THE STIGMA ASSOCIATED WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AND ITS STATUS EFFECTS ON COLLEGE STUDENTS

by

Alysha Ryann Bailey

A thesis submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Master of Arts in
Sociology

Charlotte

2025

Approved by:

_____

Dr. Joesph Dippong

_____

Dr. Teresa Scheid

_____

Dr. Jon Overton

ABSTRACT

ALYSHA BAILEY. The Stigma Associated with Attention-Deficit/Hyperactivity Disorder and its Status Effects on College Students
(Under the direction of DR. JOSEPH DIPPONG)

This study examines the impact that perceptions and expectations related to a diagnosis of attention-deficit/hyperactivity disorder (ADHD) have on academic performance. Although prior research focuses on educational interventions for children with ADHD, we know less about adults with ADHD. This paper applies research on status characteristics theory as applied to stigma to understand whether the labels applied toon college students with ADHD hinders their academic performance. My first hypothesis is that people will have lower performance expectations for students with ADHD than for those without ADHD. While my second hypothesis is that people will desire a greater social distance from an individual with ADHD than without. Participants were recruited via email to participate in a survey. Participants were assigned to read one of eight vignette conditions describing a hypothetical student and then respond to a series of questions that assess expectation states, stigma, and likelihood of academic success. Two hypotheses were tested. The first hypothesis predicts that people will have lower performance expectations for students with ADHD than for those without ADHD. The second predicts that people will desire a greater social distance from and individual with ADHD than without. Both hypotheses were not supported. One possible reason for this is that this study only collected responses from students, and not teachers who have control over people's grades. Another possible issue is the racial and age distribution of the participants, which was not fully representative of the broader student population. Despite the results not supporting the

hypotheses, it is overall a positive outcome for people with ADHD because it shows a decrease in stigmatization of ADHD.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my thesis advisor, Dr. Joesph Dippong, for his invaluable guidance, patience, and encouragement throughout the development of this thesis. His expertise and mentorship have been essential to my growth as a researcher. I would also like to extend my sincere thanks to my committee members, Dr. Teresa Scheid and Dr. Jon Overton, for their thoughtful feedback, support, and commitment to helping strengthen this work. I would also like to thank the Sociology Department for providing an engaging academic environment and resources that supported my research and development as a scholar. Lastly, I would be remiss in not mentioning my family, especially my mom, my partner, and my dogs. Their unwavering encouragement and support carried me through this process.

DEDICATION

This thesis is dedicated to my dad who saw this work started but did not live to see it finished. His strength and resilience continue to inspire me every day.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADHD	Attention-deficit/hyperactivity disorder
DSM	The Diagnostic and Statistical Manual of Mental Disorders
IDEA	Individuals with Disabilities Education Act
SCT	Status characteristics theory

CHAPTER 1: INTRODUCTION

In this thesis I explore the impact that perceptions and expectations related to diagnoses of attention-deficit/hyperactivity disorder (ADHD) have on the academic performance of students. The student body has grown more diverse; since the Individuals with Disabilities Education Act (IDEA) there has ~~also~~ been an increase in the number of students diagnosed as having disabilities (IDEA n.d). As the diversity of the student population continues to grow, so should the pedagogy of teaching and communicating with an increasingly diverse background of students grow to match their needs (Hanson, 2023). So, it is more important now than ever to understand people's perceptions of these disabilities and how they can impact other's chances in life. This study uses Status Characteristics Theory (SCT) as well as the literature on Status and Stigma to look at how students with ADHD are treated in school and whether the status of having ADHD impacts their academic performance differently than those that do not have ADHD. I will first examine the history of and current literature on ADHD; then I will apply SCT with the consideration of status effects and stigma on the academic achievement of students with ADHD.

CHAPTER 2: LITERATURE REVIEW

Attention-deficit/hyperactivity disorder (ADHD) and Young Adults

Attention-deficit/hyperactivity disorder (ADHD) is generally understood as a mental health disorder. The Diagnostic and Statistical Manual (DSM) of Mental Disorders states that ADHD is characterized by hyperactivity, inattentiveness, and impulsive behaviors that interfere with functioning or development (DSM-5: APA, 2013). ADHD typically starts in childhood but often continues into adulthood. Some adults do not get diagnosed because symptoms diminish as they get older, like impulsivity and hyperactivity, although some symptoms may linger, such as inability to focus and pay attention. Symptoms may also worsen if comorbidities are present, such as anxiety and depression (Bernfort, Nordfeldt, & Persson, 2007). Comorbid conditions are separate diagnoses that exist alongside ADHD and require their own treatment. For example, depression and chronic illnesses often coexist. Studies have shown that ADHD affects many aspects of everyday life including but not limited to academics and professional achievements (Bernfort, Nordfeldt, & Persson, 2007).

As stated above, characteristics of ADHD include, but are not limited to inattention, hyperactivity, and impulsivity. Inattentiveness can be described as difficulty concentrating and focusing and can appear as having a short attention span or being easily distracted, difficulty sticking to tasks that are time consuming, difficulty listening to and following instructions, and making careless mistakes on schoolwork. Similarly, hyperactivity and impulsivity can appear as the inability to concentrate on tasks, interrupting conversations, excessive talking and physical movement (fidgeting), and the inability to sit still especially in calm or quiet environments (DSM-5: APA, 2013).

