

COLLEGE STUDENTS' REFLECTIONS ON THE ADHD INTERVENTIONS RECEIVED
DURING HIGH SCHOOL: A STANDPOINT ANALYSIS OF BEST PRACTICES

A Thesis

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Thomas Henderson III

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by

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Abstract
of
COLLEGE STUDENTS' REFLECTIONS ON THE ADHD INTERVENTIONS RECEIVED
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Using standpoint framework this study explores first-hand experiences and reflections of university students with ADHD who received accommodations and services for at least one academic year while in high school. This qualitative research focuses on participant's beliefs of whether interventions they received during high school adequately prepared them to be academically successful for college. Five students (2 females and 3 males) participated in a 60-minute interview consisting of 24 questions that explore participants' feelings of academic preparedness for college based on their high school accommodations. Findings support previous research that college students with ADHD often struggle academically once they transition into college until they received their "wake up call". Even though, participants were satisfied with their accommodations in high school, they initially felt unprepared and struggled to adjust academically in college.

Significantly, participants who reported partaking in extracurricular activities and/or leadership roles in high school felt more confident in their academic skills, reported better social adjustment, and achieved higher grade point averages in college than their counterparts who did not participate in such activities and/or roles

_____, Committee Chair
Manuel Barajas, Ph. D.

Date

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Chapter 1

INTRODUCTION

Background

Attention Deficit Hyperactivity Disorder (ADHD) is currently the most commonly diagnosed mental disorder that affects children (American Psychiatric Association [APA], 2015). ADHD is a neuro-developmental disorder that causes inattention, hyperactivity and impulsivity (Center for Disease Control and Prevention [CDC], 2016; APA 2015). ADHD affects approximately 6.4 million (11% of) adolescents between the ages of 4-17, that's about 1 in 10 children (Lunau 2014; Pastor 2015; Frances 2014). Between 2003 and 2011 there was a 5% average annual increase in diagnosis of ADHD in adolescents, and in the last 20 years ADHD diagnosis have tripled (Frances 2014; Akinbami 2011; Patricia 2015). As ADHD diagnosis rise, high schools experience a great deal of pressure to provide effective services to a growing number of students that aspire to attend college as the rest of the students (Reaser et. al. 2007). In the United States, up to 8% of the student population in college has an ADHD diagnosis (Weyandt and DuPaul 2008). This number presents concerns of whether students with ADHD that aspire to attend college received adequate educational skills while in high school they may not be prepared to be academically successful in college.

Problem

ADHD symptoms can impede adolescents' academic learning such as the following: failing to pay attention to close details, having trouble holding attention to

task, losing things, getting distracted easily and forgetting things. Adolescents may also show signs of hyperactivity and impulsivity such as fidgeting, leaving seat, tasking nosily, talking excessively, blurting out, and impatient waiting (The American Psychiatric Association's Diagnostic and Statistical Manual [DSM] 2013). Symptoms of ADHD can cause several problems for students in a classroom setting. School is a structured institution that requires long periods of sitting in a single chair, quietly listening, focusing, waiting patiently and taking instructions all of which can be very troublesome for a student with ADHD.

As ADHD diagnosis has risen over the past years, interventions have been implemented. There are many interventions that are associated with ADHD, ranging from Individualized Education Programs (IEP), medication, behavioral therapy, counseling, coaching and academic accommodations (Parker and Boutelle 2009; Piffner et. al. 2013; Centers for Disease Control and Prevention [CDC] 2016; Fleming2012). Many studies focus on the symptoms of ADHD such as, behavior issues, social stigma, interventions and academic performance students encounter. (Ryan and Katsiyannis and Hughes 2011; Stroh et al. 2007; Larsson et al. 200; Huang et. al 2013; Allsopp and Minskoff and Bolt 2005; Weyandt and Dupaul 2008; Bussing et. al. 2007; Sonuga-Barke et. al. 1996; Koerting et. al. 2012). Examining parent's and teacher's perspectives on student behavior after interventions is important, but adolescent's perspectives are often left out or minimized in studies, while ignoring effectiveness of resources for student's preparation for college education. Thus, a huge void of information exists that could provide valuable insight to help students with ADHD be academically successful in college.

Understanding what interventions students feel are effective or ineffective provides useful information that would allow schools adequate use of resources to teach meaningful skills and improve student's academic achievement in high school and college. Moreover, by exploring students with ADHD point of view that received interventions in secondary school allows firsthand perspectives that may not have been acknowledge in academia.

Students with ADHD who go to college and once received services end up having to navigate and seek services out on their own. In college, ADHD is a self-reported learning disability and students must take all the initiative to start the process to receive services. To do so, students must self-disclose their disability and face the potential of stigmatization by peers and professors. Students with ADHD in college are required to be more independent and actively seek out their own resources while receiving minimal external support they are accustomed to. External support often would include parents, teachers and counselors advocating for the student (Uretsky and Andrews 2013; Troiano et. al. 2010). Therefore, understanding student's perspectives about their ADHD interventions they received in high school exposes areas of intervention that may need improvement.

Purpose

Exploring students' perceptions of high school interventions is important because students with ADHD have similar aspirations to those without ADHD to achieve a higher education (Reaser et. al. 2007). As ADHD continues to be the most neurodevelopmental diagnosed disorder of adolescents, great deal of importance rests on understanding the

effectiveness of current approaches to interventions for students with ADHD in secondary school. 50% of children diagnosed with ADHD continue to display symptoms into adulthood (Barkley et. al. 2002; CDC 2016). This study will investigate and determine if current college students feel they were adequately prepared to be academically successful in college based on the services and interventions they received while in high school. Participants present information that will determine whether secondary schools need to improve in integrating skills and techniques that will help students be successful in college. This study hopes to inform staff, parents and policy makers working in education about how students feel about their services during their high school years once they are in college. Additionally, this study may encourage future or current high school students that aspire to attend college to learn helpful tips and skills that will help them be academically successful.

Chapter 2

LITERATURE REVIEW

Diagnosis of ADHD

Diagnosis rates of ADHD average increased by 3% from 1997 to 2006, 5% from 2003 to 2011, most recently 7.8% in 2003 to 11% in 2011 for children ages 4-17, accounting for approximately 6.4 million children in the United States (CDC 2016; Pastor 2015). Boys are 13.2% more likely to get diagnosed compared to girls at 5.6 % (CDC 2016). As the number of adolescents diagnosed and treated for ADHD increases, the number of adults with ADHD will increase since adolescent's transition into adulthood and their ADHD impairment persists (DSM 2013). Although there has been a great increase in diagnoses of children with ADHD, few studies provide information about college students with ADHD (Simon-Dack, Rodriguez and Marcum 2014). As more children are diagnosed, understanding the effectiveness of current interventions become more necessary, especially as students with ADHD transition in to college.

