ABSTRACT

Stereotype Threat and Students with Learning Disabilities: A Phenomenological Study of Five College Students' Perspectives

Dayna M. Lund, Ed.D.

Mentor: Jessica Meehan, Ed.D.

Stereotype threat can negatively impact marginalized groups. Over the past three decades, researchers have documented that stereotype threat affects people in learning and testing performance (Aronson & Steele, 2005; Good et al., 2003; Rydell et al., 2011; Steele & Aronson, 1995; Steele et al., 2002). While some research has focused on the impact of stereotype threat and learning, there has been limited research completed focused explicitly on stereotype threat and students with learning disabilities. The research that has been conducted has been inconclusive. Due to the lack of research, there is a need to study stereotype threat and students with learning disabilities.

To fill the gap in research, this qualitative phenomenological study explored the student perception of being a student with a learning disability and of stereotype threat. Participants included five college students, both male and female, who have documentation of a learning disability diagnosis. The researcher utilized a questionnaire, evaluation report, and interview from each participant for data collection. The researcher analyzed data through the lens of Claude Steele's Stereotype Threat Model for common themes to describe the details of the student experience (Croizet et al., 2001).

The study's findings show that students with learning disabilities are vulnerable to stereotype threat. The participants perceived themselves to be stereotyped individuals and reported experiences in which they felt stereotyped. In addition, the participants described experiences in which they experienced vulnerability to stereotype threat.

Claude Steele's Stereotype Threat Model emphasizes that distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation interfere with academic performance. This study's findings demonstrated that the participants were most impacted by distraction, self-consciousness, evaluation apprehension, and test anxiety. The important implications from this study are that stereotypes of students with learning disabilities do exist and student support matters, including the use of accommodations and support systems. Using Claude Steele's Stereotype Threat Model provided a new understanding of student perceptions of college experiences of students with learning disabilities and an understanding that students with learning disabilities are vulnerable to stereotype threat.

Stereotype Threat and Students with Learning Disabilities: A Phenomenological Study of the Perspectives of Five College Students

by

Dayna M. Lund, B.S., M.A.

A Dissertation

Approved by the Department of Curriculum and Instruction

Brooke Blevins, Ph.D., Chairperson

Submitted to the Graduate Faculty of Baylor University in Partial Fulfillment of the Requirements for the Degree of

Doctor of Education

Approved by the Dissertation Committee
Jessica Meehan, Ed.D. Chairperson
Sandra Talbert, Ed.D.
Lacy K. Crocker-Papadakis, Ph.D.

Accepted by the Graduate School

December 2021

J. Larry Lyon, Ph.D., Dean

TABLE OF CONTENTS

LIST OF FIGURES	vii
LIST OF TABLES	viii
ACKNOWLEDGMENTS	ix
DEDICATION	xi
CHAPTER ONE	
Introduction to the Problem of Practice	1
Introduction	1
Statement of the Problem	2
Purpose of the Study	6
Theoretical Framework	6
Research Design	7
Definition of Key Terms	8
Conclusion	8
CHAPTER TWO	10
Literature Review	10
Introduction	10
Stereotypes and Stereotype Threat	11
Stereotype Threat and Learning Disabilities	21
Conclusion	30
CHAPTER THREE	32
Methodology	32
Introduction: Research Questions	32
Researcher Perspective and Positionality	33
Theoretical Framework	34
Research Design and Rationale	36
Site Selection and Participant Sampling	38
Data Collection Procedures	40
Data Analysis Procedures	42
Ethical Considerations	44
Conclusion	45

CHAPTER FOUR	46
Results and Implications	46
Introduction	46
Participant Description	47
Thematic Analysis	51
Framework Analysis	63
Discussion	69
Implications	76
Conclusion and Summary	
CHAPTER FIVE	80
Distribution of Findings	80
Executive Summary	80
Findings Distribution Proposal	84
Conclusion	87
APPENDICES	88
APPENDIX A	89
Research Question Alignment Chart	89
APPENDIX B	91
Theoretical Framework Matrix	91
APPENDIX C	92
Informed Consent Form	92
APPENDIX D	96
Participant Questionnaire	96
APPENDIX E	97
Interview Protocol	97
APPENDIX F	99
Framework Analysis Matrix	99
BIBLIOGRAPHY	102

LIST OF FIGURES

Figure 1.1. Stereotype threat model	7
Figure 3.1. Stereotype threat model	35
Figure 4.1. Key findings of textural statements	52
Figure 4.2. Key findings of structural statements	57

LIST OF TABLES

Table 4.1 Participant Demographics	47
Table 4.2 Stereotype Threat Vulnerability	54
Table 4.3 Key Findings from Framework Analysis	64

ACKNOWLEDGMENTS

It is with a grateful heart that I am at this place and time in which I can offer acknowledgments to those who have helped me accomplish this goal. I have been blessed educationally, professionally, and personally with individuals who have helped and inspired me along the way.

I would first like to thank my advisor, Dr. Jessica Meehan, for never giving up on me and always being kind when I needed it the most. Your calm and patience were greatly appreciated. The high standards you held for me always assured me that I would be able to meet this goal! I would also like to thank the members of Cohort 2. I am certain that without you all, I would not have made it through. The laughter and tears bonded us all together in friendship that will last our lifetime, and I am forever grateful for you all.

Professionally, I would like to thank my mentor, Mimi Bryant. Your love and passion for students with learning disabilities is inspirational, and I wanted to be better at what I do because of you. Your belief in me to carry on your work was inspiring and encouraging. I must also acknowledge my friend and colleague Dr. Kathryn Pritchard. Your desire to earn an Ed.D., combined with the torture of reading your dissertation, inspired me to apply to this program. I must tell you that yelling at me to "just write" had no impact on my actual achievement of this goal; however, it always let me know you care. Thank you.

Cue the tears. Personally, I must first thank my parents, John and Kathy Mattox. You two have taught me more than I ever could have learned in school. Dad, you taught me the art of inquiry. Because of you, I question everything, and I thirst to know more. Mom, you taught me the importance of love, compassion, and faith. Without all you taught me, I would never be able to make a difference in this world. You are my true inspiration and the best role model. Next, I must acknowledge my children. Lauren, Drake, and Zach, I am so very grateful that I have you in my life. Earning the title of stepmom is more special to me than becoming Dr. Lund. Cameron, I always told you that I hope you dance. Well, this is my dance. I hope you always work as hard as I have to create a life of love and laughter. Nolan, you have been my complete support through this whole process. You have sacrificed the most of everyone, and I promise you all the attention and video game time that one mother can give. I hope this degree serves as an inspiration to you to go after life and make it all you want it to be. Lastly, I must acknowledge my best friend, ride or die, partner in crime, husband, and the love of my life, Christopher Bert. You are the very best thing that Baylor gave me, and I am forever indebted to you. You are my rock and the only reason that we are Drs. Lund.

DEDICATION

To the Jacksonville Jaguars—If I can do it, so can you. #DTWD

CHAPTER ONE

Introduction to the Problem of Practice

Introduction

In education, many factors impact student and school success. One of these factors is stereotype threat. Stereotype threat is a "self-evaluative threat" that arises when a member of a negatively stereotyped group is in a situation in which the member risks confirming the negative stereotype (Steele & Aronson, 1995, p. 797). Research shows that stereotype threat can negatively impact a variety of marginalized groups. Race, gender, socioeconomic status, and age are different stereotyped groups that may experience stereotype threat in specific situations (Steele, 2010). Previous research shows that stereotype threat negatively impacts stereotyped groups in learning and testing performance (Aronson & Steele, 2005; Good et al., 2003; Rydell et al., 2011; Steele & Aronson, 1995; Steele et al., 2002). Since learning and testing performance are essential aspects of education and school performance, educators and administrators must understand stereotype threat implications. Unfortunately, many educators are unfamiliar with stereotype threat and its impact on their students, student performance, and student success.

This study explored the experiences of students with learning disabilities, specifically perceptions and experiences of the stereotypes of this population, the impact learning disabilities have on academic performance, and what impact stereotype threat has on college students with learning disabilities. Since students with learning disabilities

are a part of a negatively stereotyped group, they are susceptible to stereotype threat's adverse effects, such as decreased learning and underperformance on tests (May & Stone, 2010). With only a few studies examining the relationship between students with learning disabilities and stereotype threat, there is a need for further examination to truly understand stereotype threat from the perspectives of students with learning disabilities.

Statement of the Problem

One considerable challenge that educators face is ensuring that their students are learning. Many factors can impact student achievement, including the psychological aspects of education. The psychological aspects of education are some of the most critical factors associated with learning. One psychological phenomenon that can significantly impact learning and performance in the school environment is stereotype threat. The definition of stereotype threat is "a situational predicament that prevents members of negatively stereotyped groups to perform up to their full ability" (Appel & Kronberger, 2012, p. 609). Stereotype threat can negatively impact any individual or group who identifies with the stereotyped group. Many times, the typical negative impact is the underperformance of ability.

Over the past three decades, researchers have documented that stereotype threat impacts people in learning and testing performance (Aronson & Steele, 2005; Good et al., 2003; Rydell et al., 2011; Steele & Aronson, 1995; Steele et al., 2002). As learning and test performance are a high priority in student and school success, understanding the negative impact of stereotype threat is especially valuable to educators. Since a student's educational experience significantly impacts a person's performance and since stereotype threat has the possibility of keeping a student from reaching his or her potential,

educators must recognize their responsibility in creating educational environments and identifying students who are potentially vulnerable to stereotype threat within their schools and classrooms (Aronson, 2002).

Although there are many stereotyped groups, students with learning disabilities are one population vulnerable to stereotype threat. Given that the diagnosis of disabilities is on the rise in the United States, studying this population provides significant insights for better serving them (Zablotsky et al., 2017). Zablotsky et al. (2017) explain that "from 2009 to 2011 and 2015 to 2017, there were overall significant increases in the prevalence of any developmental disability, attention-deficit hyperactivity disorder, autism spectrum disorder, and intellectual disability" (p. 1). This study also found that "The percentage of children diagnosed with a developmental disability increased significantly between 2009 and 2017, resulting in a growing population of children (~1 out of every 6) with 1 or more developmental disabilities" (Zablotsky et al., 2017, p. 9). As there has been an increase in the diagnosis of disabilities, there has also been an increase in students attending college. This rise in college attendance includes students with disabilities. Just twenty years ago, "only 9% of students attending college reported a disability" (Troiano et al., 2010, p. 35). However, just 15 years later, "nineteen percent of undergraduates ... reported having a disability" (Snyder et al., 2019, p. 208). As the number of students with disabilities attending postsecondary schools increases, the importance of understanding the impact of stereotype threat on these students becomes even more critical.

Stereotype threat could have a significant impact on the academic performance of students with learning disabilities. Researchers already know that students with learning disabilities show significant deficits when compared to their non-disabled peers in

"anxiety, attention, concentration, motivation, selecting main ideas, time management, and test strategies" (Proctor et al., 2006, p. 48). These students can have more academic struggles and need to perform to the best of their ability. Student performance is vital because student performance directly impacts educational decisions and future opportunities. The emphasis on student success accountability truly makes all tests "high stakes" tests and of great importance for students and their future. Struggling academic performance can negatively impact students with learning disabilities. Connor (2012) found that "low scores may trigger punitive measures" (p. 1006). Specifically, students with learning disabilities who have low scores can have academic, social, and emotional problems (Connor, 2012). Students with learning disabilities who are student-athletes can lose eligibility based on academic performance (Hishinuma, 1999). Cunningham, as paraphrased in Connor (2012), explains that students with learning disabilities who experience negative emotions, such as "feeling inadequate," can have lower "self-worth in relation to peers" (p. 1006). Research also shows that "some students with [learning disabilities] question aspects of their own identity..." (Connor, 2012, p. 1006). With academic, social, and emotional consequences, it is essential to understand any factor that might limit students with learning disabilities. If students with learning disabilities cannot perform to their ability, they will not succeed academically.

Previous research examining stereotype threat in relation to students with learning disabilities has shown that stereotype threat negatively impacts this student population; however, the research has been weak and lacking. In the initial research attempt, May and Stone (2014) learned that the students with learning disabilities spend "significantly more time" per test item on assessments than the control students (p. 102). Further research

found that student-athletes with learning disabilities felt that they needed to act the part of a disabled student. Students reported that "they either had to play the role of the "entertainer" or they felt labeled as "dumb" (Stokowski & Hardin, 2014, p. A-103). This research demonstrates that students with disabilities feel stereotyped and labeled. While research also found that "stereotype threat is negatively predictive of academic performance of high school students with learning disabilities," it could not definitively say that labels create the threat for this specific student population (Zhao et al., 2019, p. 319). This study suggests that labels might create stereotype threat for students with disabilities and that researchers should examine stereotype threat for students with learning disabilities from a more individualistic standpoint. Since the research completed thus far is inconclusive and has specific limitations, this study provides the first qualitative study on this topic. This qualitative study examined the experiences of college students with learning disabilities in regard to stereotype threat specific to stereotypes, academic performance, and stereotype threats.

This research is essential to the students, but it is also very important for educators who create learning opportunities and learning environments. Educators must truly understand the factors that impact their students, including the negative effects of stereotype threat. Specifically, educators need to understand if and how stereotype threat affects students with learning disabilities to provide the best educational experience for this marginalized group. In addition to the educators who teach students with learning disabilities, staff who work in student support roles will find value in this study's findings. The results assist these professionals in better supporting students with learning disabilities in their institutions.

Purpose of the Study

This phenomenological study examined the student perspective of stereotype threat and learning disabilities in public colleges and universities in the United States.

This study aimed to gain insight into how students with learning disabilities experience stereotypes and perceive their academic performance, as well as the impact of stereotype threat on this student population. This study examined the following research questions:

- 1. What are student perceptions of their college experiences specifically related to their learning disability?
- 2. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 3. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

Theoretical Framework

The researcher used Claude Steele's Stereotype Threat Model as a theoretical framework to examine the student perspective of stereotype threat and learning disabilities. The framework suggests that a person needs to identify as a stereotyped person and be in a performance situation to experience the self-threat of stereotype threat. (Steele, 1997). Figure 1.1 is a schematic representation of how self-threat imposition initiates specific behavioral responses, including distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation, which leads to interference with performance (Croziet et al., 2001). The researcher used this framework to explore stereotype threat through the experience of students with learning disabilities currently enrolled in college.

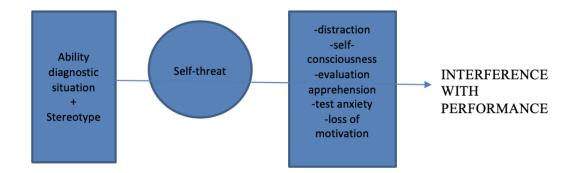


Figure 1.1. Schematic Representation of Claude Steele's Stereotype Threat Model, Reprinted from "Stereotype Threat, Social Class, Gender, and Academic Under-Achievement: When Our Reputation Catches Up to Us and Takes Over," by J. C. Croizet et al., 2001, Social Psychology of Education 4, no. 3, 298. Copyright (2001) by Springer Nature License. Reprinted with permission.

Research Design

This study utilized a phenomenological design to examine the college student perspective of stereotype threat and learning disabilities. This phenomenology explored the student experience through the lens of Claude Steele's Stereotype Threat Model. This study gained insight into how students with learning disabilities experience stereotypes and their perceptions of how stereotype threat affects their academic performance.

The participants in this phenomenology study were full-time adult college students with learning disabilities in various colleges and universities in the United States. Participants completed a demographic questionnaire. The researcher used purposive criterion sampling to select participants. Once selected, the participants submitted an evaluation report that included the diagnosis of a learning disability. The researcher then interviewed the participants. The researcher coded and performed a thematic analysis on the questionnaires, evaluation reports, and interview transcriptions. Additionally, the researcher completed a framework analysis using Claude Steele's

Stereotype Threat Model. The researcher provided a discussion to represent the student experience as a whole.

Definition of Key Terms

This section defines the commonly held terms related to stereotype threat and students with learning disabilities.

Common stereotyped groups: Stereotype threat knows no boundaries and affects race, gender, socioeconomic status, age, and other stereotyped groups (Steele, 2010).

Learning disability: Learning disabilities are diagnosed when there is a discrepancy between general intellectual ability and academic achievement (Sparks & Lovett, 2009). There are many different types of learning disabilities, including reading

disorders, mathematics disorders, and writing disorders.

Stereotype threat: The definition of stereotype threat is "a situational predicament that prevents members of negatively stereotyped groups to perform up to their full ability" (Appel & Kronberger, 2012, p. 609).

Conclusion

Educators must understand how students with learning disabilities perceive stereotype threat and how it impacts their students' academic performance. While stereotype threat impacts many marginalized and stereotyped groups, students with learning disabilities are a population in which there is a need for more research. The following chapter reviews the research on stereotype threat, specifically what stereotype threat is, which populations are vulnerable to stereotype threat, and the educational implications of stereotype threat. Chapter Two also proposes that as a marginalized,

stereotyped group, students with learning disabilities are vulnerable to the impacts of stereotype threat. The review of this research supports the reasoning and need for this phenomenological study to examine the experience and perspective of students with learning disabilities regarding stereotype threat.