Students with ADHD are less likely to complete high school and even less likely to attend college than individuals without ADHD. They often have lower GPAs, experience academic probation, and encounter more academic hardships overall compared to those students without ADHD (Emmers, Jansen, Petry, Van der Oord, & Baeyens, 2016). DuPaul, Weyandt, O'Dell, and Varejao (2009) found that approximately 2 to 8 percent of college students report having symptoms of ADHD and 25 percent of students who receive disability accommodations have ADHD. There are some resources available to students with ADHD. Students with disabilities can receive necessary accommodations which typically includes extended time, testing in different rooms, and sometimes recording lectures (IDEA). Students with disabilities should receive education in the least restrictive setting, with accommodations if necessary.

Managing ADHD as a Young Adult

Managing ADHD as a young adult student can be challenging. Scheithauer and Kelly (2014) analyzed the effects of self-monitoring as an intervention for students with ADHD, stating that, "self-monitoring involves teaching an individual to observe and record his or her behavior with the goal of changing the behavior in the future" (p.1030). Scheithauer and Kelly (2014) argue that there is limited research that focuses on adults with ADHD and academic interventions. The literature available that focuses on adults with ADHD examines cognitive-behavioral treatments such as talk therapy aimed at reducing symptoms of ADHD whereas much of the literature surrounding children with ADHD has evaluated the impact of behavioral components such as self-monitoring and contingency management that encourages behaviors through rewards and consequences, for example.

Scheithauer and Kelly (2014) suggest that adults with ADHD use self-monitoring as a behavioral intervention by recording their own behaviors to learn from themselves. Self-

monitoring has been effective for children in helping them with completing homework, staying on task, and overall academic performance. However, there have been few studies that focus on improving college students' academic performance. Most research supported the use of self-monitoring for college students, but others said there would be little benefits when study skills training is conducted. The discrepancy of current findings on the use of self-monitoring for college students is a gap in literature, with even more limited findings regarding graduate students. Aligning with current research and findings, researchers suggest combining self-monitoring with other academic treatments (Scheithauer and Kelly 2014).

The study conducted by Scheithauer and Kelley (2014) found that students with ADHD benefited from self-monitoring in their academic behavior, ADHD symptoms, goal attainment, and GPA compared with the study skills/goal setting instruction group who received the same interventions except the self-monitoring instruction but did not see the same improvements. Thus, self-monitoring helps improve academic performance for children and adults (Scheithauer & Kelley, 2014). This study shows that there are ways to help improve the performance of students with ADHD based on the environment they are in.

With the right knowledge and tools, professors can create and foster an environment in which students with ADHD can thrive. There are feasible strategies which can be implemented by the instructor to further support their students with ADHD, such as the use of self-monitoring. The lack of knowledge about ADHD or related interventions, could instead lead to stigmatization in the classroom. If instructors are not able to understand and meet the needs of their students with ADHD, this could further perpetuate the cycle of stigmatization around the diagnosis and impact the academic progression of students.

Stigma and ADHD

Students with ADHD not only are more likely to experience academic hardship, but they often struggle with social impairments related to other people's perceptions of them. People with ADHD are often stigmatized. Chew, Jansen, and Rosén (2009) state that "college students with ADHD also report higher levels of psychological distress and lower self-esteem than their non-ADHD peers" (p. 271). These experiences students with ADHD face negatively impacts their self-esteem, which makes it difficult to venture out and establish friendships and relationships in school and workplace settings (Kroska, Harkness, Brown, & Thomas, 2015).

There are numerous misconceptions surrounding students with ADHD, like that they are lazy or disruptive, that can lead to negative social interactions with professors, school administrators, and peers (Chew, Jensen, Rosén, 2009). Symptoms of ADHD can also make it challenging to understand and adhere to social norms and pick up on social cues (Bernfort, Nordfeldt, & Persson, 2007). This societal stigma can contribute to the marginalization and isolation of individuals with ADHD, influencing their sense of identity and well-being.

At times, individuals with ADHD face stigmatization in more than one way. Despite the growing awareness of ADHD, public perceptions often stem from misinformation and lack of knowledge surrounding the diagnosis. There are widespread negative feelings about the use of psychiatric drugs used to treat ADHD, due to most of them being controlled substances. Furthermore, since most common ADHD medications are amphetamines, people often compare the drugs to the street drug methamphetamine. Individuals who take medications for ADHD also face stigmatization around needing to take medication and may encounter judgement on whether they need the drug or if they are just making up symptoms in order to have access to the medication (Chew, Jensen, Rosén, 2009).

Some argue that ADHD are merely symptoms of how our society is designed, or rather that the symptoms are amplified in modern society. The process of medicalization is a great example of this. Peter Conrad (1992) defines medicalization as "a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illnesses or disorders" (Conrad 1992:209). Conrad's idea of the medicalization of social control describes how behaviors and problems once seen as moral, social, or criminal issues increasingly become defined and managed through medicine. He argues that as medical authority expands, doctors and other experts gain the power to label certain behaviors as disorders, shifting people from being judged as deviant to being treated as patients. This is contrary to Chew, Jensen, and Rosén's belief related to ADHD medication causing stigma (Chew, Jensen, Rosén, 2009).