For an adolescent to become diagnosed with ADHD, his/her must first show signs of inattention and/or hyperactivity-impulse that interferes with his/her productivity. For an adolescent to be considered inattentive and hyperactive/impulse, he/she must show signs of six or more symptoms that persist for six months before the age of twelve, or five or more symptoms for individuals seventeen and older (DSM 2013). Symptoms for inattentive behavior include the following: fail to pay attention to details in activities, does not seem like to listen when spoken to, does not follow through with work or finish, avoids tough task, loses things, and gets easily distracted and forgetful. Symptoms of

hyperactivity-impulse include fidgeting or squirms in seat, leaves seat when expected to be seated, runs or climbs on things when not appropriate, talk excessively, often “on the go”, unable to play quietly, has trouble waiting for his/her turn and interrupts on others (DSM 2013). Additionally, children must show symptoms of ADHD in two or more different settings (Dopfner et. al.2008; Lunau 2014; DSM 2013). If a child is suspected by a parent, teacher or school staff to have ADHD who may they can be referred to a physician to be assessed based on behaviors a child displays that may meet ADHD criteria, however that does not guarantee diagnosis. Assessments are conducted by mental health professionals such as psychologist, psychiatrist or a primary doctor like a pediatrician whom can determine if the child meets the criteria to be diagnosed with ADHD based on the DSM qualifications (DSM 2013; Stolzer 2009; CDC 2016; APA 2015).

Interventions and Services for Students with ADHD

Once a child has been diagnosed with ADHD they can receive personalized interventions that will best help the child to be academically successful in a classroom setting. To receive accommodations in school, a student evaluation occurs following guardian consent, which determines if the student would benefit academically from services. Services are provided through an Individualized Education Program (IEP) (Conner 2012; Weyandt and Dupaul2008). An IEP team is formed of individuals that know and work with the student on a regular basis consisting of a general education teacher, special education teacher, a parent, a representative from a public agency and sometimes the student. Once an IEP team is intact, an IEP meeting determines what

specific services the student may need to be more academically successful. The IEP includes information about the child's current academic performance, as well as accommodations the student may need such as supplementary needs and services, extended testing time, test modification, transitional services and techniques of teaching that will improve student's learning (Price-Ellingstad et. al.2000). The student's IEP is reviewed every year and re-evaluated every three years to determine if the accommodations effective (Price-Ellingstad et. al. 2000). These services are mandated to be provided and implemented by law through the Individuals with Disabilities Education Act (IDEA) that guarantees children with disabilities receive appropriate accommodations through special education (Price-Ellingstad et. al. 2000).

Section 504 of the Rehabilitation Act of 1973 assures students receive accommodations in classroom setting, but may not need special education under IDEA. These acts make sure students with disabilities receive equal access to education as students that do not have a disability (Bussing et. al. 2016; Conner 2012). Section 504 and IDEA provide financial assistance to educational agencies specifically for special education, allowing students the opportunity to receive educational support services for their disability, such as ADHD while in elementary, middle, or high school (Weyandt and Dupaul 2008; Conner 2012; Price- Ellingstad et. al. 2000). Section 504 often includes classroom accommodations and/or curriculum modifications (Bussing et. al. 2007). In addition to services received at school through an IEP, some adolescents receive behavior modification to help support and teach healthy coping skills to deal with ADHD, however, these services are not necessarily always provided through the school.

Additional services can be accessed through behavior therapy which modifies negative displayed behaviors of ADHD. Currently, 13% of children diagnosed with ADHD use behavioral therapy (CDC 2016). Only half of preschoolers diagnosed with ADHD receive behavior therapy, though the American Academy of Pediatrics (AAP) guidelines state that behavior therapy is the first line of treatment for young children between the ages of 2-5 (CDC 2016). Early interventions are important when disruptive behavior problems (DBP) are displayed, because the earlier in a child's life interventions occur the more likely the interventions are to be successful (Koerting et. al 2013). In 33 U.S. states, less than 50% of children with ADHD receive behavior modification and 17.5 % of children with ADHD were not receiving any form of treatment in 2011 (CDC 2016).

Behavior therapy for adolescents is important because it can improve their behavior, self-control, and self-esteem (CDC 2016). The absence of behavior modifications hurts students' ability to appropriately function in a classroom setting and lower academic success (Weyandt and Dupaul 2008; Meaux et. al. 2009; Parker and Boutelle 2009; Reaser et. al. 2007). Proper behavioral interventions are therefore imperative.

There are a variety of behavior interventions such as family-based therapy, coaching, and cognitive behavioral therapy (CBT). Family-based therapy interventions incorporate the parents and the students. Teaching students several coping, social, and functioning skills allows them to have more control over ADHD symptoms, as well as improving parents' interventions skills with their children's symptoms (Pffner et. al.

2013; Fleming and McMahon 2012; Lo et. al. 2016). Coaching emphasis student's strengths and provides support systems that generate new strategies that help students be successful and gain insight on the past and current feelings (Fleming and McMahon 2012; Parker and Boutelle 2009). CBT is a goal-oriented psychotherapy intervention set on changing negative behavior patterns (Fleming and McMahon 2012; Janssen et. al. 2015; Schmidt and Shimmelman 213). The different types of behavior interventions are used to teach students coping skills, social skills, social functioning and independence using reward based programs. Interventions are used to modify unwanted behavior and increase positive behavior such as organization, managing outburst and completing schoolwork (Pfiffner et. al. 2013). Behavior interventions are important because those that receive them show improvements in stress levels, depression, anxiety and social interactions (Fleming and McMahon 2012; Parker and Boutelle 2009; Pfiffner et. al. 2013). The necessity for interventions is increasing because many students with ADHD continue to struggle academically and often lack the ability to be self-reliant in college. (Troiano and Liefeld and Trachtenberg 2010; Meaux et. al. 2009; Uretsky and Andrews 2013).

IDEA and Section 504 mandate support services and modifications for academic learning in a school settings must be provided for disabilities such as ADHD (Conner 2012). Section 504 of the Rehabilitation Act of 1973, states that colleges are only required to make practical accommodations available for those who have disabilities and are required to make programs accessible to students (Conner 2012). Minimal accommodations are accessible for students with ADHD because colleges are only

required to make practical accommodations available and have a vague requirement (Uretsky and Andrews 2013). In college ADHD is a self-reported disability and is not a requirement to be reported to the universities by the student, which leads up to 8 % population of college students that at least have and/or show symptoms of ADHD (Weyandt and DuPaul 2008; Fleming and McMahon 2012; DSM V 2013). Resources and accommodations in colleges are provided to students whom actively seek out the services. However, many college students with ADHD have minimal experience advocating for themselves because while in high school they had minimal participation in the process as staff and parents took the lead in their treatment plans/services (Meaux et. al. 2009; Conner 20012; Troiano et. al. 2010; Uretsky and Andrews 2013).