CHAPTER TWO

Literature Review

Introduction

Many factors can play a role in a student's ability to learn. Two significant factors that negatively impact student learning are stereotype threat and learning disabilities. Stereotype threat is "a situational predicament that prevents members of negatively stereotyped groups to perform up to their full ability" (Appel & Kronberger, 2012, p. 609). It can negatively impact students, especially concerning learning and testing performance. Educators must understand what stereotype threat is and which of their students are vulnerable to stereotype threat. Additionally, educators need to know how to identify these students and create environments that decrease stereotype threat risk.

Students with learning disabilities are at-risk academically (May & Stone, 2010). As a stereotyped and marginalized group, there is the possibility that students with learning disabilities may underperform their ability due to perceived stereotype threat. To provide a proper educational environment, educators need to understand how stereotype threat may impact students with learning disabilities.

Many studies conducted on stereotype threat and learning disabilities exist independent of each other; however, few studies exist on the role stereotype threat plays in the learning of students with learning disabilities. Previous research has posed that students with learning disabilities are vulnerable to stereotype threat; however, these studies have yet determined the relationship's extent. Chapter Two reviews the field of

research on stereotype threat. Specifically, Chapter Two explains what stereotype threat is, which populations are vulnerable to stereotype threat, and the educational implications. After providing a background on stereotype threat, Chapter Two argues that students with learning disabilities, as a stereotyped group, are vulnerable to stereotype threat in the educational setting and provide information about the student experience of being a college student with a learning disability.

Stereotypes and Stereotype Threat

In 1954, Gordon Allport found that when people are the aim of a negative stereotype, there is a threat to self that creates defensive coping. The ego-defensive coping responses that Allport references share a similarity to what is known about the effects of stereotype threat. To best understand stereotype threat, one must fully understand the definition of a stereotype and how stereotypes impact people. Aronson and Steele (2005) describe stereotypes as "overgeneralizations" and believe that stereotypes "encourage simplistic thinking that ignores individual differences between people who belong to certain categories" (p. 438). Society constructs stereotypes, and there are many different types of stereotypes. Some of the common stereotyped groups in western society are race, gender, socioeconomic status, religion, political party affiliation, geographical origination, and age. Although stereotypes can be positive or negative, negative stereotypes can create situational events that have a lasting impact on people. Being part of a negatively stereotyped group causes a threat in situational events. This threat has become known as stereotype threat, coined by Claude Steele and Joshua Aronson in 1995. Steele and Aronson (1995) view stereotype as a "predicament." Appel and Kronberger (2012) later defined stereotype threat "... as a situational predicament that prevents members of negatively stereotyped groups to perform up to their full ability" (Appel & Kronberger, 2012, p. 609). Research has found that these situational predicaments create "... a state of psychological discomfort that is thought to arise when individuals are confronted with an evaluative situation, in which one's group is associated with a negative stereotype" (Appel & Kronberger, 2012, p. 610). Having a negative stereotype associated with a specific group is a requirement for stereotype threat to occur.

There have been many research studies in the field of psychology that have examined similar and related topics, including but not limited to racial vulnerability, stereotype vulnerability, prejudice, and solo status. Over the past two decades in the field of educational psychology, stereotype threat has been the focus of many research studies and has shown that negative stereotypes can create underperformance and underrepresentation (Appel & Kronberger, 2012; Aronson, 2002; Brown & Josephs, 1999; Good et al., 2012; Inzlicht & Schmader, 2012; Jamieson & Harkins, 2007; Keller, 2002; Schmader & Johns, 2003; Steele, 2010; Steele & Aronson, 1995). The proof of underperformance has encouraged continued and expanded research on the topic.

In a seminal study, Claude Steele and Joshua Aronson (1995) examined the role stereotype threat played in African-Americans' performance on intellectual tests. The interest in the topic came after the release of a controversial book, *The Bell Curve*. In this book, Herrnstein and Murray (1994) proclaimed that the academic achievement gap between races was due to intellectual, biological components associated with race. This controversial proclamation stimulated much research. After studying prejudice and stereotypes, Steele and Aronson (1995) hypothesized that stereotype threat would cause

African-American students to underperform on standardized tests. In a series of four studies, Steele and Aronson supported their hypothesis. In the first study, the Black and White students took a 30-minute verbal Graduate Record Examination (GRE) test. There was a stereotype threat group and a non-stereotype threat group. The test administrator told the stereotype threat group that the test served as a diagnostic test of intellectual ability and told the non-stereotyped threat group that the set of questions were a "laboratory problem-solving task that was nondiagnostic of ability" (Steele & Aronson, 1995, p. 372). In this study, there was a statistical difference in the Black and White students' performance in the stereotype threat group, and performance was almost equal in the non-stereotyped threat group. In this same study, Steel and Aronson (1995) found that:

Black participants expecting to take a difficult, ability-diagnostic test showed significantly greater cognitive activation of stereotypes about Blacks, greater cognitive activation of concerns about their ability, a great tendency to avoid racially stereotypic preferences, a greater tendency to make advance excuses for their performance. (p. 805)

This study showed that the Black participants were facing stereotype threat and that the stereotype threat affected their test-taking performance.

The majority of research on stereotype threat over the past two decades has focused on performance during testing or evaluation. Beginning with Steele et al.'s (1995) seminal study, the research has expanded from how stereotype threat impacts test-taking performance to understanding which populations are most vulnerable. From these studies, researchers identified several areas that impact the vulnerability to stereotype threat.

Stereotype Threat Risk Factors: Who is Vulnerable?

When considering what stereotype threat is and who is vulnerable, several risk factors make a person more vulnerable to the impact of stereotype threat (Aronson, 2002). Specifically, these risk factors include domain identification, group identification, stigma consciousness, acceptance of the stereotype, and intelligence beliefs (Aronson, 2002). These risk factors are good predictors of who and why an individual or group of students might be vulnerable to stereotype threat.

Domain identification is the amount that someone identifies with a certain domain (Steele et al., 2002). The more a person identifies with the domain, the more likely he or she is to experience stereotype threat effect (Steele et al., 2002). Steele et al. (2002) present the theory "that to experience stereotype threat in a domain one has to care about it" (p. 395). An opposite situation is domain disidentification. According to Larnell et al. (2014), "domain disidentification is a response that corresponds to potential 'deprivation of opportunity,' particularly apparent when the threat's target no longer seeks to participate in the domain in which the stereotype threat is known to emerge" (p. 51). When considering human behavior in general, people do not respond to threats they do not recognize (Steele et al., 2002). Disidentification describes that a person does not relate to the domain due to the stereotype. Toni Schmader (2002) completed an experiment looking into the idea that disidentification could apply to those who do not identify with the stereotyped group. Using a commonly researched stereotyped group of women taking a math test, Schmader (2002) found that women who relate higher to being a woman perform worse than women who do not identify with their gender as part of their identity.

Group identification is another area that impacts vulnerability to stereotype threat, and it is also an area in which students with learning disabilities can relate. Group identification is the degree to which someone identifies with an identified group.

Research on group identification "...suggests that the less investment in one's group, the less one will be bothered by stereotypes impugning the group's abilities" (Schmader et al., as cited in Aronson, 2002, p. 287). An individual who identifies with the group and cares about whether their actions or performance will confirm the negative stereotype will be vulnerable to the perceived threat (Shapiro & Neuberg, 2007).

A third risk factor of stereotype threat is stigma. Erving Goffman (1963) profoundly stated that stigma "...constitutes a special discrepancy between virtual and actual social identity" (p. 3). Stigma is a product of society. Elizabeth Pinel (1999) coined the term "stigma consciousness" to describe the awareness people have of their group's stigma. This study found that students who were more stigma conscious performed worse on standardized tests than those with low stigma consciousness.

Another risk factor of stereotype vulnerability is acceptance of the stereotype. Stereotype threat insists that individuals "need not believe a stereotype to feel threatened by its flattering allegations" (Aronson, 2002, p. 288). Aronson (2002) explains that stereotyped individuals "can still feel uneasy or alienated in academic settings if he or she feels devalued or suspected inferiority by others..." (p. 288). Acceptance of the stereotype has an impact on performance when under stereotype threat. In a study that examined whether stereotype acceptance is a mediator to stereotype threat, women who even slightly accepted the stereotype about women in math performed poorer on gender-associated tasks (Schmader et al., 2004).

The way a person interprets intelligence can play a role in whether or not he or she is vulnerable to stereotype threat. What people believe about intelligence can play a large role in how they respond to life. The work of Carol Dweck (2006) has been pivotal in helping parents, educators, students, and companies identify whether they have a fixed mindset or a growth mindset. If a student has a fixed mindset, he or she may feel that looking intelligent is most important (Aronson, 2002). This worry about someone else's perception and opinion may lead to an increased belief in stereotypes. Aronson and Steele (2005) believe that people worry about "confirming a stereotype through low performance [because it] poses a threat to ... important human motives" (p. 440). The belief in intelligence may play a role in self-esteem, performance, and work-ethic (Aronson & Steele, 2005). These risk factors are indicators that predict whether an individual or a group might be more vulnerable to stereotype threat than others.

Domain identification, group identification, stigma consciousness, acceptance of the stereotype, and beliefs about intelligence are all risk factors that are important to consider when trying to determine if students with learning disabilities are a stereotyped group. Additionally, these risk factors can help determine whether or not this specific student population might be vulnerable to the negative impacts of stereotype threat.

Stereotype Threat and Education

As researchers discovered more about how stereotype threat affects people, they began to explore how stereotype threat impacts learning and knowledge acquisition. Over the past 15 years, there have been many research studies that focus on the impact stereotype threat has on learning and subareas of learning. This research offers much

value to the field of education. Educators can use the information in this research to help improve learning in their classrooms.

The University of Michigan completed one of the first studies related to learning and stereotype threat. This study examines if solo status impacts learning and performance (Sekaquaptewa & Thompson, 2002). The definition of solo status is "...being the only member of one's social category in an otherwise homogenous group" (Sekaguaptewa & Thompson, 2002, p. 694). Sekaguaptewa and Thompson (2002) also explained that "...smaller the number of other disadvantaged group members present, the more negative is the experience for the individual" (p. 694). Previous research has found that solo status does not impact White males as much as females or African-American males (Sackett et al., 1991). Examining solo status can be very useful for educators who work with schools without strong diversity. Many students in low diversity schools often find themselves in solo-status in the classroom. This study hypothesized that females in solo status situations would experience lower performance during learning and testing. The study results confirmed that all participants had lower performance scores in learning and testing when experiencing solo status than those in the majority groups (Sekaquaptewa & Thompson, 2002). Stereotype threat impacted women more than men and African-American females more than White females (Sekaguaptewa & Thompson, 2002). In the study's design, Sekaquaptewa and Thompson (2002) attempted to control for stereotype threat. The researchers attempted to select a gender-neutral topic; however, Sekaquaptewa and Thompson (2002) account that the topic may not have controlled for stereotype threat. This information is very important to teachers and school leaders because one of the most important aspects of school for adolescents is belongingness

(Arroyo & Zigler, 1995; Baumeister et al., 1995; Vaz et al., 2015). American teenagers care about belonging more than almost anything else (Arroyo & Zigler, 1995; Vaz et al., 2015). The risk of social exclusion of minority students can have a significant negative impact on academic performance (Baumeister et al., 2002). Educators must be aware of stereotype threat effect and how to decrease stereotype threat in their behavior, classrooms, and schools.

A subarea of research that has emerged is examining anxiety and stereotype threat. Steele and Aronson (1995) found that negative stereotypes create anxiety in those in testing conditions. Building off Steele and Aronson's 1995 study, researchers decided to look further into the role of stereotype threat on anxiety (Stangor et al., 1998). Stangor et al. (1998) aimed to measure how subjects think they will perform and how individuals anticipate task-related anxiety. In two different experiments, the researchers found that subjects exposed to stereotype threat either by having it activated before testing or by being a solo representative of their gender rated themselves lower in expected performance than those who did not face stereotype threat; however, Stangor and his colleagues (1998) did not find that the subjects in the study rated themselves as anxious. This finding helps support that underperformance or belief of underperformance is due to the presence of stereotype threat and not due to the anxiety they feel in the testing environment. Another experiment identified that African-Americans' blood pressure was higher when under stereotype threat (Blascovich et al., 2001). Using a Cortonics blood cuff to measure blood pressure, the study demonstrated that African Americans in the High Stereotype Threat group exhibited higher blood pressure than African-Americans in the Low Stereotype Threat group (Blascovich et al., 2001).

Other researchers have examined arousal generated by stereotype threat (Mangels et al., 2012; O'Brien & Crandall, 2003). The research suggests that arousal does not affect all performance but instead affects task difficulty performance (Spencer et al., 1999). O'Brien and Crandall (2003) researched how arousal impacts performance on easy and difficult problems when in stereotyped conditions. The researchers in this study found that women under stereotype threat had increased performance on easy problems and decreased performance on hard math problems (O'Brien & Crandall, 2003). This research supports Zajone's social facilitation theory that arousal increase performance on easier items and decreases it on harder problems (Zajone, 1965). Lu and colleagues (2015) recently examined the relationship between stereotype threat, anxiety, and mind wandering. The findings of this study "represent the first empirical evidence that increased anxiety and task-unrelated thoughts independently contribute to stereotype threat effects" (Lu et al., 2015, p. 543). Stereotype threat increases arousal and anxiety, and these increases play a role in student learning.

Working memory is another area that researchers have studied concerning stereotype threat. Working memory is the brain area where people hold and process information, and it also plays an important role in attention and focus. Schmader and Johns (2003) explain that working memory "refers to the type of memory that is used to focus attention on temporarily activated information of interest while inhibiting other information that is irrelevant to the task at hand" (p. 441). As students learn, they must rely on their working memory. Deficits in working memory, whether biological, environmental, audio, or visual-spatial, create learning deficits (Schmader & Johns, 2003). Through research, there has been an understanding that the cognitive load the

environment places on a student and stress and anxiety decreases working memory (Blascovich et al., 2001; Paas et al., 2014; Steele & Aronson, 1995). In a study designed to measure working memory capacity with and without stereotype threat (mathematical ability domain), Schmader and Johns (2003) found that stereotype threat conditions decreased cognitive capacity for the stereotyped group.

Beginning in 2005, researchers, including Kronberger, Appel, Aronson, and Steele, began to hypothesize about the impacts of stereotype threat on learning. Up until this point, most research focused on performance, primarily on standardized test performance. As researchers began to understand better stereotype threat, they began to examine its impact on various areas. One area that has become of great interest is learning. Researchers began to hypothesize that if stereotype threat impacts performance, it is possible to think that it also impacts learning. In fact, they began to wonder if the performance was just a result of poor learning because of the stereotype threat students faced in the classroom (Rydell et al., 2010). Other studies focus on perceptual learning, such as visual search learning (Rydell et al., 2010). Additionally, another study focuses on map learning (Meneghetti et al., 2015).

To better understand how stereotype threat impacts learning, Appel et al. (2011) focused on preparation and training for tests instead of just focusing on test performance. The researchers examined the ability to take notes and how a student can evaluate the quality of learning materials (Appel et al., 2011). Since the two skills (taking notes and evaluating the quality of learning materials) are cognitive, then "the quality and efficiency of these activities can be vulnerable to resource depletion induced by stereotype threat" (Appel et al., 2011, p. 905). In four separate studies, Appel et al. (2011)

distinguished that stereotype threat conditions diminished test preparation quality. The researchers believed that stereotype threat interferes with learning activities, which, in turn, decreases poor test performance. They also agreed that learning in less efficient ways will eventually create holes in one's knowledge and that this "gap" would get larger and larger over time (Appel et al., 2011). Taylor and Walton (2011) also noted that if stereotype threat has an impact on people in "both learning and performance environments," then the lack of knowledge and the decreased performance would create bigger discrepancies between those who face stereotype threat and those who do not face stereotype threat (p. 1055).

Stereotype Threat and Learning Disabilities

Understanding the details of stereotype threat and understanding stereotyped groups' characteristics leads this researcher to believe that students with learning disabilities have experiences with stereotype threat. The researcher studied a population of students with learning disabilities. For this research, there was a focus on disabilities including reading disorders, attention disorders, and anxiety disorders. These disorders are referenced as learning disabilities since these disorders can impact learning. The Individuals with Disabilities Education Act (IDEA) defines a learning disability as a "disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (Individuals with Disabilities Education Act, 20 U.S.C. § 1401, 2004).

Some common learning disabilities that students may receive accommodation include reading disorders, written expression disorders, math disorder, and auditory

process disorder. Many students who have one of these disorders (or more than one as there often is comorbidity) experience academic difficulty in school. Unfortunately, teachers and parents can have lower expectations of students with a learning disability than those who do not have learning disabilities (Shifrer, 2013). Academic difficulty can begin a downward spiral that results in behaviors and outcomes that have become negatively stereotyped. There are many different ways that this academic difficulty in school due to a learning disability can make students aware of the negative stereotype and stigma of learning disabilities and be vulnerable to stereotype threat.