To summarize, ADHD is a common neurodevelopment disorder that affects both children and adults. People with ADHD may struggle with hyperactivity, inattentiveness, impulsivity, and the stigma connected to ADHD can make the condition more difficult to live with. Similarly, individuals with ADHD may encounter lower expectations of competence due to misconceptions about the nature of the disorder (Manago & Mize, 2022). Expectations of competence refers to the expected performance level and achievements attributed to individuals based on societal or educational norms. In the context of ADHD, these expectations play a crucial role in shaping the experiences and outcomes of individuals with the disorder. The expectations surrounding competence are often influenced by prevailing stereotypes, misconceptions, and societal attitudes toward ADHD. Common stereotypes such as perceiving individuals with ADHD as unintelligent or lazy only further contributes to the underestimation of their abilities. These stereotypes may very well lead to a bias in expectations, where instructors, peers, and the individuals themselves anticipate lower levels of academic performance and success. Manago and Mize explain that

research has demonstrated that mental illness labels can affect perceptions of an individual's competence. Once someone's mental illness label is publicized it increases their vulnerability and social rejection. They state, "This proposition is largely supported by the research which finds that labels increase negative evaluations of labeled people, particularly pertaining to presumptions of competence" (2022: 2). Thus, instructors and peers may inadvertently contribute to the perpetuation of lower expectations and individuals with ADHD may internalize these lower expectations. The anticipation of underperformance may contribute to a self-fulfilling prophecy, where students with ADHD are influenced by social and personal expectations and struggle to meet their full potential.

Theory

Status characteristics theory is a subset of expectation states theory and was introduced by Berger and his colleges (1972); they seek to explain how individuals create informal status hierarchies in small groups by using the available social information of one another (Correll & Ridgeway, 2006). Manago and Mize (2022) describe status characteristics and expectations states theory (SC-EST) as "the process by which status beliefs affect the way people perceive and treat one another" (2022:2). Status characteristics theory focuses on explaining how structures of social status affect interactional outcomes. In other words, characteristics such as race, gender, education level, and specific abilities play a role in establishing status hierarchies. Beliefs about these groups contribute to social inequality by becoming attached to these characteristics which influence perceptions about an actor's ability to complete a task. Correll and Ridgeway (2006) state that "status characteristics are attributes on which people differ (e.g., gender, computer expertise) and for which there are widely held beliefs in the culture associating

greater social worthiness and competence with one category of the attribute (men, computer expert) than another (women, computer novice)" (2006:32).

Expectation states theory focuses on small, task-oriented group interaction and the processes in which group members assign levels of task competence to each other and the consequences this has on their interaction (Correll & Ridgeway, 2006). Expectation states are what others expect of another person, they are created by status characteristics that stems from both specific and diffuse characteristics.

There are two types of status characteristics, specific and diffuse. Specific status characteristics carry cultural expectations around the performance of a specific task within a limited domain (Correll & Ridgeway, 2006). Being an honor student with a high GPA, level of education, job title, or tenure are examples of specific status characteristics. Diffuse status characteristics carry general expectations for competence with specific expectations for competence of certain tasks without defined limits. This influences performance expectations in a wider range of settings (Correll & Ridgeway, 2006). Examples of diffuse characteristics are age, gender, race, and social class. For the sake of clarity, think of someone being hired based on their clothing choice. Someone who is well-dressed and articulate may appear as being more suited for leadership roles compared to someone who is more casually dressed and reserved. The polished demeanor may become a diffuse status characteristic. Diffuse characteristics also have a moral component where high status is viewed as superior to low status on a diffuse characteristic (Lucus & Phelan, 2012).

According to Hysom, Webster, and Walker (2015), status characteristic can also become a salient characteristic. The emergence of a salient characteristic is dependent on whether a status characteristic significantly differentiates group members, such that possessing a required skill for

a specific task would positively contribute to their status in the hierarchy (Dippong 2012). Conversely, if the salient characteristic which has emerged is stigmatized, it can lead to status loss and devaluation within the group (Lucas & Phelan 2012). ADHD adds to the negative perceptions - but someone who is white and able bodied with ADHD may persevere through these perceptions whereas a black woman with ADHD may not be able to.

Stigma is discrimination against an individual or a group based on a negative branding or label that associates a person with an unwanted stereotype in relation to culture, religion, race, gender, illness, or disease. Link and Phelan (2001) define stigma as "the co-occurrence of its components - labeling, stereotyping, separation, status loss, and discrimination - and further indicate that for stigmatization to occur, power must be exercised" (Link & Phelan, 2001:2). Mental illness is highly stigmatized human characteristics that come with many negative labels such as being weak and untrustworthy in turn leading to negative treatment in social interactions. According to Manago and Mize (2022) "mental illness affects the extent to which individuals are perceived to be competent and capable. Broadly speaking, individuals with mental illness are viewed as incompetent and incapable of making their own decisions" (2022:2). Students who have ADHD may feel the stigma associated with their diagnosis and have difficulty performing in small groups. They might also avoid talking with people because they are afraid, they may be annoying or not assign them certain tasks because they believe it may be too difficult for them.

