unfair to students is nonsense.  
\_\_\_ Most students don't realize the extent to which their grades are influenced by accidental happenings.
5. \_\_\_ Without the right breaks, one cannot be an effective leader.  
\_\_\_ Capable people who fail to become leaders have not taken advantage of their opportunities.
6. \_\_\_ No matter how hard you try, some people just don't like you.  
\_\_\_ People who can't get others to like them don't understand how to get along with others.
7. \_\_\_ I have often found that what is going to happen will happen.  
\_\_\_ Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
8. \_\_\_ In the case of the well prepared student, there is rarely, if ever, such a thing as an unfair test.  
\_\_\_ Many times exam questions tend to be so unrelated to course work that studying is really useless.

9. \_\_\_\_ Becoming a success is a matter of hard work; luck has little or nothing to do with it.

\_\_\_\_ Getting a good job depends mainly on being in the right place at the right time.

10. \_\_\_\_ The average citizen can have an influence in government decisions.

\_\_\_\_ This world is run by the few people in power, and there is not much the little guy can do about it.

11. \_\_\_\_ When I make plans, I am almost certain that I can make them work.

\_\_\_\_ It is not always wise to plan too far ahead because many things turn out to be a matter of luck anyway.

12. \_\_\_\_ In my case, getting what I want has little or nothing to do with luck.

\_\_\_\_ Many times we might just as well decide what to do by flipping a coin.

13. \_\_\_\_ What happens to me is my own doing.

\_\_\_\_ Sometimes I feel that I don't have enough control over the direction my life is taking.