The "Learning Disability" Stereotype

Learning disabilities are not always seen in a positive way. In fact, there are stereotypes that exist about learning disabilities. As brain imaging has taught us that every brain is different and as differentiated instruction, personalized instruction, and individualized instruction have dominated professional development, one would think that educators and society are growing to appreciate cognitive diversity; however, there has not been as much growth in this category as one would wish for 2021. In the "2014 State of Learning Disabilities Report" published by the National Center for Learning Disabilities, there is much information that suggests that there is still a need for education. One disappointing statistic is that "Seven out of 10 parents, educators and members of the general public incorrectly link learning disabilities with intellectual disability ('mental retardation') and autism. Half or more of school administrators do so as well" (Cortiella & Horowitz, 2014, p. 11). This misinformation is just one example of how there is a perception of those with learning disabilities.

Stereotype Threat Risk Factors and Students with Learning Disabilities

To understand better if students with learning disabilities are a stereotyped group and vulnerable to stereotype threat, the researcher examined the stereotype threat risk factors from the perspective of students with learning disabilities. As previously mentioned, these risk factors are key factors that predict whether or not a stereotyped individual or group is likely to be vulnerable to stereotype threat. Since this research suggests that students with learning disabilities are vulnerable to the negative impacts of stereotype threat, these risk factors help support the idea that students with learning disabilities are, in fact, a negatively stereotyped group and are vulnerable to stereotype threat situations. The specific risk factors discussed are domain identification, group identification, stigma consciousness, acceptance of stereotypes, and beliefs about intelligence.

Students with learning disabilities often relate to domain identification, and domain identification is often a predictor of vulnerability to stereotype threat. Domain identification is the amount someone relates to a specific domain and how much the person views that domain as part of his or her identity, how much confidence a person has in the domain, and the amount of time some spends in the domain to do well (Saad et al., 2015; Steele et al., 2002). Researchers have found that people who identify with the domain often want to do well (Aronson, 2002). Aronson and Steele (2005) argue that when individuals are placed "in situations where academic competence is relevant—taking a test, speaking up in class, working on a project with peers, or even doing one's homework, stereotype targets will feel extra pressure not to fail" (p. 440). Students with learning disabilities who identify as a student with a disability can feel extra pressure to perform in academic settings.

Although the domain can vary, the test performance and learning domains seem to be two domains with which students with learning disabilities may identify. Because successful and unsuccessful students with learning disabilities tend to persevere even when faced with failure, they tend to keep working hard to do well even when they do not perform well (Goldberg et al., 2003). In fact, "successful informants agreed that difficult situations were often necessary for learning to take place," and "many of the successful individuals internalized their ability to persevere as an important area of strength" (Goldberg et al., 2003, p. 227). Even if students with learning disabilities are failing in the domain, they may still identify with the domain because it creates students' ability to persevere, and this perseverance is an important value for students with disabilities.

Group identification is another area that impacts vulnerability to stereotype threat, and it is also an area in which students with learning disabilities can relate. Group identification is the degree to which someone identifies with an identified group. Kenyon et al. (2014) reference Judith Howard's (2000) work on identities and state that "diagnosis is considered to give a group identity" (p. 258). This means that individuals who have been diagnosed with a learning disability are vulnerable to stereotype threat. Since students with learning disabilities receive a diagnosis from licensed professionals, they are considered to have a group identity. While there are still individual differences as to how these students identify with the group identity, Howard's (2000) work indicates that identification with the group is inevitable.

Students with learning disabilities often struggle with identifying with the group and will work to avoid group membership. Still, research has shown that successful students realize that group identification is necessary. Successful students with learning

disabilities have learned to "compartmentalize their disability," and this allows students "to contain the effect of the LD [learning disability] and prevent it from negatively affecting his sense of self and well-being" (Goldberg et al., 2003, p. 226). Students with learning disabilities also have group identification during college. In most colleges and universities, students with learning disabilities must prove their disability with documentation to receive accommodations—this requirement of providing documentation forces group identification. The way that stereotype threat impacts other stereotyped groups could predict if group identification creates vulnerability in stereotyped situations for students with learning disabilities. Aronson (2002) states, "that people who feel a deep sense of attachment to their ethnic and gender group are also more at risk for feeling stereotype threat" (p. 287). One study found that "women showed poorer performance compared to men on a stereotype relevant task when their social identity was linked to their test performance, but only if they considered gender to be an important part of their self-definition" (Schmader, 2002, p. 199). Spears et al. (1997) found that "low identifiers are more likely to opt for the individualistic strategy or dissociating from their group" (p. 543). Additionally, this study found that "high identifiers in this same situation are more likely to deal with the threat on a group level and still see themselves as representative of the group" (p. 543). Since stereotype threat decreases test performance in those who are highly group identified, then it seems this would be true for people who highly identify with being learning disabled. Students with disabilities who have high group identification are more likely to underperform than those with low group identification.

Disabilities as a whole come with a negative stigma, and learning disabilities are no exception. Many factors have played a role in the development of this negative stigma. Historically, there have been events and decisions that have contributed to the stigma of learning disabilities. One situation that has played a role in developing a stigma is the segregation of students with learning disabilities, even for years after racial desegregation occurred (Idol, 2006). The education of students with learning disabilities occurred in separate classrooms well after special education populations joined the general education schools (Idol, 2006). The separation added to the idea that these students are different and helped create a stigma. Even the word "disability" adds to the stigma because it portrays the idea that the disabled student cannot perform. Elizabeth Pinel (1999) coined the term "stigma consciousness" to describe the awareness people have of the stigma of their group, and she found that the more stigma conscious someone is, the poorer they can perform. Often students who have disabilities have average and above average intellectual ability; however, their classroom performance may below grade level within a classroom. These underperformances of students with learning disabilities are often due to "their own deficiencies, cumulative disadvantage, and more direct stigmatizing processes" (Shifrer, 2013, p. 245). Unfortunately, "teachers and parents hold significantly lower educational expectations for adolescents labeled with LDs than they do for similarly achieving and behaving adolescents not labeled with a disability" (Shifrer, 2013, p. 469). This low expectation supports that learning disabilities have a stigma. Since stigmatized groups often experience decreased performance and learning due to stereotype threat, people who have learning disabilities should also experience the effects of stereotype threat.

Societal perceptions impact people in different situational events. How students with learning disabilities accept society-created stereotypes plays a role in how they respond to stereotype threat situations. The anecdotes provided in a study help explain the experience of societal perceptions (Kenyon et al., 2014). When asked about how he expected society to treat him, one of the participants in the study expressed that people "assume you've got a disability and we can't do things" and that "they might think you don't have an opinion" (Kenyon et al., 2014, p. 260). Another participant reported that another person told him that he was "a waste of space" (Kenyon et al., 2014, p. 260). These derogatory statements portray that there is an acceptance of stereotypes for students with learning disabilities.

In the previously mentioned study by Schmader et al. (2004) that reported that women who even slightly accepted the stereotype about women in math performed poorer on gender-associated tasks, there was an insight into how students with learning disabilities may perform in a similar situation. If women in stereotyped situations have decreased performance when they believe a stereotype exists, then it is probable that people with learning disabilities underperform in situations where they feel there is a believed negative stereotyped situation. As noted previously, teachers do not always convey acceptance of students as competent, equally capable students. Students with learning disabilities report feeling like others doubt their ability; therefore, it is likely that underperformance may occur in situations when asked to demonstrate competence.

One known concept that supports the idea that students with learning disabilities are susceptible to stereotype threat is generalization. Many researchers have noted that any group of people could experience stereotype threat, especially groups who have a

negative stereotype threat (Aronson, 2002). Research has shown that stereotype threat creates underperformance in many negatively stereotyped groups, including gender (Brown & Josephs, 1999; Davies et al., 2005; Good et al., 2012; Keller, 2002; Koch et al., 2008; Sackett et al., 1991; Stone et al., 1999), race (Clark et al., 2015; Good et al., 2003; Larnell et al., 2014; Sackett et al., 1991; Steele & Aronson, 1995; Steele, 1997; Wicherts et al., 2005), socioeconomic status (Croizet & Claire, 1998; Spencer & Castano, 2007), and age (Ambady et al., 2001; Good et al., 2003; Levy, 1996; Spencer et al., 1999). Aronson (2002) states that "stereotype threat can affect students who are highly confident in their abilities and those who are less confident; highly able and prepared students and the not so able and prepared" (p. 285). No stereotyped group is free from stereotype threat.

Also, Alison May and Addison Stone (2010) completed a study to examine the stereotypes of individuals with learning disabilities. Their study confirmed the ongoing stereotype that people with learning disabilities have "generally low ability" (May & Stone, 2010, p. 490). May and Stone (2010) express their concern that "despite the passage of time, the advent of the inclusion movement, and the increasing presence of students with LD in the college population, this negative stereotype is again present in the data" (p. 490). This demonstrates that students with learning disabilities are part of a negatively stereotyped group.

Current Research on Stereotype Threat and Learning Disabilities

May and Stone (2014) conducted an initial study examining the effect that stereotype threat has on the performance of college-aged students with learning disabilities demonstrated. May and Stone (2014) hypothesized that the students who have

learning disabilities would have decreased performance on a verbal test in stereotype threat situations. After completing the study, the researchers "...found only marginal support for the hypothesis that [stereotype threat] is a contributor to the diminished performance of undergraduates with LD" (May & Stone, 2014, p. 99). The study did identify that the students with learning disabilities spent more time, "significantly longer," on the test than the control students (May & Stone, 2014, p. 99). There were several limitations to their study; however, there were two that were noteworthy. One limitation is the small sample size (only 29 students with learning disabilities). The other noteworthy limitation is that the study recruited participants by stating that they would take a "short test" (May & Stone, 2014, p. 101). Since many students with disabilities would be hesitant or unlikely to volunteer willingly for a test, there was probably a poor representation of students with learning disabilities. The researchers suggested replicating this study with a larger population as individuals with learning disabilities meet many stereotype risk factors (May & Stone, 2014).

In 2014, Stokowski and Hardin examined stereotype threat of student-athletes with learning disabilities. This study reports that the student-athletes with learning disabilities did report instances of stereotype threat. Two themes surfaced through the analysis of the results. Students reported that as student-athletes with learning disabilities, they either had to play the role of the "entertainer" or they felt labeled as "dumb" (Stokowski & Hardin, 2014, p. A-103).

A third study, completed in 2019, examined the psychological disengagement of students with learning disabilities in stereotyped situations. This study was a replication of May and Stone's (2014) study using a larger population. Zhao et al. (2019) found that

"stereotype threat is negatively predictive of academic performance of high school students with learning disabilities" (p. 319). The study also found that "labels may produce a stereotype threat toward students with learning disabilities" and that "more emphases should be placed on the individual differences among high school students with learning disabilities" (Zhao et al., 2019, p. 320).

Since there have only been quantitative based studies to examine the impact of stereotype threat on students with learning disabilities (May & Stone, 2014; Wang et al., 2017; Zhao et al., 2019), a qualitative study would be a good next step to analyze the "individual differences" that Zhao et al. references in the 2019 study. A qualitative study would allow the researcher to examine the student experience to see if students with learning disabilities are vulnerable to stereotype threat.

Determining the influence of stereotype threat on the learning and performance of students with learning disabilities allows for research expansion into other areas. One interesting area would be to examine the relationship between locus of control in students with learning disabilities and the impact of locus of control on performance in stereotype threat conditions. Another area of possible research would be to examine the relationship between the belongingness of students with learning disabilities and the impact of stereotype threat on student learning, self-regulation, and performance.

Conclusion

As educators work with students with disabilities, they must consider any obstacles that may get in the way of student learning. The obstacles can be part of the student's disability, but there can also be psychological, emotional, and environmental obstacles. Stereotype threat may very well be an obstacle that falls in the realm of

psychological, emotional, and environmental. Unfortunately, there is currently not enough research to fully understand the impact of stereotype threat on students with learning disabilities. After reviewing the research and examining how students with learning disabilities may be vulnerable to stereotype threat, there is still a need for additional research in this field. A qualitative study provides insight into the student's perspective of being a student with a learning disability.

In the meantime, educators must work diligently in professional learning communities and complete independent action research within their schools to help identify students who are at-risk of underperformance in response to stereotype threat and to develop new strategies and interventions that help students decrease the risk of underperformance. After all, not all students need to earn an A or make the highest grade in the class, but they certainly should have the opportunity to perform to the best of their ability.

CHAPTER THREE

Methodology

Introduction: Research Questions

Due to the lack of research and the need for a qualitative study, this Problem of Practice focused on an examination of the experiences of college students with learning disabilities and their perspectives of stereotype threat. This phenomenological study explored the student experience through the lens of Claude Steele's Stereotype Threat Model. This study gained insight into how students with learning disabilities experience stereotypes and their perceptions of how stereotype threat affects their academic performance, this study was designed to examine the perceptions of five individual students and reduce their experiences by answering three research questions:

- 1. What are student perceptions of their college experiences specifically related to their learning disability?
- 2. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 3. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

This chapter presents the phenomenological research design as the best fit for the study and the supporting literature. The chapter also provides additional information about the researcher's perspective, theoretical framework, data collection site, participants chosen, data collection procedures, data analysis procedures, ethical considerations, limitations, and delimitations.

32

Researcher Perspective and Positionality

Qualitative researchers examine their perspectives and positionality throughout the qualitative research process. As "an inextricable part of the research endeavor," I examined my relationship with the subject and subjects of the research, my values, and any possible bias that might impact the research process (Mantzoukas, 2004, p. 1000). Creswell et al. (2018) explain that in qualitative research, the "researchers try to get as close as possible to the participants being studied" (p. 21). Before beginning my career in education, I became interested in learning disabilities. I chose, in college, to major in psychology to better understand cognition and development. As a teacher, I have spent over 20 years working with students who have learning disabilities. As a learning specialist who worked directly with this student population, I developed close relationships with students with learning disabilities. I am a student with a learning disability and a parent of a student with a learning disability. While these experiences have helped me learn so much about this student population, it also affects my values and biases.

As Creswell et al. (2018) explain, researchers should express their values and how they may relate to the study. My experiences working with students with learning disabilities might have created beliefs and opinions that can impact my interpretation of the data collected. Bias might result because I am an educator who has spent most of her career focused on developing and growing students with learning disabilities. One possible bias that I hold is that students with learning disabilities can and do underperform their ability. I believe that students with learning disabilities often do not see themselves as smart and academically competitive with their non-disabled peers. I

believe that students with learning disabilities do underperform their ability based upon their perceptions of themselves as learners. A second viewpoint that I have is the belief that students with learning disabilities are, in fact, stereotyped. Holding this belief could impact how I view the research and the findings. I countered my assumptions and biases by having a fellow doctoral student read the data to identify significant statements, reporting all findings, and having participants offer feedback to the written description of the student experience (Creswell et al., 2018).

Theoretical Framework

The researcher used a theoretical framework to examine how students with learning disabilities experience stereotype threat. Claude Steele (1997) explained the process of how stereotype threat impacts individuals in his Stereotype Threat Model. This model suggests that a person needs to be a member of a stereotyped group and be in a performance situation to experience the self-threat of stereotype threat. Figure 3.1 is a schematic representation of Steele's Stereotype Threat Model created by Croizet et al. (2001). This representation shows that self-threat imposition can create distraction, self-consciousness, evaluation apprehension, test anxiety, or loss of motivation (Croizet et al., 2001). In turn, these behavioral components can interfere with performance (Croizet et al., 2001). The researcher used this framework to view stereotype threat through the experience of students with learning disabilities currently enrolled in college.

The researcher used the Stereotype Threat Model as a framework to guide many parts of this study. One use of the Stereotype Threat Model was in the creation of the research questions. To align the research questions, the researcher took each part of the theoretical framework model into consideration.

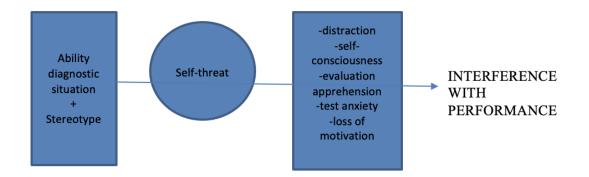


Figure 3.1. Schematic Representation of Claude Steele's Stereotype Threat Model, Reprinted from "Stereotype Threat, Social Class, Gender, and Academic Under-Achievement: When Our Reputation Catches Up to Us and Takes Over," by J. C. Croizet et al., 2001, Social Psychology of Education 4, no. 3, 298. Copyright (2001) by Springer Nature License. Reprinted with permission.