Lucas and Phelan (2012) explain that status and stigma are both important concepts that describe related processes and explore how individual characteristics produce unequal outcomes in social interactions as well as influence the expectations that shape those unequal outcomes. Stigma often arises from widely held stereotypes and misconceptions about the nature of the disorder. Stigma related to ADHD can extend beyond individual attitudes to impact institutional

practices within educational settings. Teachers, peers, and even healthcare professionals may have biased views about ADHD, leading to differential treatment, lowered expectations, and reduced opportunities for those with the disorder. This institutional stigma can further exacerbate the challenges faced by individuals with ADHD, hindering their access to necessary support and resources. Manago and Mize (2022) use experimental methods to examine the effects of mental illness labels and deviant behavior on stigma and status. By stigma they are referring to "discrimination against individuals with devalued characteristics" (1), which is measured by how much individuals wish to distance themselves from the diagnosed individual. By status, they are referring to a social ranking of people in terms of the social status that is given to them. More specifically, how competent, and capable someone appears to be. Since most of the stigma surrounding mental health diagnosis questions an individual's competency (Manago & Mize, 2022), this then contributes to the social ranking within a group (hierarchy) in the form of attributing a lower status to an individual with an ADHD diagnosis.

In this way, the stigma associated with an ADHD diagnosis effects the individual's status by devaluing them (Harkness & Kroska, 2019). Moreover, individuals with ADHD often internalize stigma, causing increased stress, anxiety, and decreased self-efficacy. This internalized stigma can create a negative feedback loop, where individuals with ADHD absorb society's negative perceptions, affecting their academic performance, mental health, and overall quality of life (Manago & Krendl, 2023).

Theoretical Model

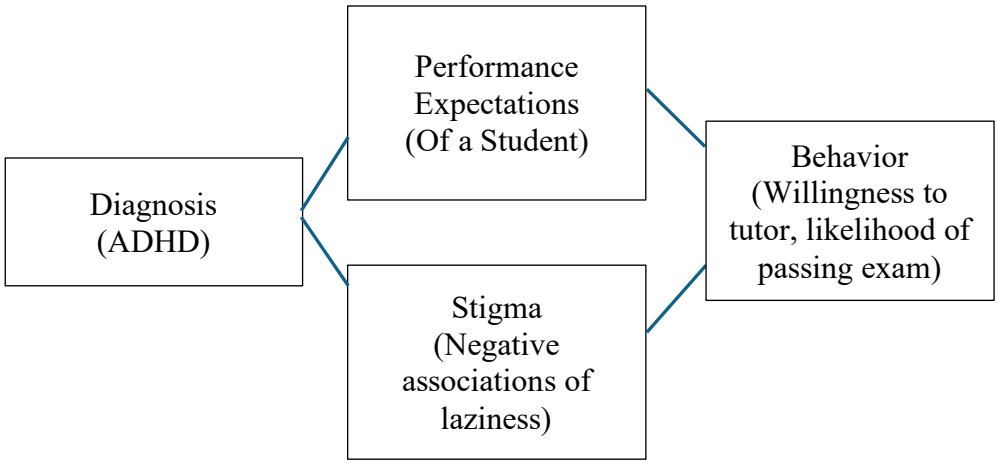

Figure 1: Theoretical model illustrating the relationship between an ADHD diagnosis and behavioral outcomes, mediated by performance expectations and stigma.

The independent variable, possession of an ADHD label, must pass through the two mediating variables, performance expectations and stigma. These variables, in turn, affect perceptions of the likelihood of passing an exam (a performance-based outcome) and willingness to help the student prepare (a stigma/ social distance-based outcome). Our knowledge and perception of the expectation state influence the further perpetuation of the expectation state. In other words, if we are aware of the negative social stigma that is associated with an ADHD diagnosis, for example, calling the diagnosed individual lazy, this becomes our expectation state for others diagnosed with the disorder – whether the expectation state is factual or not. This expectation state can then become a self-fulfilling prophecy, where the diagnosed individual believes they are lazy instead of understanding they are experiencing a symptom of their disorder. This further perpetuates the expectation state by leading to a behavioral outcome influenced by the stigma and status surrounding the condition.

CHAPTER 3: METHODOLOGY

Data collection took place through an online survey which was distributed to students at University of North Carolina at Charlotte (UNCC) via email. Participants received an email inviting them to participate in a study that examines their perceptions about the stigma associated with Attention-Deficit/Hyperactivity Disorder. The email contained a Qualtrics survey link. Upon clicking the link, participants reviewed the informed consent form that explained the purpose of the study, their rights as participants, the voluntary nature of participation, and contact information for the principal investigator and thesis advisor.

Variables

I have two dependent variables, expectations states and stigma. To measure expectations for competence we used three items from the Zeller and Warnecke general expectations scale. It listed three items: 1) Compared to you, how well do you expect the other group member to do in situations in general? 2) In terms of things that count in this world, how do you compare to the other group member? 3) How intelligent are you compared with the other group member? (Zeller & Warnecke, 1973). We measure stigma in two ways: willingness to volunteer to tutor and willingness to accept if asked. The independent variables are the four study conditions assigned to each vignette. The conditions include ADHD, Depression, Diabetes, or No Diagnosis. My control variables included age, gender, and race of respondent.