Experiences of Students with ADHD in College

Students with ADHD entering college have many adjustments to make and endure a transitional period; because for many of them, it is the first time they are required to be more self-reliant. Students begin to experience more life stressors, less structure, and are required to self-regulate (Fleming and McMahon 2012). Students with ADHD entering college are frequently unprepared and struggle because of the lack of external support that no longer exists that they are accustomed to receiving (Meux et. al. 2009; Uretsky and Andrews 2013; Troiano et. al. 2010). College students with ADHD have reported struggling with time management and actively seeking out available resources while in college (Parker and Boutelle 2009). However, students who did utilize resources were more successful and/ or improved their GPA (Kaminski et. al. 2006; Allsopp and Minskoff and Bolt 2005; Parker and Boutelle 2009; Troiano et. al.2010;

Meaux et. al. 2009). Studies have shown that college students with ADHD need to study longer hours than students that do not have ADHD and utilize “out working” others by studying longer and more frequently as a study skill to maintain academic success.

(Kaninski et. al. 2006; Troiano et. al. 2010; Simon-Dack et. al. 2000). Students’ academic success also improved when they use learning centers on their campus or other forms of external support such as academic coaching or support groups (Meaux et. al. 2009; Troiano et. al. 2010; Parker and Boutelle 2009). Overall students with ADHD academic success increases when a variety of services are used frequently (Kaninski et. al. 2006; Troiano et. al. 2010; Simon-Dack et. al. 2000; Meaux et. al. 2009; Troiano et. al. 2010; Parker and Boutelle 2009).

College students that have been diagnosed with ADHD are frequently more susceptible to high levels of anxiety, depression and social marginalization (Bilgic et. Al 2013; Patros et. Al 2013; Weyandt and Dupaul 2008; Vance and Weyandt 2008; Link and Phelan 2001). Students in college may be presented with several stressful situations that can cause a great deal of anxiety such as coursework, living situation, separation from family or friends. Once in college the level of formal structure students received in secondary school no longer exist, causing a great deal of stress that requires students with ADHD to self-regulate and be self-reliant to maintain academic success (Parker and Boutelle 2009; Meaux et. al. 2009; Uretsky and Andrews 2013; Kaminski et. al. 2006; Reaser et. al. 2007; Simon-Dack et. al. 2016). Self-sufficiency and self-advocacy are also important skills that improve academic success for students with ADHD (Uretsky and Andrew 2013; Troiano and Liefeld and Trachtenberg 2010; Stodden and Conway and

Chang 2003; Getzel and Thoma 2008; Lee et. al; Vance and Weyandt 2008; Link and Phelan 2001). However, lacking high school preparation with these skills place college students with ADHD at a greater risk for dropping out and underachieving because these are often abilities students with ADHD lack unless taught otherwise (Lee et. al. 2008).

This study seeks to identify these struggles from the point of view of college students with ADHD. Thus, this study is guided by standpoint theory in identifying and interpreting issues from the point of view of college students affected by ADHD.

Although, standpoint theory is a commonly feminist conceptual framework it provides a solid foundation for the current study because it focuses on marginalized groups and seeks knowledge that empowers them. Students with ADHD are marginalized and often face stigma of using services (Koerting et. al. 2013). Standpoint theory privileges the perspective of those from the marginalized group rather than from the dominant group i.e. those not affected by ADHD. Thus, this study provides a first-hand insight that generally would not have a voice. The general objective of this study is to identify the ideas, beliefs and stories of participants to understand their experiences. This study will use qualitative interviews to explore and understand the experiences of students diagnosed with ADHD entering college that received disability services in high school. Many of these students receive interventions to curb their symptoms of ADHD. It is important to understand participant's views of these interventions to determine if these resources adequately prepared them to succeed in college. This research will allow students in college that have been diagnosed with ADHD to reflect on interventions received in high school and if the interventions prepared them for college. This study will

allow students with ADHD to identify concerns, problems, or issues they may had with the interventions they received during high school to in hopes to ignite positive change in the preparedness for students with ADHD that aspire to attend college.

Chapter 3

METHODS

Using qualitative research method, this study focused on participant's beliefs of whether interventions during high school adequately prepared them to be academically successful for college. I explored whether they were provided with adequate services and accommodations for their disability from the students' perspectives. As well as whether they felt they were prepared for their transition into college and assimilate. My study also focused on the quality of services and reasonable accommodations. This study would contribute valuable information about high school services to those with ADHD. There was a gap in many studies that did not grasp the essence of the students' perspectives of services they received or how effective the services are beyond high school. It is important to know if current resources are providing students with ADHD the preparation and tools to be successful in higher education, and this study was guided by standpoint framework which examines student's first-hand experiences and reflections about what interventions work and do not work in getting them prepared for college.

Sampling

To recruit participants, I collaborated with an office that provides services to students with disabilities at a public university in the Western region of the United States. The office provides students with disabilities services and accommodations to help them be academically successful at the university. Recruitment flyers were posted in the office, and the office staff sent the recruitment emails to students who currently receive assistance through the office that provided my contact information. I personally had no

access to any student's personal information or contact with potential participants unless they contacted me about participating in the study.

Students were selected for the study if they had received accommodations and services because of ADHD for at least one academic year in high school. I did not request any type of medical proof of ADHD diagnosis or request to see any medical records of any kind from their present and past schools. In addition, participants were also included in the study if they did not currently receive ADHD accommodations, but self-identified as having received official diagnosis prior to enrolling in college and received interventions in high school for at least one academic year. Students were not included in the study under the following circumstances: they did not belong to the university; they were not diagnosed with ADHD by a professional prior to entering college and/or did not receive interventions for a minimal of one academic year in high school; students who did not wish to give audio-recorded verbal consent were excluded from the sample; and those who had prior connection to the interviewer were also excluded from participation. My sample includes 5 participants with 2 females and 3 males. The small sample size does not provide generalizability, but it allows the study a greater exploration and depth of student experiences and understandings. The findings will provide rich insights, understandings of the quality of support offered to students with ADHD. Participants received a \$10 gift card as a gesture of gratitude for their participation in the study.

Data Collection

I conducted one-time 60 minute individual interviews consisting of 24 questions (see Appendix A) with each participant during the 2017 spring semester. Questions were

designed to capture how the participant felt about interventions they received and the adequacy of them in relation to their academic success in college. All interviews were conducted at the university library's study group rooms unless participants requested otherwise. During the interviews, I took notes as well as audio recorded participants and analyzed both notes and audio recording to capture all information possible.

At the beginning of each interview, I greeted the participant, introduced myself, and gave some information about the study and what I hope to accomplish from it. Participant's participation entailed a semi-structured interview consisting of open-ended questions that allowed me to collect some brief, non-invasive history of the participant and participant's diagnosis experience in high school. Then I asked questions that provided in-depth information about how the participant feels about services they received during high school and how the interventions currently affected their academic experience and success. The interview provided the opportunity to explore experiences of resources provided to students and the effectiveness or ineffectiveness the interventions had on helping prepare them to be academically successful in college.

I transcribed the audio-recorded interview immediately after it was done with each participant, and transferred my written notes to my personal, passcode protected computer to secure information and ensure a high level of confidentiality. All written notes were shredded, and the rest of the de-identified data were only to be kept for three years upon completion of the study.