According to Steele's Stereotype Threat Model, the major impact of stereotype threat is interference with performance. The primary research question was developed to explore this impact. Since the impact considers performance, the third research question does just the same. Another example of how the Stereotype Threat Model influenced the research questions is the first research question. For example, the question, "What are student perceptions of their college experiences specifically related to their learning disability?" was designed to align with the "ability diagnostic situation and stereotype" phase of the framework. In addition, the second question, "How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?" also aimed to examine interference with performance. The Stereotype Threat Model was also helpful when collecting and analyzing the data in this study. One way the model was helpful was in the development of the interview questions. The interview protocol aligned with the research questions and the framework. When developing the interview protocol, the researcher created inquiries that would provide data to answer the

research questions. For example, the researcher created a chart (Appendix A) that demonstrated alignment between each interview question to a corresponding research question. The theoretical framework was also used in the data analysis. One part of interest in the theoretical framework was the behavioral components mentioned (distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation). The researcher conducted a framework analysis and used a matrix (see Appendix B) to display how data collected was coded based on the framework's categories. The researcher also examined the data for significant statements, textural descriptions, and structural descriptions related to the stereotypes of students with learning disabilities, self-threat, interference with performance, and the behavioral components. The analysis helped create an interpretation of whether students with learning disabilities are vulnerable to stereotype threat. The theoretical framework also provided a structure for the composition of the findings and the description of the phenomenon.

Research Design and Rationale

The researcher purposefully selected a qualitative design for this study to examine students' perspectives and experiences with learning disabilities concerning stereotype threat. Previous research designs and findings affirmed qualitative methodologies since there is no qualitative research that examines the student perspective and experience. Previous quantitative studies have not determined if stereotype threat impacts students with learning disabilities. A qualitative study design "empower[s] individuals to share their stories, hear their stories, and minimize the power relationships that often exist between a researcher and the participants in a study" (Creswell et al., 2018, p. 45). This

sharing of stories and experiences paints a "holistic, complex picture" of the student experience (Creswell et al., 2018, p. 45). Qualitative research provides rich data and descriptive explanations that help create a better understanding of stereotype threat through the experiences of students with learning disabilities. Specifically, this study sought "understanding of the world in which [students] live and work" (Creswell et al., 2018, p. 24). As this study aimed to gain insight into student experiences, a phenomenological study was the best design.

Three defining characteristics of a phenomenology made it the best design for this study. A phenomenological design allowed the researcher to explore a phenomenon, synthesize individual experiences into a collective experience, and use interviews for data collection (Creswell et al., 2018). Creswell et al. (2018) describe that phenomenology has "an emphasis on a phenomenon to be explored" and "the exploration of this phenomenon with a group of individuals who have all experienced the phenomenon" (p. 76). A phenomenology allowed the exploration of the way that students with learning disabilities experience stereotype threat. Creswell et al. (2018) also state that "the basic purpose of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence..." (p. 75). Since the researcher explored the student experience, a phenomenology allowed the researcher to gain insight into how students with learning disabilities experience stereotypes in the college setting and any commonalities of the phenomenon. Another characteristic of phenomenology is specific to data collection. A phenomenological study most often uses interviews as the main form of data collection by "interviewing individuals who have experienced the phenomenon" (Creswell et al., 2018, p. 77). Since having a learning disability can be a

very individualized experience, interviews were a proper way to examine the individual experiences and any common themes amongst the experiences. Additionally, phenomenological research seeks to provide both the "what" and the "how" of the experience (Creswell et al., 2018, p. 77). As this study was aimed to understand students with learning disabilities better, a phenomenological method best aligned with the researcher's perspective and experiences, the interpretive framework, the presenting problem, and the research goals.

Site Selection and Participant Sampling

The researcher chose to interview students from different universities and colleges. The researcher chose to have participants from multiple sites since the study intended to examine the experiences of students with learning disabilities, not to examine how the phenomenon might present within an individual institution. While the participants are at different universities and colleges across the United States, the participants all have lived experiences as students with learning disabilities and "can articulate their lived experiences" (van Manen, as cited in Creswell et al., 2018, p. 153). The sites include colleges and universities in multiple regions of the United States.

In this phenomenological study, the researcher used purposive criterion sampling. As "purposive sampling strategies are designed to enhance understandings of selected individuals or groups' experience(s) or for developing theories and concepts," this sampling process aligned with the purpose of this study (Devers et al., 2000, p. 264). Using a purposive sampling process allowed the researcher to select "information-rich cases" that provided a good look at the student experience (Palinkas et al., 2015, p. 539). Specifically, selected individuals "possess knowledge and experience with the

phenomenon of interest ... and thus will be able to provide information that is both detailed (depth) and generalizable (breadth)" (Palinkas et al., 2015, p. 539). To gain the best data, the researcher used criterion sampling. This sampling is the best approach to selecting participants because criterion sampling uses "participants who meet or exceed a specific criterion or criteria, possess intimate (or, at the very least, greater) knowledge of the phenomenon of interest by virtue of their experience, making them information-rich cases" (Palinkas et al., 2015, p. 539). The researcher selected participants who meet specific criteria for the study.

There were multiple criteria required for participation in this study. The first criterion that the participants share was a formal diagnosis of a learning disability. The diagnosis report must clearly state an appropriate Diagnostic and Statistical Manual of Mental Disorders (DSM) code. The participant provided the researcher with a copy of this documentation. The second criterion for the study was that the participants are full-time students in accredited universities in the United States. Additionally, the participants were adult students, ages 18 and older. Lastly, the participants were registered students with the Office of Accessibility to use accommodations at their institution. These criteria allowed the researcher to select participants who have lived experiences of a student with a learning disability and were able to provide valuable data to this qualitative study.

For this study, the researcher included five participants who met the above criterion. The researcher chose five participants for this study because there is a recommendation to include "5 to 25 individuals who have all experienced the phenomenon" (Polkinghorne, as cited in Creswell et al., 2018, p. 79). As a previous learning specialist who worked with students with learning disabilities, the researcher

used to work with over 200 high school students who have a learning disability. During that time, the researcher had access to a population of students with learning disabilities. These relationships with students allowed the researcher the ability to contact students to solicit participation in the study. The researcher contacted ten students as potential participants to identify students to share their experiences openly. Seven of the ten students signed the consent form and completed the questionnaire. This questionnaire included basic demographic information and criterion-related information, such as whether the student was registered to use accommodations. The researcher selected five of the participants so that there were five participants from different schools and those who had the most current evaluation reports. After reviewing the results of the questionnaire, the researcher chose five participants from the ten potential students.

Data Collection Procedures

In the spring of 2021, the researcher collected data. The researcher chose to use multiple methods of data sources. The use of multiple data sources increased the study's validity and created a stronger understanding of the experience of attending college as a student with a learning disability regarding stereotype threat. The multiple data sources for this research included a questionnaire, a formal evaluation stating the diagnosis of the learning disability, and semi-structured interviews of five students who have a learning disability. Before collecting data, the researcher sought and secured approval from Baylor University's Institutional Review Board (IRB) and collected signed consent forms (see Appendix C) from the participants.

The first data collection was the questionnaires completed by potential participants (see Appendix D). The data collected from these questionnaires helped the

researcher determine if the participants meet the criteria to participate in the study. Additionally, this data included background information on the participant and his or her diagnosis of a learning disability. The selected participants provided the researcher with documentation of the learning disability. This documentation was often in the form of a psycho-educational evaluation. This evaluation report often contained test results and anecdotal accounts of the student. This evaluation report provided details about how the disability presented itself within the participant's life. The researcher reviewed the evaluation report and coded the information provided from the questionnaire.

The researcher chose to use interviews to gather data from the participants. As previously stated, interviews in a phenomenological research design are a typical way to collect data from participants to understand their experiences with the phenomenon better. In this study, the researcher created an interview protocol (Appendix E) to conduct semi-structured interviews. This type of interview allowed the researcher to collect data that explored the "how" and "what" of the phenomenon (Creswell et al., 2018).

Silverman (as cited in Creswell et al., 2018) states that "reliability can be enhanced if the research ... by employing good-quality recording devices and transcribing the digital files" (p. 264). The researcher completed five interviews via Zoom. The researcher individually transcribed the interviews. The researcher completed two follow-up interviews via zoom with Participant A and Participant C. The researcher stored the video-recordings, the audio files, and the digital files securely in a protected Dropbox account to protect the data and the participants.

Data Analysis Procedures

After data collection and interview transcription, the researcher began analysis. Data analysis included coding each participant's questionnaire, evaluation report, and interview. The researcher first examined the data by creating a written transcript for each interview. This process allowed the researcher to spend quality time with the data and have a strong sense of what each participant shared during their interviews. After creating the transcripts, the researcher wrote an epoché to further express the researcher's viewpoint and experiences. This epoché provided "a full description of his or her own experience of the phenomenon" (Creswell et al., 2018, p. 201). Next, the researcher read each transcript and identified significant statements from each participant. Additionally, to increase reliability, a second reader (a fellow doctoral student) identified significant statements. From there, the researcher sorted the identified significant statements into textural statements (perception) and structural statements (experiences). The thematic analysis revealed the essence of the experience. After completing the thematic analysis, the researcher examined the data through the lens of Claude Steele's Stereotype Threat Model. The researcher coded for specific behaviors noted in the theoretical framework, including distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation that leads to interference with performance (Croziet et al., 2001). The researcher used a matrix (see Appendix F) to analyze and demonstrate how the textural and structural data collected aligns to the behavioral components in the theoretical framework. The framework analysis allowed the researcher to answer the research questions.

After completing the data analysis, the researcher composed a report representing the information learned during the phenomenological study. After conceptualizing the data, the researcher wrote a "composite description of the phenomenon" (Creswell et al., 2018, p. 201). This long, descriptive discussion section synthesized the individual experiences of the students with learning disabilities into the essence of the experience overall. The results section, found in Chapter Four, was organized into a thematic analysis that includes textural statements, structural statements, an essence of the shared experience, and a framework analysis that includes the five behavioral components of Claude Steele's Stereotype Threat Model which assisted in answering the research questions.

Trustworthiness, Validity, and Reliability

As a professional, it was essential to take many steps to create reliable and valid research throughout the data collection and data analysis. Several strategies were used to ensure validity. First, the researcher expressed her positionality. This was done to expose "...past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to this study" (Creswell et al., 2008, p. 261). The researcher also used multiple data sources to create validity. The multiple data sources for this research included a questionnaire, a formal evaluation stating the diagnosis of the learning disability, and semi-structured interviews of five students who have a learning disability. Additionally, the researcher included all interview details, including negative information learned. The reliability of the study was also of upmost importance. To ensure reliability, the researcher recorded and transcribed the interviews. Using all these

strategies throughout the data collection and analysis ensured research that would be valuable to the fields of psychology and education.

Ethical Considerations

The researcher made several ethical considerations for data collection. The first ethical consideration made was gaining permission through the IRB of Baylor University. The researcher gained approval from the IRB to ensure the protection of all human participants. The researcher educated the participants on the risks of participating and collected verbal and written consent prior to participation. Since the study worked with students with learning disabilities, the researcher designed a study that respected participants' confidentiality. The researcher assured participants that their collected data was locked and always secured in accordance with approved ethical standards.

Additionally, the researcher assigned each participant a participant letter (Participant A, Participant B, etc.) to further ensure anonymity. While the participation was voluntary and did not pose a threat to the participants, the researcher provided the participants with information on any perceived or actual risks of participation and a copy of the signed consent for their further review.

Limitations and Delimitations

As a professional, the researcher was purposeful in designing a quality research study. Even with this effort, there were still limitations. One limitation is the sample size. With only five interviewed participants, the findings represent a limited student perception. This perception might not be representative of all students with learning disabilities. Additionally, this study focused on students with learning disabilities in a

college setting. Some younger students with learning disabilities in public and private schools may hold a different perspective than college-age students. While the researcher knew the participants before interviewing and was purposeful in establishing rapport with the participants, the participants might not have shared freely and openly about their personal experiences as students with learning disabilities. Additionally, as a person with a learning disability and as a special education teacher, the researcher must recognize personal bias as a limitation.

There are also several delimitations that were set in order to help keep the study focused on the phenomenon. First, the researcher chose to use a small sample size. The choice to use five participants was so that there would be a fair representation of the shared experiences of students with learning disabilities. The researcher also chose to focus on college-age participants versus working with younger participants. This delimitation was purposeful as this age demographic should have developed a better understanding of learning and performing as a student with a learning disability.

Conclusion

Chapter Three discussed the selection of the phenomenological research design, the research questions, the participant selection process, the research site, the method for data collection, and the analysis methodologies. The purpose of this phenomenological research was to examine the college student perspective of stereotype threat and learning disabilities through the lens of Claude Steele's Stereotype Threat Model. This study gained insight into how students with learning disabilities experience stereotypes and their perceptions of how stereotype threat impacts their academic performance. The next chapter thoroughly examines the results of this study.

CHAPTER FOUR

Results and Implications

Introduction

The current study utilized a phenomenological design to examine the college student perspective of stereotype threat and learning disabilities. The researcher analyzed the research data through thematic analysis and framework analysis through the lens of Claude Steele's Stereotype Threat Model. The intent of the study was to provide details and insights into the student experience of students with learning disabilities in college regarding stereotype threat.

Through the collection of the participants' questionnaires, psycho-educational reports, and interviews, the researcher aimed to answer the following research questions:

- 1. What are student perceptions of their college experiences specifically related to their learning disability?
- 2. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 3. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

The research questions were essential to developing the methodology of this study and guided the entire research process.

The phenomenological methodology was selected because this methodology achieved a coherent description of the participants' lived experiences. As described by Creswell et al. (2018), the phenomenological methodology synthesizes the experiences of the individual participants into the "essence" (p. 75). Since this study aimed to

understand the experience and perception of the students with learning disabilities in regard to how stereotype threat interferes with academic performance, this study was designed to examine the perceptions of five individual students and reduce their experiences down to one synthesized experience.

Chapter Four provides a participant description and interview summary that includes details about the participants of the study as well as brief interview overviews. Additionally, there is a thematic analysis, and a framework analysis section. Lastly, Chapter Four also includes a discussion section answering the research questions, implications of the results, summary, and conclusion.

Participant Description

Purposive criterion sampling was used to select five adults enrolled full time in accredited colleges or universities in the United States (see Table 4.1). Prior to selection, participants signed a consent, completed a demographic questionnaire, and provided an evaluation report that indicated the diagnosis of a learning disability.

Table 4.1

Participant Demographics

Participant	Institution	Age	DSM Code	Accommodations
Participant A	Furman University	21	315.00	Yes
Participant B	Clemson University	20	315.00; F41.1	Yes
Participant C	University of Virginia	20	315.00; F41.1	Yes
Participant D	University of Florida	22	315.00; 314.0X	Yes
Participant E	Fordham University	20	315.00; 314.0x	Yes

The participants come from private and public universities located in the United States.

These participants all had a formal diagnosis of a learning disability (determined by a

diagnosis report with an appropriate DSM code) and were registered for accommodations in their university's Office of Accessibility. After the review of the questionnaire and evaluation report, the participants were interviewed. The researcher used a semi-structured interview process, and the interviews were 45 minutes to one hour long.

Participant A

Participant A self-reported to be a 21-year-old rising junior who is registered full-time at Furman University in South Carolina. The participant was diagnosed by a licensed psychologist when the participant was in 4th grade. The diagnosis made was a reading disorder (DSM 315.00). The participant self-reported that the reading disorder was a significant issue during his elementary and middle school years. To help become a better reader, the participant attended Lindamood-Bell to complete a reading intensive tutoring program. During elementary school until the present, he required the accommodations of extended time and a reader on most assessments, particularly high stakes exams. The participant explained that he has used accommodations throughout his entire middle school, high school, and college experience.

Participant B

From the completed questionnaire, the researcher found that Participant B is a 20-year-old rising junior at Clemson University in South Carolina. The diagnosing report and a post concussive report were provided to the researcher. The post concussive report indicates that the participant reported learning problems after experiencing a concussion. The diagnosing report (completed by a licensed psychologist) indicates that learning concerns were present before the concussion; however, the psychologist believes that the concussion exacerbated the symptoms of a reading disorder (DSM 315.00). The

psychologist also indicates that the academic problems caused by the reading disorder is contributing to an anxiety disorder (DSM F41.1).

Participant C

Participant C self-reported to be a 20-year-old rising junior who is registered full-time at University of Virginia. The participant was diagnosed by a licensed psychologist when the participant was in 8th grade. The diagnosis made was a reading disorder (DSM 315.00) and anxiety disorder (DSM F41.1). The participant explained that the anxiety created more challenging symptoms than the reading disorder and was a significant issue during his elementary and middle school years. The participant explained that he has used accommodations throughout his entire middle school, high school, and college experience.

Participant D

Participant D completed the questionnaire indicating that the participant is a 22-year-old rising senior attending the University of Florida. The participant was diagnosed with a reading disorder (DSM 315.00) and attention deficit hyperactivity disorder (ADHD; DSM 314.0X) when in the 8th grade. Since that time, the participant has registered for accommodations and used accommodations, particularly on assessments. The participant indicated that she believes she was able to compensate rather easily for her reading disorder but has found the symptoms from her ADHD to be more challenging to manage. Participant D self-reported her grades to consistently be As and Bs.