Independent Variable

Participants were randomly assigned to one of eight vignette conditions based on a 2 (Gender: Male/Female) x 4 (Diagnosis: ADHD, Depression, Diabetes, No Diagnosis) factorial design. Each vignette describes a hypothetical student (e.g., “Matthew” or “Emily”) who recently underwent an exam and has made a request related to classrooms expectations or support.

Participants then read the vignette that described the student, including their gender and disclosed diagnosis (or no diagnosis). The vignette otherwise is identical across conditions. After reading the vignette, participants responded to a series of questions that assess Expectation States and Stigma. Expectation states are the perceptions of competence that we measure using the Zeller and Warnecke three item expectation states scale (Zeller & Warnecke, 1973). While Stigma are the participants' level of comfort and willingness to work with or help the student, that was measured through behavioral and attitudinal stigma scales. After that, participants completed a brief demographics section that asked their age, gender, and year in school.

Theory application

Status characteristics theory resides under the larger framework of expectation states theory. Although expectation states theory can be applied in various settings, status characteristics theory is usually applied in small group settings. Although it is not a small group setting that is traditionally talked about in status characteristics theory, I argue that people likely see students as a group who have specific expectation tied to them. Expectation states often arise from both diffuse and specific status characteristics ascribed onto individuals. The specific expectations held for individuals by others is greatly influenced by status characteristics.

I am expecting to find two different things. First, I am expecting that people are going to have lower expectations for students with ADHD on academic performance, which would provide support for hypothesis one.

Hypothesis 1: People will have lower performance expectations for students with ADHD than for those without ADHD.

Secondly, I expect that people would expect students with ADHD to underperform due to the lower expectations placed upon them. If such a correlation exists, this would provide support for hypothesis two.

Hypothesis 2: People will desire a greater social distance from an individual with ADHD than without.

IRB

Since this study involves human subjects, the survey language was reviewed and approved by University of North Carolina at Charlotte's Internal Review Board (IRB). This process was to ensure that any interaction with the study's sample was done in an ethical way and that potential harm was minimized.

CHAPTER 4: RESULTS

I collected data from a total of 471 participants. I dropped 81 cases for failing the attention check. The attention check included one item that measured people's ability to recall the vignette targets academic major. We asked respondents after they read the vignette to name the students major, Psychology. If respondents answered incorrectly then they failed the attention check. I dropped an additional 104 cases from respondents who took less than three minutes to complete a survey that was estimated to take seven minutes. After exclusion, I had an analytic sample of 286 participants. The sample was composed primarily of individuals who identified as cisgender women (60.1%), and just over half identified as white (56%). The average age was just over 24.5 years. Table 1 below presents the means and standard deviations for all participant characteristics. The table also provides descriptive information for all measures of dependent variables. The table includes information for the total sample and for each of the four experimental conditions.

As can be seen in table 1, after exclusions, assignment across conditions was approximately, though not perfectly equal. Approximately one-quarter of participants responded to a vignette in each category: ADHD (25.2%), depression (26.9%), diabetes (24.1%), and no diagnosis (23.8%). Regarding gender of the focal character in the vignette, 48.25 of respondents read a vignette in which they evaluated a female student. There were no significant differences in participant characteristics across vignette conditions in terms of age ($F = 1.96$; $p = .12$), gender ($X^2 = 1.67$; $p = .64$), and race ($X^2 = 1.05$; $p = .79$). This provides evidence that random assignment was effective at distributing characteristics across conditions.

Table 1 Descriptive Statistics (numbers in parentheses are standard deviations)

Variable name	Full Mean	ADHD	Depression	Diabetes	No diagnosis
Likelihood Pass Exam	5.965 (1.615)	5.930 (1.841)	5.896 (1.400)	6.173 (1.706)	5.867 (1.505)
Likelihood Pass Class	6.660 (1.598)	6.708 (1.631)	6.584 (1.533)	6.753 (1.058)	6.602 (1.746)
Volunteer to Tutor	4.024 (1.067)	4.180 (.9393)	4.116 (1.012)	3.811 (1.179	3.970 (1.119)
Tutor if Asked	4.531 (.8485)	4.611 (.7970)	4.532 (.8520)	4.507 (.8681)	4.470 (.8889)
Anxious	2.129 (.9571)	2.028 (.9557)	2.181 (.9559)	2.115 (.9320)	2.191 (.9963)
Performance Expectations	4.842 (.8802)	4.949 (.9892)	4.614 (.8290)	5.033 (.8653)	4.794 (.7791)
Professor Expectations	4.503 (1.160)	4.662 (1.179)	4.333 (1.182)	4.772 (1.056)	4.254 (1.154)
Respondent Characteristics					
Cis Woman	60.14%	56.94%	58.44%	66.67%	58.82%
Race White	54.55%	54.17%	58.44%	55.07%	50.00%
Age	24.51% (10.599)	26.98% (14.637)	23.26% (8.08)	23.34% (6.577)	24.5% (11.086)