Data Analysis Procedures

Data were analyzed by identifying patterns in expression, ideas, thoughts, feelings, and themes that provided the opportunity to capture the participant's point of view. After the initial interviews, a codebook was generated to organize and categorize data results; the codebook served as a guide to flag certain themes in participant's interviews. After data were collected, the results were coded and grouped with other participant's similar thoughts and experiences to provide a detailed standpoint of all participants. This study captures the perceptions of participants, displays their culture and the essence of their feelings and beliefs. This allows students with ADHD to present firsthand accounts of their beliefs and feelings and their interpretation of their experiences.

Chapter 4

FINDINGS

My findings, as other studies, identified and interpreted the following common themes from the standpoint of students with ADHD: academic accommodation, extracurricular activities, time management, external support, therapy, being babied, technology and reinforcement. All participants received accommodations in high school that were required by their IEP or recommended through their 504 plans. All participants reported while in high school receiving extended time on assignments, extended testing time, alternative test locations and classroom seating accommodations.

From the perspective of the participants, most interventions they received in high school did not sufficiently prepare them for academic success in college only aided them academically. As participants transitioned into college they received similar accommodations after they requested them through the disabilities office on the university's campus. Participants would submit confirmation of an ADHD diagnosis and then were awarded specific accommodations they qualified for based on the participant's need. In addition, to receive the same accommodations received in high school, participants were also approved for technological accommodations such as voice to text programs, digitalized books, and audio recording class lectures. Although participants felt they were not adequately prepared for academic success entering college, they believed that, without the accommodations they received, they would not have been as academically successful in high school. Some participants believed graduating on time or graduating at all from high school might have not been possible. Accommodations

helped participants graduate from high school, but receiving accommodations did not always correlate to preparedness for immediate academic success in college.

Interestingly, when a participant received accommodations along with therapy or participating in extracurricular activities in high school they seemed to be more confident and academically successful in college compared to those who did not. In addition, participants stressed the importance of partaking in extracurricular activities in high school because they acquired important skills and support by joining. Participants reported that extracurricular activities and therapy provided an outlet for coping with stress, frustration, anger management and academically motivated them. After transitioning into college, participants began to have a better understanding that skills other than just academic accommodations were necessary for academic success. However academic accommodations are the foundations to their academic success and were essential in their transition into college.

Academic Accommodations

All participants valued the accommodations they received while in high school and in college. The most mentioned and praised accommodations were extended time on test and the ability to take test in a separate area from peers. Participants mentioned they would receive time and a half on test compared to their peers which was very beneficial in their academic achievement. Some going as far to say they might have not graduated from high school on time or have as high of a grade point average (GPA) as they do now in college. When asked how services they received impacted their academic success their responses were straight to the point.

“Leaps and bounds, I am testing higher, retaining information longer and not forgetting as much information that I would before” (Colin).

“I think without services, I probably would have not graduated. I was border line 2.25 GPA in high school and without that little extra push I probably would have fallen under a 2.0 and never graduated” (Allen).

“I wouldn’t have gone to college or graduated high school without the services and support system around me. I had a pediatrician. I saw him every six months. So, he was really good about making sure I got the services I need and that my parents were aware of what services I needed” (Cassidy).

Services and accommodations had a great impact on the success of participants.

Students can often have a difficult time being successful in school because their ADHD symptoms can be highly disruptive to not only the students themselves, but their peers around them. Disruptive behaviors can include hyperactivity, inattention, fidgeting, squirming, talkative and moving (Solzer 2009; Daley and Birchwood 2009; Koerting et. al. 2013). For example, when Sara got to college, she had a hard time being patient, raising her hand, and waiting her turn to be called on; because in high school she often got away with just calling out and receiving no consequence. Displayed symptoms of ADHD in a classroom setting creates a demand for accommodations and services for students that display those actions.

Participants reported that not all accommodations were as necessary as time and a half on test, testing in a different location, and text to talk programs. These three academic accommodations positively impacted every participant’s academic achievement

in high school and college because the accommodations could help manage inattentive, hyperactive and impulsive behaviors (Simon-Dack and Rodriguez and Marcum 2016; Parker and Boutelle 2009). Often, students' symptoms of ADHD can create many issues when in a classroom setting, especially when testing. Testing in a secluded room provided students with a less distracting location. Cassidy explains why she preferred a small secluded room,

“... (When) testing in a small room with less distractions it was usually a one on one or one on two, so when I was looking around they knew I wasn't cheating that I just needed to look around and take a mental break here and there...I was also able to schedule it (test). I realized I was testing better in the mornings so being able to take test in the mornings or before class was extremely helpful” (Cassidy).

Cassidy often needed to take mental breaks during test that would result in her looking around and it may appear to a professor as if she was cheating. In addition, the constant “mental breaks” could also explain why extended test taking time was beneficial not only for Cassidy but other ADHD students as well. Cassidy realized what worked for her and used her accommodations to achieve her goals. Seclusion while testing also provides students with a setting that may be less distracting for them; as inattentive behavior is a common issue with students with ADHD taking an exam apart from a group of people can reduce the potential distractions that may occur. Multiple participants reported that they are distracted quite easily from another peers coughing, erasing, getting up or a peer simply shifting in their chair. Furthermore, participants reported less stress

and anxiety when they took test out of the normal classroom setting. Sarah reported that she not only had higher grades when she used the test center, but she also felt less test anxiety during the test.

Technology

Technological accommodations were also extremely important to participant's classroom learning and individual studying once they transitioned into college. Technological accommodations were used inside and outside the classroom. Participants used text to speech when reading, speech to text when writing essays and voice recorders when taking notes. Text to talk is an important tool because "for someone with ADHD like me, reading can be a laborious task" (Allen). Reading can often be a difficult task for students with ADHD because they frequently struggle to maintain attention to one thing for an extended period and are easily distracted (DSM 2013). Participants reported that focusing during reading is very difficult, and they are often easily distracted and lose focus easily. Text to talk required participants to read and listen at the same time, which often stopped them from being distracted by something they heard while reading. Taking participants multiple hours to read just one chapter of a book constantly having to refocus or reread sections. Kurzweil is a popular text to talk program participants mentioned they use, allowing to upload almost any book so they can access the text digitally.

"They take the book, they cut off the spine, they literally scan all the pages in the book and then that gets uploaded to a cloud database and I can access that cloud database and the program will highlight the sentence and highlight the word it's on in different color and it will also auditory read it to me. So, if the sentence is

“the ball is red” the sentence will be in yellow and it will bounce on each word in green. And the reason I use that is because, even though I am literate and have a high comprehension level I have problems tracking my words when I read. My eyes will glaze over and get foggy and I’ll lose my space and I find with that is I can probably read up to no more than 6 pages an hour while versus with this program I can set it to read 240 words a minute which is basically 4 words a second and I can get through 30 pages in an hour maybe 2. It’s much more efficient and this time around I find myself again staying on task more because I’m not being overwhelmed by the reading this time” (Allen).