Participant E

Participant E is a 20-year-old rising junior attending Fordham University in New York. The participant was diagnosed by a licensed educational psychologist during his fourth-grade year. The participant was diagnosed with a reading disorder (DSM 315.00) and attention deficit hyperactivity disorder (ADHD; DSM 314.0X). The participant reported spending significant time working to remediate the reading disorder. Today, he reports being a strong reader. The participant reported in the psychoeducational report that the attention disorder made school very challenging. The participant struggled sustaining focus on homework and tests and struggled with organization. The participant has used testing accommodations throughout middle school, high school, and college.

Epoché

While the researcher previously disclosed her biases, assumptions, and positionality, it became apparent during the interview process that the researcher's viewpoint and experiences are important to note. Throughout the researcher's career, she has worked with students who have learning disabilities. Working with these students has allowed the researcher the opportunity to develop close and personal relationships with hundreds of students. The researcher holds this type of relationship with all the participants. This close, personal relationship has created an environment in which the participants have rapport and trust with the researcher. The participants felt comfortable sharing personal experiences that might be difficult to share otherwise. During the interview process, the researcher noted that the close, personal relationship made it difficult to keep with a semi-structured interview. The researcher had to be mindful and purposeful to stick to the intended protocol. Since many of the experiences the

participants had were shared experiences with the researcher, the researcher found it necessary to disclose this noticing. These shared experiences were due to the researcher and the participant working and attending the same school. On some occasions, the researcher knew the teachers referenced, the procedures and structure of the accommodations process, and had some knowledge of some of the participants' previous struggles. This knowledge occasionally triggered an emotional response in the researcher, and the researcher made note of this and took all precautions to remove emotional responses and stay true to the interview protocol.

Thematic Analysis

In order to identify themes, the researcher completed a thematic analysis. In this section, the researcher provided a sampling of the textural statements that surfaced during the interview process. The textural statements created a clear picture of the participants' perceptions of being a college student with a learning disability. Additionally, the researcher provided a sampling of the structural statements that participants shared during the interview process. Structural statements offered insight on the participants' experiences as students with a learning disability.

Textural Statements

Using the significant statements, the textural statements were organized in three categories: students with a learning disability, stereotypes of students with learning disabilities, stereotype threat on students with learning disabilities (see Figure 4.1).

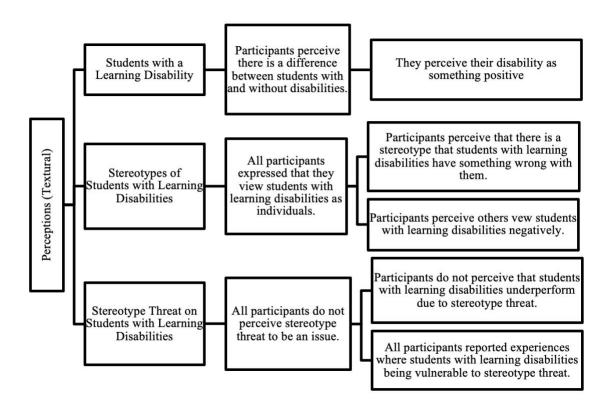


Figure 4.1. Key findings of textural statements.

There were several textural statements that demonstrated what the participants think about being a student with a disability. There were two main common perceptions amongst participants. The first perception that participants shared indicated that students with learning disabilities recognize that there is a difference in being a student with a learning disability. Participant A described being a student with a learning disability by saying, "I think it's unique. It adds a little bit more uniqueness to your personality." Participant B explained that "It's not that the person is at a disadvantage, or they're lacking in anything. It's just that they need more, kind of like a cushion or a padding." Participant C explains her perception of being a student with a learning disability by saying, "I'm a little bit different. A different snowflake." These examples provide insight to how students with learning disabilities believe that their disability makes them unique.

The second perception that participants shared is that they view their learning disability in a positive way. In many ways, the participants avoided saying that they perceived having a learning disability as a negative experience. The participants declared positive statements about having a learning disability. Participant B expressed students with learning disabilities are "very driven to learn" and "very, very determined to understand." Participant D described students with learning disabilities as "... probably some of the smartest people in the classroom." In another positive statement, Participant E explained that the process of understanding how she learns has made her become "...a better learner and student than students without learning disabilities."

When examining the data, participants had a common view on the stereotyping of students with learning disabilities. All participants expressed that they view students with learning disabilities as individuals. Four of the five participants directly stated that it was difficult to make broad generalizations about students with learning disabilities; however, when prompted with follow up questions, all the participants offered their perceptions of stereotypes of students with learning disabilities. Participant A said, "I don't believe it but I think some people think students with learning disabilities are dumb." Participant B offered the stereotype that students with learning disabilities should look or act differently, "like they must be seriously on the spectrum or they might have a visible outward sign of having a learning disability." Participant E explained that society believes that students with learning disabilities must "be a little bit different or be special needs." Participant C explained that "people believe that the learning disabled have poor social skills." Overall, the participants expressed that there is a stereotype that people with learning disabilities must have something wrong with them.

When interviewing the participants about how stereotype threat impacts students with learning disabilities, none of the participants were familiar with what stereotype threat is and how it impacts learners. After a brief description (included in the interview protocol), the participants were asked if they believe students with learning disabilities are vulnerable to stereotype threat. In response to this question, four out of five participants hold the perception that students with learning disabilities are vulnerable to stereotype threat (Table 4.2).

Table 4.2

Stereotype Threat Vulnerability

Participant	Textural Statements	Structural Statements
	(Do you perceive	(Do you have experiences being
	students with learning disabilities are vulnerable	vulnerable to stereotype threat?)
	to stereotype threat?)	
Participant A	No	"Teacher felt I was underperforming in
		the class, but I disagree. I was
		outperforming my peers in work ethic."
Participant B	Yes	"When a teacher thinks I can't, I am
		likely to get test anxiety and not do as
		well."
Participant C	Yes	"When I first got accepted to college, I
		disclosed my disabilities. For a long
		time, I did not think I should have been
		accepted because I needed
		accommodations. I tried to take tests
	**	without using accommodations."
Participant D	Yes	"When I don't feel my disabilities are
		being met, it doesn't matter if I am
		confident or not in the information. I
D .:	***	am not going to perform as well."
Participant E	Yes	"I would get so nervous on tests when I
		took them with other classmates. When
		they finished their tests so quick, I
		would hurry and finish so they did not
		think I was stupid. I know I missed so
		many points on those tests."

One of the participants did not perceive that students with learning disabilities are vulnerable to stereotype threat but went on to provide experiences that illustrate stereotype threat vulnerability. Another participant who said that students with learning disabilities are vulnerable to stereotype threat went on to say that he does not think every student with a learning disability underperforms their ability. All five participants provided personal experiences in which they experienced being vulnerable to stereotype threat due to being a student with a learning disability. These experiences are discussed in detail in the next section, Structural Statements.

Structural Statements

Similar to the textural statements, the structural statements were examined in three categories: student with a learning disability, stereotypes of students with learning disabilities, stereotype threat on students with learning disabilities. The participants each provided situations they have experienced as students with learning disabilities (see Figure 4.2 for a summary). Many of these experiences revolved around the experiences the participants have using accommodations at their higher-level institutions. Participant A described how she experienced using the accommodation of a reader by saying that when the test is "read aloud, it just kind of reminds me, like a gentle tug, that I am not like the person next to me." Participant B shared how accommodations help him feel successful for the first time. Participant B described taking a test in his high school:

In our physics test in high school, in a private room alone with as much time as I needed, that was the first time that I really realized that I could take and conquer that test. I started to see tests as like opportunities to actually show what I know. I'm sure every person kind of has that moment where they're like, 'Oh, I have a disability, but I can overcome it.' That physics test was probably mine. I just like vividly remember sitting in that room in in the Student Services office and being like. I can, like, do the physics with my hands and I can see it, because I had like that little, you know, shelter of getting to take my own time and be alone and talk

out loud and not be distracted by other students in the classroom. It changed everything.

Participant C also shared accommodations were very beneficial to her academic success; however, she did also reflect on a time when she was in elementary school. This participant remembered a time when she "...was dumb struggling with reading issues in 3rd grade. It felt isolating to use accommodations." One participant shared an insightful reflection about accommodations. Participant E stated:

I would say before I had some of my learning issues, I didn't really understand how someone's brain could need special accommodations to work better. But then once I once my circumstances kind of demanded that I needed special accommodations, I realized that it's not at all that a person is at a disadvantage, or they're lacking in anything. It is just that they need a cushion or a padding, or like some sort of special accommodation to show what they know.

The participant experiences highlight accommodations are an important part of being a student with a learning disability. Additionally, the participants explained that support systems are an important part of finding success. There were three main ways that the participants found support: peers who also have learning disabilities, teachers, and mentors or parents. Participant A explained that peers can be a huge support system. She said that, "students with disabilities are certainly more of a community." She explained that becoming friends with other students who had learning disabilities helped her feel like she "belonged in college." Participant C reflected that the teachers who were kind and accommodating made it easier for him to use accommodations. Participant A also agreed that "professors who are accommodating in a supportive way helped me feel okay about using accommodations." Participant D shared that his parents became very important to him whenever he faced failure. He said that his "parents would help [him] keep motivated and moving forward when things seemed too dark." Participant E

suggested that students with learning disabilities should find mentors. She explained that "you can surround yourself with people who are motivated to see you succeed, in addition to the motivation you have for yourself." Whether it is peers, teachers, parents, or mentors, all five participants shared experiences in which students with learning disabilities should develop a support system.

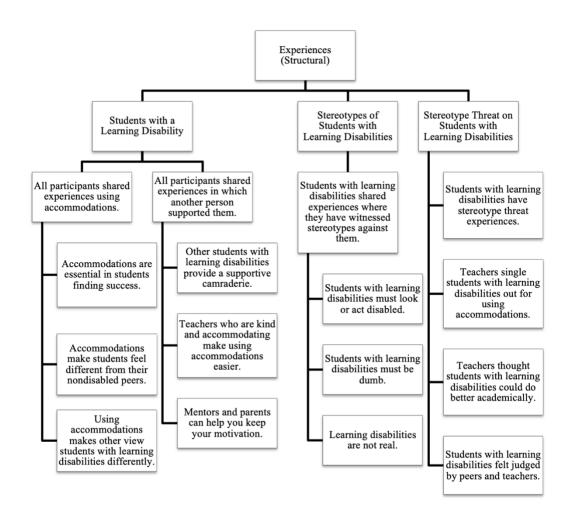


Figure 4.2 Key findings of structural statements.

The participants shared several experiences that defined stereotypes related to being a student with a learning disability. The participants shared experiences with stereotypes of looking disabled, being viewed as dumb, and other people questioning the

existence of learning disabilities. Participant E felt that people must hold a stereotype that students with learning disabilities must look or act a certain way because people often express to him that he "does not fit the mold of having a disability." He went to on to say that he sometimes questioned the people as to what "the mold of having a disability" is and sometimes he just "lets it go." Participant B had a similar experience when a peer said that Participant B must not have a disability because she "is too smart to have a disability." Participant D shared what he described as a painful memory from his high school experience. At the end of his senior year, Participant D overheard two friends discussing the candidates for the class's valedictorian and salutatorian. He heard one friend telling another that he "didn't deserve to even be considered because of the unfair advantage of extra time." When asked how that experience made him feel, Participant D replied, "It made me question my own standing." Participant A shared that she once had a friend explain to her that "she didn't think [Participant A] was going to do as well on the test because I need extended time." In addition to the participants having experiences with stereotypes of looking disabled and being dumb, one participant shared that an experience where people questioned the validity of learning disabilities. Participant C reported that "I have had friends talk to me about how they think that learning disabilities are phony or an unfair advantage." All five participants shared experiences in which they were stereotyped as a person with a learning disability.

While only four out of five participants held the perception that students with learning disabilities are vulnerable to stereotype threat, all five participants provided experiences in which they felt they were vulnerable to stereotype threat. Table 4.2 provides specific experiences; however, this section also highlights some of the

stereotype threat experiences. Participant A shared that when he used accommodations, his "teachers were funny about me using my accommodations" and he "felt kind of singled out." He explained that he would have to spend time reassuring himself that he was not "cheating" by getting extra time on his assessment and that he could spend much of his "extra time calming himself down." He also explained that in his Chemistry class, the "teacher felt [he] was underperforming in the class, but [he] disagreed. [He] was outperforming my peers in work ethic." Participant A said that he felt "judged" by his student about his performance and never felt "good enough." Student B also expressed feeling vulnerable with a teacher due to her disability. Participant B explained that "when a teacher thinks I can't, I am likely to get test anxiety and not do as well as I could if the teacher thinks I am capable." Participant C explained how she experienced stereotype threat during her admissions process to college. During the application process, Participant C disclosed that she had a learning disability in her college essay. After getting accepted and for a long time, she did not think [she] should have been accepted because [she] needed accommodations." She even "tried to take tests without using accommodations." Participant C recalled "struggling" during that time. Participant B has had experiences when he was offered accommodations and times when he was not granted accommodations. He explained, "when I don't feel my disabilities are being met, it doesn't matter if I am confident or not in the information. I am not going to perform as well." Participant E explained how every year he would try and "go without accommodations." This participant described how he felt when he took tests with his peers:

I would get so nervous on tests when I took them with other classmates. When they finished their tests so quick, I would hurry and finish, so they did not think I was stupid. I know I missed so many points on those tests.

In addition to the experiences that the participants shared, one participant shared the following when asked if there was any question that I did not ask that she felt I should have asked. This participant said I should ask students about the situations when students took tests "...in an academic setting where they required accommodations and they felt like they were not being discriminated against for having those accommodations." These experiences offer insight that students with learning disabilities might underperform their ability when vulnerable in stereotype threat situations.

Essence of Universal Experience of the Phenomenon

There were several themes that surfaced during the data analysis process. When considering themes, the researcher identified and examined "... the universal essence" of the phenomenon (Creswell et al., 2018, p. 75). The common themes that surfaced included the belief that accommodations are essential, the development of a strong work ethic, and the sense of camaraderie.

One theme that emerged during data analysis is the importance of accommodations. All five participants had accommodations recommended by the professionals who diagnosed their learning disabilities and used accommodations for test-taking during high school and college. The accommodations reported include extended time, testing alone, reader, scribe, and a note-taker. During the interviews, extended time was mentioned 188 times. All five participants shared two commonalities regarding accommodations. The first commonality shared amongst the five participant is the importance of accommodations. Without a direct interview question about

accommodations, the five participants all commented that accommodations were a very important part of being a student with a learning disability. Participant A described accommodations as something "made so their brain can work the best. And it's not that, you know, you're any lesser than anyone, but it's like, you just need X, Y, and Z to help you do your best." Participant B explained that "accommodations need to be made is so that the playing field is level" and that without accommodations, he was not able to show what he knows. Participant C reflected that her professors are "pretty accommodating" and that her college is set up so that using accommodations is easy. After Participant D used accommodations for the first time, he realized, "... I have this disability and I like truly do like need these accommodations." Participant E emphasized how accommodations have helped her grow as a student. She feels confident in her need for accommodations. When discussing the use of accommodations with her peers, she explained that "you might want that time, but I like, truly need the additional time." She reflected that she had to be confident in knowing "that I don't care if I get something really quick or if it takes extended time; I just care if I learn it and can show what I've learned." In addition to noting that accommodations are important, the participants all shared experiences that learning how to use accommodations was an essential part of learning how to be a student with a learning disability.

Another common theme that surfaced was about the work ethic that students with learning disabilities developed while learning how to learn. All five students included details about their work method during their interviews. When asked what is easy for students with learning disabilities, all five participants paused and struggled to provide an answer. After thinking about the question, every participant mentioned something to do

with their work ethic. The participants explained that because of their learning disability they needed to develop a methodology and a system to learn and to be successful. Participant B explained that students with learning disabilities "...study in a way that addresses the needs that they have rather than a random study method." Participant C said something very similar: "It seems that [students with learning disabilities] just feel what works better for them because they have to follow a certain methodology in order to better succeed and not just trying a wide variety of things." Participant E reported that the "methodologies and strategies have allowed me to succeed the most over time, and so I've tried to learn from that and improve based on that." The methodologies have reported advantages, including confidence and deeper learning. Participant B explained:

When it comes to learning, [students with learning disabilities] just so deeply try to understand the knowledge and not just like jot it down. You know, they don't just move on, you know, memorize it for a test and forget it, but they're so like trying to learn it and know it and like get it in their brains.

Participant D described his process he follows at the start of each semester. When the new semester starts, he contacts the professors and schedules meetings with them. During the meetings, he asks questions about the structure of the course. He reported that he has to "figure out how to study for this class by asking questions, like 'Do I need the textbook read aloud to me or is this a class without a textbook? And do I need to get a note taker for this class, or do I take my own notes?" Participant E explained that the work did not stop once his system was in place; he learned that he "needs to give [himself] additional study time and time to study in a lot of different ways." The students all shared the perception and had experiences that indicated that students with learning disabilities need to develop strong work ethics that counter the stereotypes that people hold toward them to be successful learning.