Descriptive statistics for all study variables are presented in table 1. On average, students reported moderately high perceptions that the focal vignette character would pass the exam (M = 5.97, SD = 1.61) and class (M = 6.42, SD = 1.59). Participants also reported moderate levels of willingness to volunteer to tutor (M = 4.02, SD = 1.07) or to tutor if asked by the professor (M = 4.53, SD = .85). Anxiety levels related to tutoring another student were relatively low (M = 2.13, SD = 0.96). Lastly, participants reported moderate performance expectations for the focal vignette character (M = 4.84, SD = .88) as well as moderate perceptions of the professor's expectations for the vignette character (M = 4.50, SD = 1.16)

When examined by experimental conditions, small differences emerged across groups. Students who evaluated a character with diabetes (condition 3) reported the highest perceived

likelihood of passing the exam (M = 6.17, SD = 1.71), along with the lowest reported anxiety (M = 2.15, SD = 0.93). Participants in the ADHD (condition 1) reported perceived exam performance that was very close to the full sample mean (M = 5.93, SD = 1.84) and slightly higher anxiety (M = 2.03, SD = .96). Depression (condition 2) and no diagnosis (condition 4) fell between these groups, with exam performance means of 5.90 and 5.87. Overall, perceived likelihood of passing the class was similar across all four conditions, ranging from 6.29 to 6.75. When we interpret by condition, diabetes (condition 3) has the highest exam scores (M = 6.17) and with the lowest anxiety (M = 2.15). While ADHD (condition 1) has the lowest exam performance (M = 5.34) and slightly higher anxiety. Whereas Depression (condition 2) and no diagnosis (condition 4) fall in between. This suggests that diabetes may have had a more positive academic and emotional profile overall compared to the others.

Hypothesis Tests

My first hypothesis seeks to answer if there is a difference in performance expectations for students with ADHD compared to those without ADHD. I test my prediction of lower expectations for ADHD using a pair of one-way ANOVA tests. The first one-way ANOVA (Model 1a) includes performance expectations as the dependent variable and study condition as the categorical independent variable. This analysis shows that the difference by condition is significant at the .05 alpha level with a p-value of 0.02. This means that there is a significant difference in performance expectations between at least two conditions.

Table 2a: ANOVA Performance Expectations vs. All Conditions

Source	SS	df	MS	F	Prob > F
Between Groups	7.49758191	3	2.49919397	3.30	0.0207
Within Groups	213.310885	282	.756421579		
Total	220.808467	285	.774766552		

Bartlett's equal-variances test: chi2(3) = 4.3935 Prob>chi2 = 0.222

However, the second one-way ANOVA (Table 2b) comparing performance expectations between vignette characters with ADHD against all other conditions did not show any significance. The p-value was insignificant at any alpha level with a p-value of .236, which implies that ADHD is not causing the variance we see. Therefore, hypothesis one is not supported.

Tabel 2b: ANOVA Performance Expectations of ADHD vs. All Conditions

Source	SS	df	MS	F	Prob > F
Between Groups	1.08969377	1	1.08969377	1.41	0.2363
Within Groups	219.718773	284	.773657653		
Total	220.808467	285	.774766552		

Bartlett's equal-variances test: chi2(1) = 2.9907 Prob>chi2 = 0.084

My second hypothesis predicts that people will desire a greater social distance from an individual with ADHD than without ADHD. This prediction of desire for social distance from someone with ADHD was tested using another pair of one-way ANOVA tests. The first one-way ANOVA (Table 2a) includes how willing someone is to volunteer to tutor as the dependent variable and study condition as the categorical independent variable. This test lacked significance (p-value = 0.169), implying that the study condition of the student has no impact on others' willingness to tutor them.

Table 3a: ANOVA Willing to Tutor vs All Conditions

Source	SS	df	MS	F	Prob > F
Between Groups	5.73594049	3	1.91198016	1.69	0.1694
Within Groups	319.092731	282	1.13153451		
Total	324.828671	285	1.13974972		

Bartlett's equal-variances test: chi2(1) = 4.2613 Prob>chi2 = 0.235

The second one-way ANOVA (Table 3b) tests the willingness of students to accept an assignment to tutor someone with one of the study conditions. This test also lacked significance (P = 0.9732). Both tests lacking significance implies that ADHD status has no impact on whether someone would be willing to volunteer to tutor or to accept a tutoring assignment. Thus, hypothesis two is not supported.

Table 3b: ANOVA Accept Tutor Assignment vs All Conditions

Source	SS	df	MS	F	Prob > F
Between Groups	.749287655	3	.249762552	0.34	0.7932
Within Groups	204.467496	282	.725062041		
Total	205.216783	285	.720058888		

Bartlett's equal-variances test: chi2(3) = 0.8938 Prob>chi2 = 0.827

The descriptive statistics showed that participants had a moderate willingness to tutor someone else and Anxiety levels related to tutoring another student were relatively low. This might explain why there were not significant results in the models related to student's willingness to tutor.

Supplemental Analysis

I conducted a supplemental analysis to test whether performance expectations predict perceptions of success. This analysis used a regression model with how likely respondents think students are to pass a class as the dependent variable, and a variable measuring performance expectations as the independent variable. Model 3a shows that performance expectations are

significant at the .001 alpha level with a coefficient of 0.648 and standard error .1006. This makes sense because one would think that high performance expectations of someone are aligned with believing that the person is able to pass a class.