Sarah also explained how Kurzweil program helped her stay focused while reading and improved her comprehension of the material. She found the program to be even more beneficial when she learned she could slow down and speed up the speech. Sarah was more productive in a shorter period and admitted to being able to finish some readings in one sitting, whereas before she could not. Allen reported that many times he would need to have two of his senses occupied to maintain focus. Allen explained why the digital books were so important to his academic growth because he was not only following along as the program highlighted words but also hearing the words simultaneously which kept him focused one task and not getting caught in his “web of thoughts”. Cassidy also mentioned she too would need multiple senses in use while learning. Often while a professor was giving a lecture she would roll a tennis ball under her foot or roll play dough in her hand to help her focus and not get off task.

Participants all received accommodations to help them achieve higher academic success, however, academic accommodations were not always enough to help support participants as they often dealt with a variety of other issues that effected their academic success such as anger management and classroom coping skills.

Therapy

Participants reported seeing a therapist and/or counselor while in high school. Colin reported that his doctor would help him develop classroom coping skills, study skills and vocalizing what he needs and wants. Sarah reported that art therapy was beneficial to her as well because it helped her deal with frustration: “I would turn anger inward so I would get really frustrated at myself because I wanted to be perfect to prove to them (family and friends) that I was smart enough and I could get anything accomplished at any time” (Sarah).

Sarah also stated that her frustration stemmed from her inability to complete work and others doubt about her. These experiences provoked much anger that interfered with her ability to focus on school work and do quality work. Art therapy helped manage her frustrations and improve her work.

Cassidy also dealt with anger management and saw a counselor while in high school. Cassidy reported that a good deal of anger she felt resulted from the stigma she received from her peers for being “different” or receiving “special treatment”. Therapy also helped her manage these frustrations.

Allen had also reported dealing with a great deal of stigma and being bullied:

“I had a pretty long school record of getting into fights as a kid. I would get bullied and I would stand up for myself, I would yell, I would shout, I would punch back and the second one that punches is the one that always get seen and that’s the kid that would always get hit hardest with punishment. They (staff) only saw what the after affect was. They never saw the beginning, they never saw the buildup. So, all they knew was I was always getting into trouble as they saw it. The other kids would pester me. They see I would be the one to take the fall for it and so they would just keep poking and prying” (Allen)

Allen went through counseling to deal with anger issues and cope with his short temper. However, he admitted that therapy did not have as big an impact on him in high school as it did in college when he felt he became more mature; as he matured and was more equipped to use his coping skills he was better able to control his impulsivities. Along with anger management, Colin received tutoring from his school and believed the behavior modification he received from his doctor taught him beneficial social skills, including: interacting with peers, teachers; vocalizing his needs; as well as staying focused and regaining focus on the task at hand while in class. These skills have helped him more than anything in improving his academic success in college. Sarah reported that attending art therapy helped her because the activities assisted her coping with ADHD because of a variety of techniques and skills she learned that would normally not been allowed to in a classroom setting such as patience, deep breathing and soothing anxiety. Sarah felt significantly lower levels of pressure, which allowed her to be more

comfortable with the fact she had ADHD and allowed her to be more successful in the classroom.

Counseling and therapy may not always have had a direct effect on academic achievement that teaches tools and techniques to score higher on a test or better understand how to time manage when doing homework; but they do serve a greater purpose. Counseling and therapy help students with ADHD deal with their emotions and actions that often can have a negative effect on their classroom behavior. Learning to cope with symptoms of ADHD can have a positive effect on student's social interactions as well as academic success. Social interactions and participating in social activities also benefitted participants.

Extracurricular Activities

In addition to receiving accommodations in the classroom and therapy outside the classroom, extracurricular activities helped prepare them for academic success. All five participants reported the importance of extracurricular activities in helping them cope and provide an outlet for ADHD. Peter reported the significance of extracurricular activities and the social and time management skills he learned while enrolled in Boy Scouts; Peter credited a lot of his development to Boy Scouts and the role it played in his academic success.

“(Boy Scouts) Which I think helped serve me with time management because one of the merit badges is personal management, which being able to time manage.

You got out into the community and learned certain skills and I believed it helped

me with my schooling. Like how to be patient when I'm trying to explain something to a person.”

Boy Scouts not only helped Peter with time management, but also presenting experiences that taught him how to be patient in potentially frustrating situations. Sarah felt she benefitted from attending drama festivals because they would have to read their parts out loud in front of others. It allowed her to understand that breaking reading up into segments was much more beneficial to her than trying to accomplish it all at once. Cassidy's school went as far as to have academic skill building available to students.

“We did dragon skills (what the school called their skill building program) in the morning which was anyone could go and not just students that needed it. We were recommended by our counselors to go to it and we would have and be able to always go to it and it was only available to other students on Friday. That was extremely helpful because you would be able to bounce ideas of each other in a constructive manner. So, it was a place to do homework and get things done because time management went out the window with the way I am. So that was extremely important to be having a place to go that was constructive and get things done and have someone hold me accountable for projects and things I needed to get done. College students or recent graduates would volunteer and come in and spend some time, so it wasn't so much as teaching as it was checking in and holding you accountable and you were actually getting work done.”

Cassidy learned skills while having a positive support group that created structure and vision for her educational needs outside of her normal classroom setting. Support groups

have been proven to be beneficial to students with ADHD and help support them socially and academically (Kaminiski et. al. 2006).

Reinforcement: Structured Support and Mentoring

The three participants that reported partaking in extracurricular activities while in high school reported being more confident and doing better in school compared to the two who did not report participating in extracurricular activities. Participating in extracurricular activities allowed participants an opportunity to learn and practice valuable tools they would later apply in school to improve their academic achievement. Extracurricular activities motivated, inspired and empowered participants while in high school. Peter mentioned how he learned meaningful skills from boy scouts and another youth group he was a part of that benefitted him in school such as time management, organization, memorization and self-advocacy. Peter credits learning those skills from mentoring, giving presentations, completing task on his own, and being a part of a supportive group. Most importantly he took on a leadership role where he volunteered and mentored cub scouts. Additionally, Cassidy was a part of a program that supported her and inspired her to strive for academic excellence. Since the program involved mentors that had learning disabilities such as ADHD it allowed Cassidy to feel supported and learn from others that had similar experiences to her.

“A lot, so in high school I teamed up with a non-profit, which is a mentoring non-profit national [organization] and you take high school and college students with learning disabilities or ADHD and you mentor middle school with the same learning struggles using art. So, design your own classroom, what types of things

would you want in your classroom so you can learn. So, I ended up running the program in high school and building that type of community was extremely important to where I am now without this community, I was 15 and seeing people just like me in a PhD program and I was like “amazing” so when I built this community and had this support system of people that had gone through the similar struggles, it was, well, that’s the reason I went to college. Before that I never thought I would go to college, my father told me I probably wouldn’t graduate high school when I was really young. So, until I met people that had done it and told me I could do it I wasn’t planning on going to college” (Cassidy).

Strong support systems are essential in the development and academic success of college students with ADHD. College students with strong external support systems and utilized academic support services had more academic success (Troiano et. al. 2010). Sarah mentions how her experience at drama festival helped her with felling overwhelmed when reading and especially reading out loud. Also, “it was nice to have a group of peers from ninth grade to twelfth grade to do something we all had the same mentality, that we can all do something going to a college and performing in front of I don’t know how many people” (Sarah). Sarah also reported how she felt when she took on a mentoring role while living in a group home: “Uh, I was like a mentor, they were around my age anyways so they would just ask for my advice. I would just talk to them because the staff didn’t want to talk to them” (Sarah).