Another surfaced theme is the importance of camaraderie. Each participant offered insight into how isolating being a student with a learning disability can be. The participants referenced that testing with accommodations often means that they are away from their peers. Leaving the group and being alone has made the participants feel isolated and lonely. On the flipside, the participants also mentioned the camaraderie that feel with other students who use accommodations. Participant A shared that it brought her comfort to see that other people whom she respected needed to use accommodations. She felt a comfort level with these students and said it was very reassuring to her when taking a test. Participant C mentioned how close he felt to his testing coordinator. He felt that the testing coordinator cared about him and "saw all the good" in him. Participant E talked about the importance of mentorship. She felt it was important for students with learning disabilities to surround themselves with a strong support system. All five participants shared an appreciation for their support systems.

The study's findings show that students with learning disabilities are vulnerable to stereotype threat. The participants perceived themselves to be stereotyped individuals and reported experiences in which they felt stereotyped. In addition, the participants described incidents in which they experienced vulnerability to stereotype threat. Using the textural and structure statements identified, the researcher completed a framework analysis.

Framework Analysis

After completing the thematic analysis, the researcher completed a framework analysis using Claude Steele's Stereotype Threat Model. This model suggests that a person needs to be a member of a stereotyped group and be in a performance situation to

experience the self-threat of stereotype threat. A framework analysis was done by analyzing the significant statements (textural and structural statements) to see if the five topics of Steele's model, distraction, self-consciousness, evaluation apprehension, test anxiety, or loss of motivation occur in the significant statements (Croizet et al., 2001). Appendix F offers a highlight of the framework analysis of textural and structural statements. Due to similarities of how self-consciousness and evaluation apprehension present, the research chose to combine the two behaviors into on category. Table 4.3 summarizes the key findings from the framework analysis. Following the table, results by behavior (distraction, self-consciousness and evaluation apprehension, test anxiety, and test anxiety) are discussed.

Table 4.3

Key Findings from Framework Analysis

Distraction	Self-Consciousness & Evaluation Apprehension	Test Anxiety	Loss of Motivation
Participants believe that students with learning disabilities have to manage distractions and their attention.	Participants feel self- conscious because they feel judged by their peers for getting extra time.	Participants have perceived and experienced test anxiety.	Participants have experiences in which they can lose motivation when faced with frustration and failure.
Participants hold the perception that students without learning disabilities do not have to manage focus, distractions, and attention in the same way that students with learning disabilities do.	Participants agreed that using accommodations made them feel self-conscious and experience evaluation apprehension.	Participants believe test anxiety negatively interferes with test performance.	Participants believe that optimism when feeling frustrated helps them stay motivated.
Participants' experiences showed that anxiety, including test anxiety, impacted the participants ability to attend and ignore distractions.	Participants feel evaluation apprehension because their teachers have made comments of being surprised the student did well on a test.	Participants utilize accommodatio ns to help manage anxiety.	Participants believe that support systems can help them stay motivated.

Distraction

When it comes to the participants' perceptions and experiences of distraction, all participants mentioned having to manage distractions and their attention. In fact, the participants shared insight on what is like to manage their own distractions, their perceptions on distraction and their nondisabled peers, the role of anxiety on distraction and attention, and strategies the participants use to help manage distraction. When considering how the participants view their own distraction, there were several comments that indicated that the participants perceive that distraction plays a role in their learning. Participant C explained that she knows that "the way [she] learns requires more time and focus." Participant E reflected that "sometimes it is hard to focus [his] brain." Participants also hold the perception that students without learning disabilities do not have to manage distractions, focus, and attention in the same way that students with learning disabilities do. Participant B mentioned, "I know that for students without disabilities, they get to take their tests in a classroom and they don't have to worry about anything. They don't have to get distracted." Participant D also explained, "one thing I have always been envious of throughout my whole life, is how easy it looks to everyone. They won't get distracted by the pencil dropping and need to figure out where it dropped." While is important to note that two of the five participants have been diagnosed with attention disorder, the participants who have not been diagnosed with attention disorders found that they can be easily distracted and believe that they are more distractable than their peers. A second finding is that the participants' experiences showed that anxiety, including test anxiety, impacted the participants ability to attend and ignore distractions. Participant C shared, "test anxiety is the anxiety that occupies you in a way that you just feel off. It's not that you don't feel confident; It's that your attention

is taken away by the anxiety." The participants often use strategies, resources, and accommodations to increase attention and block out distractions. Participant A shared that she has "tried a few different focus apps and trials that block everything on your laptop so that you only had on your screen what you need to focus on." Overall, the participants recognize that distraction is something they must manage due to being a student with a learning disability.

Self-Consciousness and Evaluation Apprehension

The researcher chose to analyze the data for evidence of self-consciousness and evaluation apprehension together because of the similarity of the two topics. When it comes to the participant's perceptions and experiences of self-consciousness and evaluation apprehension, participants mentioned beliefs and experiences that indicate that they can be self-conscious or have evaluation apprehensive about being a student with a learning disability. Participants agreed that using accommodations made them feel self-conscious and experience evaluation apprehension. The participants experience self-consciousness because they judged by their peers for using accommodations.

Additionally, they feel evaluation apprehension because their professors have told the participants that they are surprised they did well on tests.

When considering how the participants view themselves, there were several comments that indicated that the participants are self-conscious about having a learning disability. Participant A explained that he knows that "I am pretty sure my friends think I only do well because I have extra time." Participant C reflected that "I don't reveal in any way that I have received benefits [accommodations] so that I am not seen as different to friends because I don't like to be labeled in any way." The participants gave statements

indicating that they are self-conscious even with their friends. In the previously mentioned experience, Participant D shared a story of overhearing his friends talking about candidates for valedictorian and salutatorian. When the friends said that they did not think that he should be a candidate because he uses extended time. The experience made Participant D "... question [his] own standing." This demonstrated how Participant D experiences self-consciousness and evaluation apprehension for using accommodations and for being a student with a disability.

The participants also shared experiences in which they experienced feeling self-consciousness when using accommodations and interacting with professors. Participant A described the experience using the accommodation of a reader by saying that when the test is "read aloud, it just kind of reminds me, like a gentle tug, that I am not like the person next to me." The participants experienced feeling evaluation apprehension from experiences with their professors. Participant B and Participant E both shared an experience where their professors seemed surprised by the students' grades on tests. Participant E further explained that his professor's surprise made him feel worried about the next test, saying "I worried I might disappoint my professor if I don't do well." The participants hold both perceptions and experiences that indicate that they have feelings of self-consciousness and evaluation apprehension as students with learning disabilities.

Test Anxiety

During the interview process, the five participants mentioned the words anxiety over 90 times. It appears that test anxiety is perceived and experienced by students with learning disabilities. The participants shared experiences of how test anxiety interferes

with test performance and accommodations help the participants manage anxiety.

Participant A explained how test anxiety feels:

When I have test anxiety, my mind feels occupied. I think the first word that comes to mind is anxious, and obviously that's the problem, because test anxiety occupies you in a way that you just feel off. It's not that you don't feel confident; It's that your attention is taken away by the anxiety. Anxiety is the thing that's almost fighting your focus on the test.

Participant B explained how he feels when he experiences test anxiety. He said that "the anxiety was stopping me from moving on in a way that prevented me from doing the thinking I needed to actually move on." The participants perceived that the test anxiety they experience negatively impacts their academic performance. Participant E expressed a related experience when taking a test. This participant said that she would get "nervous on tests when I took them with other classmates. When they finished their tests quickly, I would hurry and finish, so they didn't think I was stupid. I bet I missed so many points on those tests." While the participants suggested that their academic performance is negatively impacted by test anxiety, the participants provided that accommodations helped decrease test anxiety. Participant B explained that accommodations helped begin "to see tests as like opportunities to actually show what I know and not as something producing all sorts of anxiety." The participants all supported that accommodations, such as extended time and testing alone, are effective supports to decrease test anxiety.

Loss of Motivation

When it comes to the participant's perceptions and experiences on loss of motivation, the participants varied in perceptions and experiences. When considering how the participants view their own motivation, the participants made comments that indicated that the participants perceive that they can lose motivation due to frustration

and failure. When faced with loss of motivation, participants explained that they counter the frustration and failure with an optimism and a support system to decrease the loss of motivation. Participant B stated he, "might lose motivation to keep going because I am so frustrated but then I might, like, just be very optimistic, like, oh well, this next one I'm going to do better." A positive outlook helped the participants to keep going during tough times. For example, participant C said that he "has learned how to push back when [he feels] like [he's] hitting a breaking point, which is a weird thing to do, but you just have to keep on working." Participant E pointed out that support systems can make a difference in motivational levels. She said, "you can surround yourself with people who are motivated to see you succeed, in addition to the motivation you have for yourself." The participants recognized that the learning difficulties they experience can lower their motivation if they do not decide to stay positive and surround themselves with a support system.

Discussion

To provide a thorough discussion, the researcher examined the findings through the lens of the research questions. This study examined the following research questions:

- 1. What are student perceptions of their college experiences specifically related to their learning disability?
- 2. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 3. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

The next sections review the findings organized by research question.

First Research Question

The first research question offered insight into student perceptions of college experiences of students with learning disabilities. The question posed what are the student perceptions of their college experiences specifically related to their learning disability? While this question has been answered through the textural and structural statements of the thematic analysis section, it is important to address this question directly.

One specific area that surfaced was that the participants have the perception that stereotypes exists against students with learning disabilities. While all participants shared their perceptions of stereotypes of students with learning disabilities, it was important to note that the perceived stereotypes varied from participant to participant. More important than the perceptions are the participant experiences being stereotyped. One common stereotype that all participants experienced was that they felt that their professors and teachers, along with their peers, stereotyped students with learning disabilities as having visual signs of struggle or underperformance. Some teachers made the participants feel singled out for using accommodations. Other participants felt that their teachers were surprised when the participant had strong academic performance. In those situations, the students felt that they were breaking a stereotype that the teachers held.

Another important factor is that all five participants found it difficult to share a stereotype that they, as individuals, held about students with learning disabilities; however, they all were easily able to provide examples of stereotypes that others held about students with learning disabilities. In the current study, the participants were more comfortable talking about their own perceptions and experiences than generalizing about all students with learning disabilities. Interestingly, four of the five participants found it

difficult to make broad generalizations about all students with disabilities. This finding supports that students with learning disabilities are better viewed as individuals than as a collective stereotyped group. This was similar to the implication reported by Zhao et al. (2019). The researchers suggested that "more emphases should be placed on the individual differences among high school students with learning disabilities" in future research on the topic of students with learning disabilities regarding stereotype threat (Zhao et al., 2019, p. 320). This implication Zhao et al. (2019) directly impacted this researcher's decision complete this current qualitative study, and the findings in the current study support the implication made by Zhao et al. Students with learning disabilities might share a common diagnosis, but how the disability impacts the student is individualized.

Second Research Question

The second research question is how do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential? While all participants reported that they are successful students currently, the participants all described experiences of academic and learning struggle. All the participants reported that managing distractions is a concern for them as students and impacts their work and their test performance. Managing distractions is in line with previous research. Schmader and Johns (2003) found that stereotype threat conditions decreased cognitive capacity for the stereotyped group. This indicates that distractions decrease working memory and the amount of cognitive load a student can manage, (Blascovich et al., 2001; Paas & Ayres, 2014; Steele & Aronson, 1995). Even with

managing distractions and focus, the students have achieved enough success to gain admission to attend higher education institutions.

As previously mentioned, the participants attribute their success to accommodations. With that being said, the participants in the current study all perceive that they were able to meet their academic potential. One participant commented that he cannot imagine what it might be like to study and take tests as a student without a disability. In fact, this same participant said that he would not give up his disability because he feels that the work ethic he has developed will be beneficial in the future. One instance is where the literature suggested that students with learning disabilities spend more time on the provided test than the control students (May & Stone, 2014). Each participant in the current study indicated the need for extended time when taking tests. While the participants discussed different reasons for needing the extra time, they all referenced that they needed the time to demonstrate their learning. The extra time was used to process the material, read the material, manage anxiety, plan out writing, and double-check their answers.

In this same study, May and Stone (2014) only found "marginal support" of a decrease in performance. The participants all rated their academic performance average and above average. The participants in the May and Stone (2014) study were not granted extended time. Based upon the findings of the current study, it would plausible that the students underperformed their ability due to removal of accommodations versus underperformance due to stereotype threat. It would be important for a study to replicate May and Stone (2014) with the consideration of accommodations. Since the participants of the current study strongly agreed on the benefit and necessity of using

accommodations, offering accommodations to students could allow a better view of which variable is causing the decrease in performance.

Third Research Question

The third research question aimed to examine the perceptions that students with learning disabilities have of how stereotype threat interferes with academic performance. Findings from the framework analysis results best answer this question. The findings demonstrated that the participants were most impacted by distraction, self-consciousness, evaluation apprehension, and test anxiety. As mentioned previously, the participants in this student all described situations in which distractions were a concern for them as students. Self-consciousness and evaluation apprehension were also areas of concern for students with learning disabilities.

The interview data found that the participants felt that they were judged by their peers as students with learning disabilities. The judgment made the participants identify more as being learning disabled. Previous research has found that those who identify with the learning disability are more likely to underperform. An individual who identifies with the group and cares about whether their actions or performance will confirm the negative stereotype will be vulnerable to the perceived threat (Shapiro & Neuberg, 2007).

Schmader (2002) found that women who relate higher to being a woman perform worse than women who do not identify with their gender as part of their identity. The participants discussed the importance of not wanting to be labeled for fear of judgment by their peers. The participants seemed less concerned about the judgment of their professors versus the judgment of their peers.

The participants feel that their peers do not view students with learning disabilities as academically competitive. These findings align closely with several previous studies. Zhao et al. (2019) also found that "labels may produce a stereotype threat toward students with learning disabilities" (Zhao et al., 2019, p. 320). It seems that the perceptions of the participants closely aligned with the findings in the Zhao et al. (2019) article regarding labels. This demonstrates that students with learning disabilities are vulnerable to stereotype threat. In a world where grades hold much importance, the participants felt that they were often evaluated by the scores they earned and not always evaluated for the work that they do to be successful. Students with learning disabilities perceive that the extra work they must do as a student with a learning disability is not a factor or a consideration to their peers or their professors. The participants indicated that this judgment made students question their own standing. As previously mentioned, it made students question whether they should be able to be valedictorian. It made the participants question whether they should have been accepted into the college they attend.

The judgment of others contributed to the advancement of the stigma and stereotype of being a student with a learning disability. In addition, the judgment led to participants deciding not to use accommodations and to students feeling greater test anxiety which they believed decreased their academic performance. This judgment led to students with learning disabilities feeling like they are learning disabled students. This aligns with the work on Elizabeth Pinel (1999). Pinel (199) coined the term "stigma consciousness" to describe the awareness people have of their group's stigma. This study found that students who were more stigma conscious performed worse on standardized

tests than those with low stigma consciousness. The participants in this study perceived this to be true for them as well.

Another finding from the framework analysis was the role that test anxiety plays in regard to stereotype threat. All five participants have reported test anxiety. This differs from previous research. Stangor et al. (1998) did not find that the subjects in the study rated themselves as anxious. With all five participants experiencing test anxiety, this study found that test anxiety is a factor. This is important because previous research has found "that increased anxiety and task-unrelated thoughts independently contribute to stereotype threat effects" (Lu et al., 2015, p. 543). The framework analysis demonstrated that the participants experience many behavioral responses that contribute to stereotype threat vulnerability.

Framework Analysis Discussion

Using Claude Steele's Stereotype Threat Model provided a new understanding of student perceptions of college experiences of students with learning disabilities and an understanding that students with learning disabilities are vulnerable to stereotype threat. The framework suggests that a person needs to identify as a stereotyped person and be in a performance situation to experience the self-threat of stereotype threat. (Steele, 1997). Self-threat imposition imposes specific behavioral responses, including distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation, which leads to interference with performance (Croziet et al., 2001). In this study, the participants experienced self-threat imposition through group identification and stigma consciousness. The participants reported four of the five behavioral responses (distraction, self-consciousness, evaluation apprehension, and test anxiety). Participants also expressed

situations in which they experienced interference with performance. Without the right environment and conditions, students with learning disabilities could experience academic underperformance due to feeling like they are living up to the stereotypes of a student with a learning disability. While the participants in this study have all found ways to be successful, it is possible that with the wrong conditions or in a negative environment, stereotype threat could have a significant impact on this population.

Implications

Educators must truly understand the factors that impact their students, including the negative effects of stereotype threat. This study's findings demonstrated that students with learning disabilities are vulnerable to stereotype threat. This vulnerability provides new information that is beneficial to educators. Better understanding how stereotype threat affects students with learning disabilities provides better educational experiences for this marginalized group. The important implications from this study are that stereotypes of students with learning disabilities do exist and student support matters.