Table 4a: Regression Pass Class and Performance Expectations

	Coef.	**Std. Err.**	**t**	**P>|t|**
Performance expectations	.6479421	.1006599	6.44	0.000
Constant	3.523078	.4954204	7.11	0.000
N = 286, r^2 = .13				

Table 4b, adds controls for the other study characteristics in the vignettes. In this model performance expectations are still significant, but none of the controls were significant. These results suggest that the status characteristics theory model holds up, performance expectations do predict success, but ADHD does not appear to function as a status characteristic here.

Table 4b: Regression Pass Class, Performance Expectations, study characteristics

	Coef.	**Std. Err.**	**t**	**P>|t|**
performance expectations	.6346803	.106032	5.99	0.000
adhd	.0064535	.2564521	0.03	0.980
depression	.0996513	.2518331	0.40	0.693
diabetes	-.0041077	.2596021	-0.02	0.987
cisgender female	.2066627	.1854241	1.11	0.266
White respondent	.0965243	.1805471	0.53	0.593
Respondent age	.0055284	.008709	0.63	0.526
matthew	.1828014	.1791027	1.02	0.308
_cons	3.15278	.5730208	5.50	0.000
N = 286, r^2 = .13				

Across the full analytic sample of 286 participants, descriptive statistics showed that students generally expected the vignette characters to perform moderately well in both the exam and in class, reported moderate willingness to tutor or help if asked, and expressed low levels of anxiety related to tutoring another student. Assignment to the four conditions (ADHD, depression, diabetes, or no diagnosis) was approximately even, and there were no significant differences in participant demographics across conditions. When comparing outcomes across study conditions, small differences appeared in descriptive means, but ANOVA tests indicated no significant differences in performance expectations or willingness to tutor across conditions, and ADHD status did not predict lower expectations or greater social distance. As a result, both hypotheses, predicting lower performance expectations for ADHD and greater social distance from someone with ADHD were not supported. In a supplemental regression, performance expectations strongly predicted perceived likelihood of passing a class, but diagnosis condition and demographic factors did not.

CHAPTER 5: DISCUSSION

The purpose of this study was to examine the impact that perceptions and expectations related to an ADHD diagnosis has on the academic performance of students. A lot of prior research surrounding this topic focuses on children with ADHD whereas the literature that focuses on young adults with ADHD and academic interventions is limited in comparison. This lack of knowledge could further perpetuate the stigmatization of ADHD in and outside of the classroom. On the other hand, increased medicalization of the symptoms of ADHD could increase people's awareness of ADHD and possibly destigmatize it over time.

The hypotheses in this study were not supported. Not only was ADHD not a contributing factor towards the survey responses, but none of the study characteristics had any impact on respondent's performance expectations or willingness to tutor the student. This could possibly be due to this study only collecting responses from students, who do not have control over other people's grades. Future research could examine attitudes among instructors, since they are the ones judging student's academic performance on a regular basis. Although our findings indicate reduced stigma toward ADHD among students, it remains unclear how professors view students with ADHD.

As with all research relying on self-report and vignette-based methods, this study has limitations that should be recognized. First, a key limitation involves the racial and age distribution of the participants, which was not fully representative of the broader student population. For instance, after cleaning the data, more than half of the participants identified as cisgender white women with the average age of 24 years old. Another limitation is the study was conducted in English, and all materials, including the survey and consent form, was provided in English only.

Despite the results not supporting the hypotheses, it is overall a positive outcome to end on. Maybe ADHD is becoming more destigmatized, at least among students. ADHD might still be stigmatized among professors, but this study suggests that students do not think differently of their classmate's chances to perform well in academia for classmates with ADHD.

CHAPTER 6: CONCLUSION

ADHD is a common neurodevelopment disorder that affects both children and adults. People with ADHD may struggle with hyperactivity, inattentiveness, and impulsivity and the stigma connected to ADHD can make the condition more difficult to live with. This paper argues that a student's academic performance is hindered if they have ADHD due to the stigma associated with it. This paper applied research on status characteristics theory and stigma to find out if the labels placed on students with ADHD hinder their academic performance and further contribute to the stigmatization of people with the disorder.

The results of this study did not confirm that ADHD status of a student negatively impacts people's perceptions of them, but it adds to the existing literature on ADHD. The current literature we have available on ADHD in higher education is insufficient. By filling this gap in literature, this study not only serves to broaden our understanding of how students with ADHD are viewed by their peers but also helps us to understand the effects of stigma surrounding ADHD.

REFERENCES

About idea. Individuals with Disabilities Education Act. (2022, November 7). https://sites.ed.gov/idea/aboutidea/#:~:text=The%20Individuals%20with%20Disabilities%20Education,related%20services%20to%20those%20children.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. (5th ed.).

Berger, J., Cohen, B. P., Conner, T. L., & Zelditch, N. Jr. (1965). Status Characteristics and Expectation States: A Process Model. https://hdl.handle.net/1969.1/154651.