Sarah did not mind and was happy to take on the role of a supportive person at her group home. Even though her mentoring experience may have not been as in depth as Cassidy and Peter, the development of leadership may have impacted her ability to self-advocate and she understood how important it is to create and maintain support systems. Cassidy, Peter and Sarah all experienced being a mentee and a mentor which may explain their valuation of external support groups in college. However, further research could help explain how much importance and knowledge students with ADHD have about external support groups. In addition, more research needs to be done to determine the effect participation in extracurricular activities in high school and holding leadership roles has on academic success for college students with ADHD.

Participants in this study that partook in extracurricular activities learned at a young age the importance of these support systems. They learned valuable tools and skills and could apply them to everyday life that allowed them the opportunity to practice these skills. Additionally, the participants that reported feeling most successful and having more confidence in their abilities were those that took their extracurricular activities a step further and became mentors. After being in strong support groups three participants found themselves in leadership roles. Although, participants did not directly specify a connection between their mentoring roles and success, it could possibly be the strongest indicator and predictor of success for students with ADHD after they transition into college. Studies show that lack of external support and self-advocacy are constant issues students with ADHD face time and time again. Although external support is important, there needs to be a balance between external support and self-reliance.

Being “Babied”

A common issue with participant’s transition into college was the minimal external support they received in college they were accustomed to in high school. Participants reported that in high school their parents, a counselor, or a teacher would be the ones scheduling meetings, making sure the students were receiving their services and their needs were being met by accommodations. When asked what the differences were about services received in college compared to high school Cassidy explains there is:

“A lot more responsibility on the self in college than there is in high school. In my high school because our counselors were on top of you making sure you did what you needed to do. But here if you don’t go and get your paper work signed that first week of the semester or as soon as you have your schedule for the next semester you are not going to get your services immediately. Most professors require it the first two weeks. So, if you’re not on top of your shit you’re not going to get the services your due. (In high school) I was a little babied. I think the first semester was a rude awakening when I failed a class. I failed it because I couldn’t rely on someone else. So, there was a little bit of babying in high school, I think there is too much”.

In addition, Peter expressed similar feelings about how he was “babied” in high school stating that he felt he was often “spoon fed” the test that were given to him in high school and often would be told by teachers “this is what I am going to ask you (on the test)”. In contrast in college, tests were much more difficult and varied in style. As participants transitioned into college they might be accustomed to being “babied” or “spoon feed”

answers while in high school hindering their ability to be academically successful. These can be seen because participants ultimately received similar accommodations in college as they did in high school; and although it is expected that the course work difficulty will increase, students with ADHD are not entirely equipped with the ability to deal with the responsibility of being self-reliant with their academics. Students with ADHD are accustomed to their parents or school staff taking care of everything for them and not having to actively participate in the process of their IEP's, 504's or seeking accommodations while in high school. As Allen put it, "Momma bear took care of everything for me while I was in high school". It is essential that students with ADHD learn how to "take care" of themselves in academia before they transition into college. Colin reflected, "Parents are not there to solve all your problems anymore. In college students with ADHD are expected to advocate for themselves by seeking accommodations and/or finding helpful resources on campus. Participants reported that self-advocating is important and so is understanding what is needed and the diagnosis.

Know the Diagnosis

The importance of external support is well documented within literature about college students with ADHD. However, a component that is often overlooked is the importance college students with ADHD knowing what and how their diagnosis can and does affect them. "Most problems kids with ADHD have are ones they make for themselves" (Colin). Participants were all aware of behaviors that were their own setbacks or down falls, anything from calling at in class to anger problems. Cassidy even goes as far as still carrying around playdough to all her classes because she knows it will

help support her in staying focused and becoming distracted by other activities or even her own thoughts. Cassidy knows what works for her and uses that knowledge to her advantage. "...but until you get that ability to monitor yourself and get the skills to do so, (otherwise) you're just on a sinking ship. If I had to give advice to someone with ADHD I would say learn your behavior because if you can predict your own behavior you can sort of plan around that" (Peter). Participants reported that learning about their diagnosis and what triggers them will help them prevent distractions and potential issues in the classroom. To encourage successful habits students with ADHD can greatly benefit from external support as they transition into college. Support groups are important for students and help maintain consistency, which also helps students with managing their time.

Time Management

Time management is a major issue with students with ADHD (Meaux et. al. 2009), especially as students with ADHD transition into college. Participants did not report receiving a great deal of training learning time management skills from there high school. Participants reported just receiving friendly reminders from teachers or parents and occasionally having to get an organized binder checked off by a teacher; but participants couldn't recall many concrete skills they learned necessary for college. However, all participants, as research has shown, stress how important it is for students with ADHD to be able to manage their time and be organized. High schools are attempting to meet the needs of the students with ADHD in high school, but seem to be failing to meet their needs to transition into college. College students with ADHD are at a higher risk of underachievement, school dropout and emotional impairment in

comparison to college students that do not have ADHD (Lee et. al. 2008). Students with ADHD continue to have lower achievement in college and struggle to transition from high school to college even after receiving accommodations in high school and college. Participants reported finding and applying skills and tactics for what worked best on their own. They were often left to learn what worked and did not work that would best suit their organizational and time management needs through lived experiences. For example, “So it like finding out what worked for me and having those skills of Meta cognition was huge. Knowing what I needed always did better than what someone else was telling me. So, I would gather the information” (Cassidy). Cassidy knew that others could help her, but it was important to understand how to help herself because she knew what she needed better than anyone else.

“You are basically self-taught and when you have ADHD you don’t get much done so you really have to focus hard. And one thing I really had to learn was organization that was a huge one for me. So um, you didn’t get no tips on how to organize, you didn’t get no tips on how to write something on a scratch paper to help you remind. I didn’t learn that until I was an adult. So, if something would help me understand a little better or even give me ideas of how to manage.

Because yeah, I am forgetful and I have to use a planner and make sure it is all visible. Not having a week planner and I need to look something I need to do 3 weeks from now it needs to be all out and that is what I learned as an adult”

(Sarah).

Furthermore, Allen found what worked for him by creating a structured environment around him that was like his high school schedule. Making sure every hour of the day was accounted for and scheduled. Participants learned from lived experiences and trial and error, which is a common theme among college students with ADHD (Meaux et. al. 2009). However, Allen did not start this routine until after he initial struggles in his college courses.

Participants reported several accommodations that helped them be academically successful in high school and college. Participants seemingly were not prepared for immediate success after transitioning into college and did not achieve the same amount of academic success in college as they experienced in high school.

“First time around college was a lot more intense than I expected it to be. I had always been the smartest kid in my class and I was able to breeze by with minimal effort just going off my intelligence. I got swamped in the course work first time around to the point I dropped out” (Allen).

Allen struggled his first time around because he often received a lighter easier workload while in high school. He could easily pass classes solely based on his intelligence and was normally not academically challenged. Students with ADHD have a high dropout rate.