Stereotypes Exist

While there has been previous research on stereotypes of students with learning disabilities, having current findings on the perceptions that students with learning disabilities hold about stereotypes is helpful to educators (May & Stone, 2010; Rydell et al., 2011). The participants of this study perceived students with learning disabilities are stereotyped. The stereotypes included students with learning disabilities are dumb, should look disabled, and should underperform their nondisabled peers. Knowing that these students feel that others stereotype them, educators can be alert to their own actions and the other students. Educators can look for behavior, language, and attitudinal barriers that

might occur in their classrooms and institutions. Educators can evaluate their policies to identify if they hold biases to students with learning disabilities. Additionally, educators can add questions to their evaluations specific to students with learning disabilities. These questions should inquire as to if the students felt respected and if they felt that the professor handled accommodations adequately. They should work to create learning environments that deemphasize stereotypes. This lays a foundation for the next section on student support. This foundation building does not fall on the educator alone. Students need to use self-advocacy skills

Student Support Matters

Learning environments are an important part of teaching. Students must feel supported to learn. The participants in this study all shared experiences in which they felt isolated because of their learning disabilities or judged because they required accommodations due to their learning disability. This is important to educators because they are responsible for building their classroom learning environments that support all students, including students with learning disabilities. There are two important implications in regard to student support that educators need to know. These two implications are accommodations and support systems.

Accommodations. Students with learning disabilities benefit from the use of accommodations. Participants shared many negative experiences that occurred involving the use of accommodations. The findings in this study emphasize the importance of accommodations for students with learning disabilities. Educators should understand that without accommodations, students with learning disabilities feel like they underperform academically. Additionally, educators must know that how they handle accommodating

students can decrease the anxiety the student experiences and help decrease negative stereotypes of students with learning disabilities.

Support systems. The participants in this study all expressed the importance of having strong support systems. These support systems included peers, teachers, advisors, parents, tutors, mentors, and support staff. The participants shared examples that these support systems help the students find success and keep motivated. Individuals who work with students with learning disabilities should help these students create a support system.

Conclusion and Summary

Many educators are unfamiliar with stereotype threat and its impact on their students' academic performance and overall success. Educators need to understand the implications of stereotype threat to ensure all students succeed in their learning environments. Students with learning disabilities are a stereotyped population that can benefit from the support of the educators who teach them.

This qualitative phenomenological study was conducted to examine the perceptions of students with learning disabilities regarding stereotype threat in their learning environments. The study's findings show that students with learning disabilities are stereotyped and can be vulnerable to stereotype threat. Claude Steele's Stereotype Threat Model emphasizes that distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation can all interfere with academic performance. This study's findings demonstrate that the participants were most impacted by distraction, self-

consciousness, evaluation apprehension, and test anxiety. This demonstrates that students with learning can be vulnerable to stereotype threat.

CHAPTER FIVE

Distribution of Findings

Executive Summary

Stereotype threat is a "self-evaluative threat" that arises when a member of a negatively stereotyped group is in a situation in which the member risks confirming the negative stereotype (Steele & Aronson, 1995, p. 797). Research shows that stereotype threat can negatively impact a variety of marginalized groups. Students with learning disabilities are often stereotyped and are marginalized. The marginalization of stereotyped groups can lead to academic underperformance. Since learning and testing performance are essential aspects of education and school performance, educators and administrators must understand stereotype threat implications.

Since students with learning disabilities are a part of a negatively stereotyped group, they are susceptible to stereotype threat's adverse effects, such as decreased learning and underperformance on tests (May & Stone, 2010). With only a few studies examining the relationship between students with learning disabilities and stereotype threat, there is a need for further examination to truly understand stereotype threat from the perspectives of students with learning disabilities.

This study examined the student perspective of stereotype threat and learning disabilities in public colleges and universities in the United States. This study aimed to gain insight into how students with learning disabilities experience stereotypes and their

perceptions of how stereotype threat impacts their academic performance. This study examined the following research questions:

- 4. What are student perceptions of their college experiences specifically related to their learning disability?
- 5. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 6. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

The next sections review the data collection and analysis procedures, summarized the essential findings, and highlighted the informed recommendations.

Overview of Data Collection and Analysis Procedures

A qualitative phenomenological study explored the student perception of being a student with a learning disability and of stereotype threat. The study selected five college students with learning disabilities using criterion. The criterion to be a participant included being enrolled full time in accredited colleges or universities in the United States, have a formal diagnosis of a learning disability (determined by a diagnosis report with an appropriate DSM code), and be registered for accommodations in their university's Office of Accessibility. The participants gave consent to participate. The data was collected from questionnaires, evaluation reports, and interviews. The researcher analyzed the collected data by completing a thematic analysis and a framework analysis. The thematic analysis identified textural and structural statements about the participants' perceptions and experiences of students with learning disabilities. The researcher analyzed data through the lens of Claude Steele's Stereotype Threat Model for common themes to describe the details of the student experience (Croizet et al., 2001). The

framework analysis specifically focused on distraction, self-consciousness, evaluation apprehension, test anxiety, or loss of motivation (Croizet et al., 2001).

Summary of Key Findings

The study's findings show that students with learning disabilities are stereotyped and are vulnerable to stereotype threat. All participants reported perceptions about stereotypes and experiences in which they were stereotyped. In addition, the participants described experiences in which they experienced vulnerability to stereotype threat. Claude Steele's Stereotype Threat Model emphasizes that distraction, self-consciousness, evaluation apprehension, test anxiety, and loss of motivation can all interfere with academic performance. This study's findings demonstrated that the participants were most impacted by distraction, self-consciousness, evaluation apprehension, and test anxiety. While these participants were vulnerable to stereotype threat, they did not report that distraction, self-consciousness, evaluation apprehension, and test anxiety negatively impacted their academic performance. The participants did report that these factors made them develop strong work ethic and use accommodations. These findings provide relevant insights for educators and administrators on supporting students with learning disabilities and combating stereotype threat from negatively impacting student performance.

Informed Recommendations

Educators must truly understand the factors that impact their students, including the negative effects of stereotype threat. This study's findings demonstrated that students with learning disabilities are vulnerable to stereotype threat. Due to negative impact that

stereotype threat vulnerability has on students with learning disabilities, the researcher is offering three informed recommendations for educators.

Create learning environments that deemphasize stereotypes. The participants of this study perceived students with learning disabilities are stereotyped, including students with learning disabilities are dumb, should look disabled, and should underperform their nondisabled peers. Knowing that these students feel that others stereotype them, educators can be alert to their own actions and the other students. Educators can look for behavior, language, and attitudinal barriers that might occur in their classrooms and institutions. Educators should create classroom learning environments that are safe for students with learning disabilities. Learning environments are an important part of teaching. Students must feel supported to learn. The participants in this study all shared experiences in which they felt isolated because of their learning disabilities or judged because they required accommodations due to their learning disability. Educators can add questions to their evaluations to help gain a better understanding of how well they are supporting and accommodating students in their classes. Additionally, department chairs should evaluate the accommodation policies that their faculty employ. Professors can also gain insight and training from the offices of accessibility at their institutions. This is important to educators because they are responsible for building their classroom learning environments that support all students, including students with learning disabilities.

Help students with learning disabilities use accommodations. Students with learning disabilities benefit from the use of accommodations. Participants shared many negative experiences that occurred involving the use of accommodations. Educators

should understand that without accommodations, students with learning disabilities feel like they underperform academically. Additionally, educators must know that how they handle accommodating students can decrease the anxiety the student experiences and help decrease negative stereotypes of students with learning disabilities. Educators should recognize that the management of accommodations should be handled privately and discretely. They should talk to their students respectfully by being mindful of their word choice, facial expressions, and overall tone. It is recommended that educators develop a working relationship with their students. Using supportive language, such as what can I do as your professor to help you be successful, can help students with learning disabilities build trust and rapport with the professor.

Help students develop a support system. The participants in this study all expressed the importance of having strong support systems. These support systems included peers, teachers, advisors, parents, tutors, mentors, and support staff. Individuals who work with students with learning disabilities should help these students create a support system. These support systems should provide guidance on how students with learning disabilities can and should access resources. The support systems should also offer encouragement: encouragement to use accommodations and encouragement to preserver when facing failure or struggle. The support system should also provide words of praise and acknowledgment.

Findings Distribution Proposal

The distribution of the study's findings is important because it will provide relevant insights for those who educate students with learning disabilities and combating

stereotype threat from negatively impacting student performance. Many educators are unfamiliar with stereotype threat and its impact on their students' academic performance and overall success. Educators need to understand the implications of stereotype threat to ensure all students' success in their learning environments. Learning about the results of this study will help educators best support students with learning disability.

Target Audience

While all people could benefit from learning about stereotype threat, there is a specific target audience for the results of this study. This study's findings provide relevant insights for educators, administrators, and staff who support students with learning disabilities. All levels of educators would benefit from the results of this study. Staff who work in the school's Office of Accessibility would also benefit since they directly support students with learning disabilities. Administration and school leaders who are decision makers for school policy would also benefit from the results of this study. Additionally, parents of students with learning disabilities and the students themselves would benefit from better understanding stereotype threat vulnerability.

Proposed Distribution Method and Venue

To reach educators, this research will be published in an academic publication and presented at an educational conference.

Academic publication. The researcher will submit this research to The Journal of Learning Disabilities. There are two main reasons that The Journal of Learning Disabilities best suits the current study. First, this journal promotes research on students with learning disabilities. Second, this journal published the first study completed on

students with learning disabilities and stereotype threat. To prepare for this submission, the researcher will reformat this research to meet the journal's guidelines for submission. The submission deadline is rolling, so the researcher will submit in the spring of 2022.

Professional academic presentation. The researcher has chosen to submit a proposal to present at the Association on Higher Education and Disability (AHEAD) conference. The 2022 conference will be in July in Cleveland, Ohio. This organization works to promote equity for students with learning disabilities in higher education institutions. At this point in time, there is not information provided by organization as to proposal submission dates; however, the researcher will continue to check for this information.

Distribution Materials

The distribution materials needed for this publication submission include a publication manuscript. *The Journal of Learning Disabilities* maintains specific guidelines for submission. To prepare a 30–35-page article, the researcher will provide an article that includes a condensed literature review, a brief overview of methodology, data collection and data analysis details, the key findings, discussion, and implications.

For the academic presentation, the researcher will create a presentation. The presentation will be in the form of a PowerPoint. The PowerPoint will include the problem statement, literature overview, and key findings of the study. Once the key findings are shared, the researcher will offer recommendations to the educators attending the conference. Finally, the audience will be provided time to ask questions.

Conclusion

This study began with the premise that students with learning disabilities are a stereotyped population who are vulnerable to stereotype threat. Studying the experiences of college students with learning disabilities provided valuable insight into how this population perceives the stereotypes of having a learning disability, how being a student with a learning disability impacts academic performance, and how stereotype threat impacts this population. With these findings, educators must make changes to improve how the provide accommodations and the support systems they foster for students with learning disabilities. Presenting this information at conferences and publishing these findings are two ways the researcher will help educate professionals who serve students with learning disabilities. These conclusions support findings from previous research; however, they add insight into the importance of accommodations and support systems. This research provided needed information to help educators better support students with learning disabilities. Educators must seek to understand the experiences of students with learning disabilities to help actualize the potential the possess and to decrease the impact of stereotype threat.

APPENDICES

APPENDIX A

Research Question Alignment Chart

This study examined the following research questions:

- 1. What are student perceptions of their college experiences specifically related to their learning disability?
- 2. How do students with learning disabilities perceive that their learning disability interferes with their ability to meet their academic potential?
- 3. What are students with learning disabilities' perceptions of how stereotype threat interferes with academic performance?

Interview Question	Research	Research	Research
	Question	Question	Question
	#1	#2	#3
What are your thoughts about learning	X	X	
disabilities?			
Do you have any experiences that you feel are	X	X	X
unique to being a student with a learning			
disability?			
What do you think about students with learning	X	X	X
disabilities as learners?			
What do you consider easy for students with	X	X	X
learning disabilities?			
What do you consider hard for students with	X	X	X
learning disabilities?			
What stereotypes do you believe are there about	X	X	X
students with learning disabilities?			
Do you believe those stereotypes are true or	X	X	X
false?			
Do you have any experiences in which you	X	X	X
believe you were stereotyped due to your			
disability?			
Can you describe how it felt to experience the	X	X	X
stereotype?			
Do you have any experiences in which someone	X	X	X
else was stereotyped because of a perceived or			
known disability?			

Interview Question	Research Question #1	Research Question #2	Research Question #3
What role does your learning disability play in your learning?		X	X
How does your disability affect your learning?		X	X
How does your disability affect your academic		X	X
performance?			
In what ways do you compensate for having a learning disability?		X	
How does your academic performance compare with your peers?		X	X
In what ways are you academically competitive?	X	X	X
In what ways have you had to work harder because of your learning disability?	X	X	X
Describe a time when you were unable to complete an assignment or a test. What were you feeling? What prevented you from completing it?	X	X	X
Can you describe a time when you underperformed knowing you could do better? What were you feeling? Why do you think you underperformed when you knew you could do better?	X	X	X
Stereotype threat is the idea that people who are members of stereotyped groups can underperform their ability when placed in situations where their performance might confirm the negative stereotype. For example, there is a stereotype that women are not as good at math as men. In certain environments that create stereotype threat, women can perform worse than in situations where they do not feel the threat. How do you feel students with learning disabilities are vulnerable to stereotype threat?			X
What question do you feel that I should have asked during this conversation? How might you answer that question?			
I have no other questions for you, but would you like to ask anything or add anything before we finish today?			

APPENDIX B

Theoretical Framework Matrix

	Textural description: What are the participant's perceptions of the phenomenon?	Structural description: How does the participant experience the phenomenon?
Distraction		
Self- consciousness		
Evaluation apprehension		
Test anxiety		
Loss of motivation		

APPENDIX C

Informed Consent Form

Baylor University **Department of Education**Consent Form for Research

PROTOCOL TITLE: Participant

PRINCIPAL INVESTIGATOR: Dayna M. Lund

Invitation to be Part of a Research Study

You are invited to be part of a research study. This consent form will help you choose whether or not to participate in the study. Feel free to ask if anything is not clear in this consent form.

Important Information about this Research Study

Things you should know:

- The purpose of the study is to examine the student perspective of learning disabilities and stereotype threat in colleges and universities in the United States.
- In order to participate, you must be 18 years old or older and a full-time college student, have a learning disability or disability that affects your learning, be registered for accommodations at your institution, and speak English.
- If you choose to participate, you will be asked to complete a questionnaire. If selected as a participant, you must provide documentation of learning disability diagnosis and participate in an interview. This will take a maximum of two hours.
- Risks or discomforts from this research include emotional response to interview questions; however, the risks involved in this study are not expected to be greater than everyday life.
- There is no direct benefit to participating in this study.
- Taking part in this research study is voluntary. You do not have to participate, and you can stop at any time.

More detailed information may be described later in this form. Please take time to read this entire form and ask questions before deciding whether to take part in this research study.

Why is this study being done?

The purpose of this study is to examine the student perspective of learning disabilities and stereotype threat in colleges and universities in the United States.

What will happen if I take part in this research study?

If you agree to take part in this study, you will be asked to:

• complete a questionnaire (15-30 minutes)

If selected as a participant, you must:

- provide documentation of learning disability diagnosis by submitting an evaluation report (15 minutes)
- participate in an interview (60 minutes)

How long will I be in this study, and how many people will be in the study?

Participation in this study will last a maximum of two hours. If needed, follow up interviews and communication might be required. About five subjects will take part in this research study.

What are the risks of taking part in this research study?

While we do not anticipate any risks from participating in this research, there is a chance of an emotional response to the interview questions.

Are there any benefits from being in this research study?

Although you will not directly benefit from being in this study, educators might benefit because they will have additional information on the student experience of having a learning disability in regard to stereotype threat.

How Will You Protect my Information?

A risk of taking part in this study is the possibility of a loss of confidentiality. Loss of confidentiality includes having your personal information shared with someone who is not on the study team and was not supposed to see or know about your information. The researcher plans to protect your confidentiality.

We will keep the records of this study confidential by storing all documents and digital files in a private, secure Dropbox account. We will make every effort to keep your records confidential. However, there are times when federal or state law requires the disclosure of your records.

The following people or groups may review your study records for purposes such as quality control or safety:

- Representatives of Baylor University and the BU Institutional Review Board
- Federal and state agencies that oversee or review research (such as the HHS Office of Human Research Protection or the Food and Drug Administration)

The results of this study may also be used for teaching, publications, or presentations at professional meetings. If your individual results are discussed, your identity will be protected by using a code number or pseudonym rather than your name or other identifying information.

Will I be compensated for being part of the study?

There is no compensation for participating in this study.

Your Participation in this Study is Voluntary

Taking part in this study is your choice. You are free not to take part or to withdraw at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you decide to withdraw from this study, the information that you have already provided will be kept confidential. You cannot withdraw information collected prior to your withdrawal.