Bernfort, L., Nordfeldt, S., &Persson, J. (2008). ADHD from a socio-economic perspective. *Aca Paediatrica, 97*(2), 239-245. https://doi.org/10.1111/j.1651-2227.2007.00611.x

Chew, B. L., Jensen, S. A., & Rosén, L. A. (2009). College students' attitudes toward their ADHD peers. *Journal of Attention Disorders*, *13*(3), 271–276. https://doi.org/10.1177/1087054709333347

Conrad, P. (1992). Medicalization and Social Control. *Annual Review of Sociology, 18,* 209 – 232. http://www.jstor.org/stable/2083452

Correll, S.J., & Ridgeway, C. L. (2006). Expectation States Theory. In: Delamater, J (eds) *Handbook of Social Psychology,* 29–51. https://doi.org/10.1007/0-387-36921-X_2

Dippong, J. (2012). The effects of scope condition-based participant exclusion on experimental outcomes in expectation states research: A meta-analysis. *Social Science Research, 41*(2), 359-371. https://doi.org/10.1016/j.ssresearch.2011.11.005

DuPaul, G. J., Weyandt, L. L., O'Dell, S. M., & Varejao, M. (2009). College students with ADHD. *Journal of Attention Disorders*, *13*(3), 234–250. https://doi.org/10.1177/1087054709340650

DuPaul, G. J., Gormley, M. J., Anastopoulos, A. D., Weyandt, L. L., Labban, J., Sass, A. J., Busch, C. Z., Franklin, M. K., & Postler, K. B. (2021). Academic trajectories of college students with and without ADHD: Predictors of four-year outcomes. *Journal of Clinical Child & Adolescent Psychology*, *50*(6), 828–843. https://doi.org/10.1080/15374416.2020.1867990

Emmers, E., Jansen, D., Petry, K., van der Oord, S., & Baeyens, D. (2016). Functioning and participation of students with ADHD in higher education according to the ICF-framework. *Journal of Further and Higher Education*, *41*(4), 435–447. https://doi.org/10.1080/0309877x.2015.1117600

Hanson, Melanie. "College Enrollment & Student Demographic Statistics" EducationData.org, October 1, 2023, https://educationdata.org/college-enrollment-statistics

Harkness, S. K., & Kroska, A. (2019). Self-Stigma and the Social Interactions of Mental Health Patients. *Advances in Group Processes,* 79-94. https://doi.org/10.1108/s0882-614520190000036007

Hysom, S. J., Webster, M., & Walker, L. S. (2015). Expectations, status value, and group structure. *Sociological Perspectives*, *58*(4), 554–569. https://doi.org/10.1177/0731121415571134

Kroska, A., Harkness, S. K. (2021). Information vs. Inspiration : Evaluating the Effectiveness of Mental Illness Stigma-Reduction Massages. *Social Science Research, 96,* 102543. https://doi.org/10.1016/j.ssresearch.2021.102543

Kroska, A., Harkness, S. K., Brown, R. P., & Thomas, L. S. (2015). Gender, Status, and Psychiatric Labels. *Social Science Research*, *54*, 68–79. https://doi.org/10.1016/j.ssresearch.2015.06.021

Kroska, A., Harkness, S. K., Mattingly, K. N., & Lovera, M. A. (2023). Psychiatric Labels: Exploring Indirect and Direct Assessments of Task Performance. *The Sociological Quarterly, 64*(4), 606-629. https://doi.org/10.1080/00380253.2023.2200474

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*(1), 363–385. https://doi.org/10.1146/annurev.soc.27.1.363

Lucas, J. W., & Phelan, J. C. (2012). Stigma and Status. *Social Psychology Quarterly*, *75*(4), 310–333. https://doi.org/10.1177/0190272512459968

Manago, B., & Mize, T. D. (2022) The Status and Stigma Consequences of Mental Illness Labels, Deviant Behavior, and Fear. *Social Science Research, 105,* 102690. https://doi.org/10.1016/j.ssresearch.2021.102690

Manago, B., & Krendl, A. C. (2023). Cultivating Contact: How Social Norms can Reduce Mental Illness Stigma in College Populations. *Stigma and Health, 8*(1), 61-71. https://doi.org/10.1037/sah0000363

Scheithauer, M. C., & Kelley, M. L. (2014). Self-monitoring by college students with ADHD: The impact on academic performance. *Journal of Attention Disorders*, *21*(12), 1030–1039. https://doi.org/10.1177/1087054714553050

Zeller, A. R., & Warnecke, B. R. (1973). The Utility of Intervening Constructs in Experiments. *Sage Publication, 2*(1), 85-110. https://journals.sagepub.com/doi/10.1177/004912417300200105

APPENDIX A: VIGNETTE PROMPT

At the beginning of the semester, [Matthew/Emily], a Psychology major at Southeast University, must enroll in an advanced statistics course. How do you expect [Matthew/Emily] to perform in this class?

1. A few days before the first exam approaches, [Matthew/Emily] receives an [ADHD/Depression/Diabetes/No] diagnosis from his/her doctor. How does this affect your perception of his/her performance on this exam?
2. Unsure of how this might affect his/her academic performance, [Matthew/Emily] meets with the instructor to share the recent diagnosis and discuss possible accommodations.
3. After this first exam in the advanced statistics course, [Matthew/Emily] expresses his/her difficulty with the material to the professor and requests additional support, such as a tutor. The professor then asks you, a student who is doing well in the class, if you would be willing to tutor [Matthew/Emily].

With this information in mind, please answer the following set of questions.