In brief, among the central themes that students with ADHD highlighted as affecting their preparation for college were academic accommodations, extracurricular activities, time management, external support, therapy, being babied, technology and reinforcement. In the following section, I discuss from my participants’ standpoint

perspective some practical lessons that can improve special education for those with ADHD interested in higher education.

Chapter 5

DISCUSUON

All participants had an IEP and some had a 504 plan in high school that allowed them specific accommodations in the classroom and with their studies. Although participants were satisfied with their accommodations and felt academic success would be unachievable without them, participants still felt overwhelmed and unprepared for academic success after transitioning into college. When asked what advice participants would give to incoming freshman diagnosed with ADHD, the common advice participants would give is to utilize the resources on campus and get the services that are there for them. Every participant explicitly stated that it is important to receive the services on campus that are provided, even if students do not plan on using them. Just knowing the services are available if they are ever needed is a security blanket. Participants reported that often if you do not get your accommodations early enough in the semester students may miss out on the opportunity to receive them.

Findings from this study support previous research that college students with ADHD often struggle academically once they transition into college until they received their “wake up call” by failing a class or classes (Meaux et. al. 2009). Even though college students with ADHD are satisfied with their accommodations, they continue to struggle in college due to poor concentration skills, inability to self-regulate and manage their own time (Reaser et. al. 2007). Results from this study suggest that students with ADHD need more than just accommodations while in high school to help prepare them for academic success in college. They need extensive interventions that extends beyond

just academics because their symptoms often interfere with their ability to learn because of their behavioral challenges.

Continuing accommodations is necessary to meet the academic needs of students with ADHD, but they also need assistance coping and modifying their behavior. Hence, the participant's belief that being active in extracurricular activities allowed them to feel more confident and satisfied with their academic achievement. Extracurricular activities can teach them several things they are not always learning in class such as self-advocacy and time management. Perhaps high schools should be transitioning and training students with ADHD to be more self-sufficient and self-reliant. High schools should also be encouraging students to participate in extracurricular activities that can teach them necessary tools needed to be academic successful in college that accommodations cannot provide for them.

Accommodations are a great tool that help support students with ADHD be academically successful, however providing only accommodations keeps students with ADHD from learning skills that can be applied to their academics when they work more independently. Perhaps high schools can create a transitional program for students with ADHD that have college aspirations; the program could create an environment that is like the independent academic style of college. Students with ADHD should be required to participate in their IEP of their senior year, coached and allowed to speak up in the meeting and assume leadership roles. This experience allows students the opportunity to practice self-advocacy. High schools should assist ADHD students' need to transition into college and not just "passing" them through and only catering to their academic

needs. There is a need to teach those that have ADHD skill that will allow them to be successful in college before needing a “wake up call”.

Learning skills is key to academic success and participant’s responses show that accommodations alone are not enough to adequately prepare students with ADHD to be successful in college. High schools cannot require students to participate in extracurricular programs, but while having IEP meetings staff and teachers could recommend it to parents. Students continue to struggle with self-advocacy and self-reliance, but the student cannot be entirely blamed for their inadequate preparation. As students are often left out or have school staff, psychologist and parents pulling the strings every step of the way when student’s individualized programs are developed and revised. Schools can develop curriculum that teaches students coping skills, and how to be more self-reliant and be a stronger advocate for themselves in a school setting. Perhaps family-based therapy can teach students and parents techniques that reinforce similar skills in their home setting as it would apply to school. Furthermore, youth with ADHD can experience heightened behavior issues can greatly increase when there is poor management of youth behavior and family relationships (Lo et al. 2016). Evidently, family based interventions are necessary because those that have stronger support systems are often more academically successful (Lo et al. 2016). No participant reported family-based therapy in this study, though, the practice is very scarce and further research can help determine its value in helping with college preparedness. Not only do schools need to do a better job preparing students for academic success in college, but so do parents/guardians. The responsibility should not rely on strictly the institution, but the

institution and the family as well. Providing accommodations alone and pushing students through high school is not good enough, and students with ADHD are suffering and struggling once they enter college.

In addition to teaching coping skills and offering therapy, we must also look at the schools themselves, more specifically special education. Schools need to be further examined about the effectiveness of their special education programs. Many times, society points the finger at the student for struggles in college and blames them for their academic inadequacy. Students with ADHD often do show symptoms that can negatively affect their academic success, but are these not the same issues we can also witness in students that have not been diagnosed with ADHD and are successful? It may not be uncommon to walk into a college lecture hall and see students displaying some of the same attributes as someone with ADHD by: fidgeting, talking amongst themselves, seeming to squirm, daydreaming, disorganized, forgetful. So, why is it that these same students can still be success academically displaying these same problem behaviors? Yes, it may be because they do not possess similar cognitive deficiency as students with ADHD, but there is a possibility that another factor could contribute to the issue, Special Education. We must also examine the academic curriculum and explore the possibility students with ADHD may be receiving a subpar education while in Special Education. Students with ADHD that had multiple classes in Special Education might be academically behind because of their course work they received was not as extensive as their peers or were just not challenged enough intellectually.

Although, this study goes into great depth in capturing participant's perceptions of interventions and services they received, there are still some limitations to this study. Geographical location of the participant's high school they attended, class and gender were not considered when conducting interviews. Further research needs to be done to determine if there is a difference in quality of services that are provided based on the geographical location of the high school participants attended i.e. rural or urban areas. Additionally, research needs to be conducted to determine if there is a difference in the quality of services that are provided for those that come from higher, middle or lower class backgrounds. This study also does not go into depth to determine if different types of interventions and accommodations work better or worse based on participants gender. These three limitations need further investigation to determine if it impacts participant's perception of interventions and accommodations.

Some selected recommendations include that student's participant in extracurricular activities could prove to have a positive effect on students with ADHD. Participants who reported partaking in extracurricular activities in high school felt more confident in their academic success. Those who were in leadership roles reported even more success and reported higher grade point averages. Previous research has proven that external supports are extremely beneficial to students with ADHD; however, little to no evidence has been shown that students with ADHD are learning critical skills to create or maintain these connections. Additionally, participating in extracurricular activities may not only teach valuable skills, but also provide students with a stronger and a more diverse external support system. If students are accustomed to participating in

extracurricular activities they may continue to after they enter college. However, more research would need to be conducted to determine if there is a strong correlation between extracurricular activities and academic success for college students with ADHD.

If students with ADHD are constantly struggling when they enter college and are feeling unprepared there must be a systemic issue with our current secondary education institutions. It seems the goal is to push students through the secondary educational system, but not prepare them for higher education. Students are provided IEPs and 504 plans, but continue to struggle at the next level, perhaps high school needs a “wake up call”, where they will be provided the extra external support and resources that could aid them maximize student achievement. This support would allow students’ learning experiences to occur in a less intense environment and prepare them not only for success in higher education, but life as well.