If you are a Baylor student or faculty/staff member, you may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your grades or job status at Baylor University. You will not be offered or receive any special consideration if you take part in this research study.

Contact Information for the Study Team and Questions about the Research

If you have any questions about this research, you may contact:
Dayna Lund
Phone:
Email: Dayna_Perret1@baylor.edu

Or

Dr. Jessica Meehan

Phone:

Email: Jessica Meehan@baylor.edu

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the following:

Baylor University Institutional Review Board Office of the Vice Provost for Research

Phone: 254-710-3708 Email: <u>irb@baylor.edu</u>

Your Consent

Signature of Subject:

By signing this document, you agree to be in this study. We will give you a copy of this document for your records. We will keep a copy of the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I understand what the study is about, and my questions so far have been answere to take part in this study.		
Signature of Subject	Date	
Signature of Person Obtaining Consent:		
I have explained the research to the subject and answer a copy of the signed consent form to the subject.	ered all his/her questions. I will give	
Signature of Person Obtaining Consent	Date	

APPENDIX D

Participant Questionnaire

Name		
	Age	
Language of Preference		
College or University Name		
Full-time student?	Expected Graduation Date	
Have you been diagnosed with a learning	ng disability?	
Name of disability		
Are you registered to use accommodati	ons at your college?	
Do you use accommodations for testing?		
Which accommodations are you approve	ved to receive?	

APPENDIX E

Interview Protocol

PARTICIPANT INTERVIEW PROTOCOL

As you know, my name is Dayna Lund, and I am a doctoral candidate at Baylor University. I am conducting research on college students with learning disabilities and stereotype threat. You have already provided your written, informed consent to participate in this interview. I just want to make sure that you are still comfortable participating in this interview.

Thank you for providing me with an evaluation report that documents the diagnosis of a learning disability.

- What are your thoughts about learning disabilities?
 - Do you have any experiences that you feel are unique to being a student with a learning disability?
 - What do you think about students with learning disabilities as learners?
 - What do you consider easy for students with learning disabilities?
 - What do you consider hard for students with learning disabilities?
- What stereotypes do you believe are there about students with learning disabilities?
 - o Do you believe those stereotypes are true or false?
 - Do you have any experiences in which you believe you were stereotyped due to your disability?
 - o Can you describe how it felt to experience the stereotype?
 - Do you have any experiences in which someone else was stereotyped because of a perceived or known disability?
- What role does your learning disability play in your learning?
 - o How does your disability affect your learning?
 - o How does your disability affect your academic performance?
 - o In what ways do you compensate for having a learning disability?
- How does your academic performance compare with your peers?
- In what ways are you academically competitive?
- In what ways have you had to work harder because of your learning disability?
- Describe a time when you were unable to complete an assignment or a test. What were you feeling? What prevented you from completing it?
- Can you describe a time when you underperformed knowing you could do better? What were you feeling? Why do you think you underperformed when you knew you could do better?

- Stereotype threat is the idea that people who are members of stereotyped groups can underperform their ability when placed in situations where their performance might confirm the negative stereotype. For example, there is a stereotype that women are not as good at math as men. In certain environments that create stereotype threat, women can perform worse than in situations where they do not feel the threat. How do you feel students with learning disabilities are vulnerable to stereotype threat?
- What question do you feel that I should have asked during this conversation?
 - o How might you answer that question?
- I have no other questions for you, but would you like to ask anything or add anything before we finish today?

APPENDIX F

Framework Analysis Matrix

Framework Analysis Matrix: Significant Statements Data Sample Compared with Claude Steele's Stereotype Threat Model

Steele's Stereotype Tilleat Woder				
	Textural Statements: What are the participant's perceptions of the phenomenon?	Structural Statements: How does the participant experience the phenomenon?		
Distraction	The way I learn requires time and focus. I know that for students without disabilities, they get to take their tests in a classroom and they don't have to worry about anything. They don't have to get distracted Sometimes it hard to focus my brain. That's always been something I've been envious of for throughout my whole life. Is how easy it looks to everyone. They won't get distracted by the pencil dropping and then figure out where that like just.	"I like the pen that I used in high school that recorded the lecture while I took notes. That made a big difference for me to record notes, especially when I could easily pick up from where I stopped paying attention." Test anxiety is the anxiety that occupies you in a way that you just feel off. It's not that you don't feel confident; It's that your attention is taken away by the anxiety. I have tried a few different focus apps and trials that block everything on your laptop so that you only had on your screen what you need to focus on. When I take tests, I have to really think about where I am going to sit in the room. Some seats are more distracting.		
Self- Consciousness & Evaluation Apprehension	I am pretty sure my friends think I only do well because I have extra time. I don't reveal in any way that I have received benefits so that I	I'm happy with who I am and don't really feel heavily influenced by the judgment of others, but to hear that coming from a a friend was definitely hurtful.		

	am not seen as different to friends because I don't like to be labeled in any way.	Sometimes I worry about who I am sitting next to, too. I worry if I take way longer to finish than if they do.
	because disability is looked at as if it disadvantages you in some way or makes you lesser in some way. Just because it happens, that doesn't mean that they're you know any lesser, but you just need some sort of like because you're lacking something.	two friends discussing the candidates for the class's valedictorian and salutatorian. He heard one friend telling another. that he "didn't deserve to even be considered because of the unfair advantage of extra time." When asked how that experience made him feel, Participant D replied, "It made me question my own standing."
Test anxiety	When I have test anxiety, my mind feels occupied. I think the first word that comes to mind is anxious, and obviously that's the problem, because test anxiety occupies you in a way that you just feel off. It's not that you don't feel confident; It's that your attention is taken away by the anxiety. Anxiety is the thing that's almost fighting your focus on the test. The anxiety was stopping me from moving on in a way that prevented me from doing the thinking I needed to actually move on.	I started to see tests as like opportunities to actually show what I know. And not as something producing all sorts of anxiety. I get nervous on tests when I took them with other classmates. When they finished their tests quickly, I would hurry and finish so they didn't think I was stupid. I bet I missed so many points on those tests. Test anxiety is the anxiety that occupies you in a way that you just feel off. It's not that you don't feel confident; It's that your attention is taken away by the anxiety.
Loss of motivation		I might lose motivation to keep going because I am so frustrated but then I might, like, just be very optimistic, like, oh well, this next one I'm going to do better. I have learned how to push back when I feel like I'm hitting a breaking point, which is a weird thing to do, but you just have to keep on working. You can surround yourself with people who are motivated to see you

	succeed, in addition to the motivation you have for yourself.

BIBLIOGRAPHY

- Allport, G. (1954). *The nature of prejudice*. Addison-Wesley.
- Ambady, N., Shih, M., Kim, A., & Pittinsky, T. (2001). Stereotype susceptibility in children: effects of identity activation on quantitative performance. *Psychological Science*, *12*(5), 385–390.
- Appel, M., & Kronberger, N. (2012). Stereotypes and the achievement gap: Stereotype threat prior to test taking. *Educational Psychology Review*, 24(4), 609–635.
- Appel, M., Kronberger, N., & Aronson, J. (2011). Stereotype threat impairs ability building: Effects on test preparation among women in science and technology. *European Journal of Social Psychology*, 41(7), 904–913.
- Aronson, J. (2002). *Improving academic achievement: Impact of psychological factors on education*. Academic Press.
- Aronson, J., & Steele, C. (2005). Stereotypes and the fragility of academic competence, motivation, and self-concept. In A. Elliot, & C. Dweck (Eds.), *Handbook of competence and motivation* (pp. 436–456). Guilford.
- Arroyo, C., & Zigler, E. (1995). Racial identity, academic achievement, and the psychological well-being of economically disadvantaged adolescents. *Journal of Personality and Social Psychology*, 69(5), 903–914.
- Baumeister, R., Leary, M., & Baumeister, R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529.
- Baumeister, R., Nuss, C., & Twenge, J. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83(4), 817–827.
- Blascovich, J., Spencer, S., Quinn, D., & Steele, C. (2001). African Americans and high blood pressure: The role of stereotype threat. *Psychological Science*, *12*(3), 225–229.
- Brown, R. P., & Josephs, R. A. (1999). A burden of proof: Stereotype relevance and gender differences in math performance. *Journal of Personality and Social Psychology*, 76(2), 246–257.

- Clark, J. K., Thiem, K. C., Barden, J., Stuart, J. O., & Evans, A. T. (2015). Stereotype validation: The effects of activating negative stereotypes after intellectual performance. *Journal of Personality and Social Psychology*, 108(4), 531–552.
- Connor, D. (2012). Actively navigating the transition into college: Narratives of students with learning disabilities. *International Journal of Qualitative Studies in Education*, 25(8), 1005–1036.
- Cortiella, C. & Horowitz, S. H. (2014). *The state of learning disabilities: Facts, trends, and emerging issues.* National Center for Learning Disabilities.
- Croizet, J., & Claire, T. (1998). Extending the concept of stereotype threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin, 24*(6), 588–594.
- Croizet, J., Désert, M., Dutrévis, M., & Leyens, J. (2001). Stereotype threat, social class, gender, and academic under-achievement: When our reputation catches up to us and takes over. *Social Psychology of Education*, *4*(3), 295–310.
- Davies, P. G., Spencer, S. J., & Steele, C. M. (2005). Clearing the air: Identity safety moderates the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology*, 88(2), 276–287.
- Dweck, C. (2006). Mindset: The new psychology of success. Random House.
- Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Prentice-Hall.
- Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice*, 18(4), 222–236.
- Good, C., Rattan, A., & Dweck, C. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology*, 102(4), 700–717.
- Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology*, 24(6), 645–662.
- Herrnstein, R., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life.* Free Press.
- Hishinuma, E.S. 1999. An update on NCAA college freshman academic requirements: The impact on students with LD. *Journal of Learning Disabilities*, *32*(4), 362–371.

- Inzlicht, M., & Schmader, T. (Eds.). (2012). Stereotype threat: Theory, process, and application. Oxford University Press.
- Jamieson, J. P., & Harkins, S. G. (2007). Mere effort and stereotype threat performance effects. *Journal of Personality and Social Psychology*, *93*(4), 544–564.
- Keller, J. (2002). Blatant stereotype threat and women's math performance: Self-handicapping as a strategic means to cope with obtrusive negative performance expectations. *Sex Roles*, *47*(3), 193–198.
- Kenyon, E., Havil, N., & Jackson, T. (2014). Learning disability: Experience of diagnosis. *British Journal of Learning Disabilities*, 42(4), 257–263.
- Koch, S., Müller, S., & Sieverding, M. (2008). Women and computers. Effects of stereotype threat on attribution of failure. *Computers & Education*, *51*(4), 1795–1803.
- Larnell, G., Boston, D., & Bragelman, J. (2014). The stuff of stereotypes: Toward unpacking identity threats amid African American students' learning experiences. *Journal of Education*, 194(1), 49–57.
- Levy, B. (1996). Improving memory in old age through implicit self-stereotyping. *Journal of Personality and Social Psychology*, 71(6), 1092–1107.
- Lu, A., Feng, Y., Yu, Z., Tian, H., Hong, X., & Zheng, D. (2015). Anxiety and mind wandering as independent consequences of stereotype threat. *Social Behavior and Personality: An International Journal*, 43(4), 537-558.
- Mangels, J. A., Good, C., Whiteman, R. C., Maniscalco, B., & Dweck, C. S. (2012). Emotion blocks the path to learning under stereotype threat. *Social Cognitive and Affective Neuroscience*, 7(2), 230–241.
- May, A., & Stone, C. (2014). An initial investigation into the role of stereotype threat in the test performance of college students with learning disabilities. *Journal of Postsecondary Education and Disability*, 27(1), 89–106.
- May, A. L., & Stone, C. A. (2010). Stereotypes of individuals with learning disabilities: Views of college students with and without learning disabilities. *Journal of Learning Disabilities*, 43(6), 483–499.
- Meneghetti, C., Muffato, V., Suitner, C., De Beni, R., & Borella, E. (2015). Map learning in young and older adults: The influence of perceived stereotype threat. *Learning & Individual Differences*, 42, 77–82.

- O'Brien, L. T., & Crandall, C. S. (2003). Stereotype threat and arousal: Effects on women's math performance. *Personality and Social Psychology Bulletin*, 29(6), 782–789.
- Paas, F., & Ayres, P. (2014). Cognitive load theory: A broader view on the role of memory in learning and education. *Educational Psychology Review*, 26(2), 191– 195.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544.
- Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology*, 76(1), 114–128.
- Proctor, B.E., Prevatt, F., Adams, K., Hurst, A. and Petscher, Y. (2006). Study skills profiles of normal-achieving and academically-struggling college students. *Journal of College Student Development*, 47(1), 37–51.
- Rydell, R. J., Rydell, M. T., & Boucher, K. L. (2010). The effect of negative performance stereotypes on learning. *Journal of Personality and Social Psychology*, 99(6), 883–896.
- Rydell, R., Rydell, M., & Boucher, K. (2011). "The effect of negative performance stereotypes on learning": Correction to Rydell et al. (2010). *Journal of Personality and Social Psychology*, 100(4), 586–586.
- Saad, C. S., Meyer, O. L., Dhindsa, M., & Zane, N. (2015). Domain identification moderates the effect of positive stereotypes on Chinese American women's math performance. *Cultural Diversity and Ethnic Minority Psychology*, 21(1), 162–167.
- Sackett, P. R., DuBois, C. L., & Noe, A. W. (1991). Tokenism in performance evaluation: The effects of work group representation on male-female and White-Black differences in performance ratings. *Journal of Applied Psychology*, 76(2), 263–267.
- Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology*, 38(2), 194–201.
- Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. *Journal of Personality and Social Psychology*, 85(3), 440–452.

- Schmader, T., Johns, M., & Barquissau, M. (2004). The costs of accepting gender differences: The role of stereotype endorsement in women's experience in the math domain. *Sex Roles*, 50(11), 835–850.
- Sekaquaptewa, D., & Thompson, M. (2002). The differential effects of solo status on members of high- and low-status groups. *Personality and Social Psychology Bulletin*, 28(5), 694–707.
- Shapiro, J., & Neuberg, S. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences, and interventions. *Personality and Social Psychology Review*, 11(2), 107–130.
- Shifrer, D. (2013). Stigma of a label: Educational expectations for high school students labeled with learning disabilities. *Journal of Health and Social Behavior*, *54*(4), 462–480.
- Snyder, T.D., de Brey, C., and Dillow, S.A. (2019). *Digest of Education Statistics 2018* (NCES 2020-009). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Sparks, R. L., & Lovett, B. J. (2009). College students with learning disability diagnoses: Who are they and how do they perform? *Journal of Learning Disabilities*, 42(6), 494–510.
- Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin*, 23(5), 538–553.
- Spencer, B., & Castano, E. (2007). Social class is dead! Long live social class. Stereotype threat among low socioeconomic status individuals. *Social Justice Research*, 20(4), 418–432.
- Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35(1), 4–28.
- Stangor, C., Carr, C., & Kiang, L. (1998). Activating stereotypes undermines task performance expectations. *Journal of Personality and Social Psychology*, 75(5), 1191–1197.
- Steele, C. (2010). Whistling Vivaldi: How stereotypes affect us and what we can do. Norton & Company.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, *52*(6), 613–629.

- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811.
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology*, *34*, 379–440.
- Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype threat effects on Black and White athletic performance. *Journal of Personality and Social Psychology*, 77(6), 1213–1227.
- Stokowski, S., & Hardin, R. (2014). Stereotype Threat in academic experiences of student-athletes with learning disabilities. *Research Quarterly for Exercise and Sport*, 85(S1), A102–A103.
- Taylor, V., & Walton, G. (2011). Stereotype threat undermines academic learning. *Personality and Social Psychology Bulletin*, *37*(8), 1055–1067.
- Troiano, P., Liefeld, J., & Trachtenberg, J. (2010). Academic support and college success for postsecondary students with learning disabilities. *Journal of College Reading and Learning*, 40(2), 35–44.
- Vaz, S., Falkmer, M., Ciccarelli, M., Passmore, A., Parsons, R., Black, M., & Falkmer, T. (2015). Belongingness in early secondary school: Key factors that primary and secondary schools need to consider. *PLoS ONE*, 10(9), 1–27.
- Wicherts, J. M., Dolan, C. V., & Hessen, D. J. (2005). Stereotype threat and group differences in test performance: A question of measurement invariance. *Journal of Personality and Social Psychology*, 89(5), 696–716.
- Zablotsky, B., Black, L., Maenner, M., Schieve, L., Danielson, M., Bitsko, R., Blumberg, S., Kogan, M., & Boyle, C. (2017). Prevalence and trends of developmental disabilities among children in the United States: 2009–2017. *Pediatrics*, *144*(4), 1–9.
- Zajonc, R. (1965). Social facilitation. *Science*, 149(3681), 269–274.
- Zhao, F., Li, S., Li, T., & Yu, G. (2019). Does stereotype threat deteriorate academic performance of high school students with learning disabilities? The buffering role of psychological disengagement. *Journal of Learning Disabilities*, *52*(4), 312–323.