In Conclusion

This study explores and presents the standpoint views of college students with ADHD of whether they felt they were adequately prepared for college. Participants reported they felt their high schools did not adequately prepare them for academic success in college. Participant’s reported many reasons for their academic struggles in college from being disorganized, not advocating for services or just the workload was more intense than they expected. ADHD diagnosis continues to rise in adolescents, which means there will potentially be more students continuing to transition into college with an ADHD diagnosis. Students with ADHD struggle initially in college, have lower grades and higher dropout rates in comparison to those that do not have ADHD. Using standpoint

theory this study captures the point of view of the marginalized group of college students with ADHD and their belief that they were inadequately prepared by their high school. With strong evidence to back up ADHD students' standpoints, it is time that some adjustments be made to our high school's attempt in preparing students with ADHD to be academically successful in college. After presenting lived academic experiences that come with an ADHD diagnosis in academia, I hope this study shines light on areas or spark ideas that our educational system can use to improve college readiness. Even though this study was conducted using a small sample size, the qualitative findings reinforce previous research and generates the questions: why do college students with ADHD still struggle? Why have our school systems not found a better way to equip students with the tools and skills to be successful in college? Moving forward engages interesting new ideas that need further research; but it may generate answers to solving the issue of students with ADHD being unprepared for academic success once they transfer into college. The investment in these students' academic success will bring greater social-ethical and financial returns to society than if we remain in the normalized path of neglect and failure.

Appendix A

Interview Questions

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| <ol style="list-style-type: none"> 1) How are you doing? 2) Is college what you expected it would be? Why or Why not? 3) How are you currently doing in school? 4) How old were you when you were first diagnosed with ADHD? 5) What grade were you in? 6) What age and grade were services first offered? 7) What type of services were offered to you during high school? <ol style="list-style-type: none"> a. What did you like about the services? b. What did you dislike about the services? 8) How do you feel services you received impacted your academic success? Why? 9) What type of impact do you feel those services have on your current academic success? 10) Did you participate in behavior modification interventions? If so, what type? Do you feel it was beneficial? <ol style="list-style-type: none"> a. Did it help you be more successful in academic success (e.g., GPA and self-regulation in class)? 11) What was most effective about the services you received? <ol style="list-style-type: none"> a. What were the least effective areas of the services you received? 12) What skills did you learn in high school that you still use now that help you be successful? | <ol style="list-style-type: none"> 13) Do you feel the services you received in high school adequately prepared you to transition to college? Why or why not? 14) Do you feel the skills you learned in high school apply to your academic achievement in college? 15) What were some of your support services you had other than school? 16) Do you currently use academic support services now? 17) What interventions do you feel have been the most effective in your academic achievement in college and high school? Why? 18) What are some similarities between services in high and college? What are some differences? 19) What inspired you to seek out services in college? 20) What advice would you give to incoming freshman that have been diagnosed with ADHD? 21) What type of impact did interventions have on your GPA in college and high school? 22) How satisfied are you with your academic development? Why or why not? 23) What do you feel high schools can do to improve their academic supports for students diagnosed with ADHD? 24) What do you feel colleges can do to improve their academic supports for students diagnosed with ADHD? |
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Appendix B

Ethical Considerations

I took many precautions to ensure all participants rights, values, needs were protected while gathering data to assure ethical research was conducted. To protect the participants' rights and meanings the following tactics were used: 1) Participants identities remained confidential and pseudonyms were used. 2) I presented participants a written consent form and their consent was verbally recorded on an audio recording device. Having participant verbally state consent on audio recorder will show active consent and further reassure me that the participant understands the consent form and their rights. Participants read over the form, and then I verbally reiterate important points such as: subject's ability to end interview at any time, their participation is voluntary and participation will not affect their current services or future services with the university. The participants were given a consent form to take home for their records. The consent form included information to free mental health resources that are offered on campus to help support students. ADHD is a potentially stigmatizing, sensitive topic for some and may have had negative experiences in the past based on their diagnosis. No signature was collected on the consent form to avoid collecting identifiable information. Participant's verbal consent to take part in the interview and to be audio-recorded maintains separation between the participant and identifiable information. Participants may have felt reassured and potentially answer more honestly knowing their identity will remain as confidential as possible. The principle investigator did not obtain signatures to fully protect the participant and reassure them that their identity would not be exposed. 3) Participants

reviewed the collected data to ensure accuracy. 4) Prior to beginning any research or data collection a Human Subjects application was submitted and approved by the university's department of Sociology and university's Institution Review Board (IRB).

Appendix C

Researcher's Positionality

I have worked at a public school as a behavior support assistant around many students diagnosed with ADHD for approximately four years. I have witnessed high school students diagnosed with ADHD and the interventions they have or have not received. From my experiences, I am curious how academically prepared these students are for college and if these students feel they were adequately prepared. I also explore how these students would function when presented the opportunity to be independent in college; especially, after receiving interventions and having many support services while in high school. I have predetermined perceptions and biases about ADHD that I bring to this study. As a result, my biases may shape my interpretation of results, but I remain reflexive and conscious about these perceptions and seek to achieve objectivity. One way of ensuring this objectivity is by employing triangulated research approaches, benefitting from my first-hand experiences for the past four years, my interview questions and my extensive investigation of previous research. After collecting data, I will also go over my notes with each participant to make sure that I have grasped their meaning of their responses and not imposed my interpretation of their meanings.

Works Cited

- Akinbami, Lara J., xiang Liu, Patricia N. Pastor, and Cynthia A. Reuben. 2011. "Attention Deficit Hyperactivity Disorder Among Children Aged 5–17 Years in the United States, 1998–2009." *Centers for Disease Control and Prevention*. Retrieved January 23, 2017 (<https://www.cdc.gov/nchs/data/databriefs/db70.htm>).
- Allsopp, David H., Esther H. Minskoff, and Les Bolt. 2005. "Individualized Course-Specific Strategy Instruction for College Students with Learning Disabilities and ADHD: Lessons Learned from a Model Demonstration Project." *Learning Disabilities Research and Practice* 20(2):103–18.
- American Psychiatric Association. 2014. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. Washington: American Psychiatric Publishing.
- Anon. 2016. "Facts About ADHD." *Centers for Disease Control and Prevention*. Retrieved January 24, 2017 (<https://www.cdc.gov/ncbddd/adhd/facts.html>).
- Anon. 2017. "Centers for Disease Control and Prevention." *Centers for Disease Control and Prevention*. Retrieved November 5, 2017 (<https://www.cdc.gov/ncbddd/adhd/index.html>).
- Barkley, Russell A., Mariellen Fischer, Lori Smallish, and Kenneth Fletcher. 2002. "The Persistence of Attention-Deficit/Hyperactivity Disorder into Young Adulthood as a Function of Reporting Source and Definition of Disorder." *Journal of Abnormal Psychology* 111(2):279–89.

- Bussing, R., F. A. Gary, T. L. Mills, and C. W. Garvan. 2007. "Cultural Variations in Parental Health Beliefs, Knowledge, and Information Sources Related to Attention-Deficit/Hyperactivity Disorder." *Journal of Family Issues* 28(3):291–318.
- Claycomb, Cynthia D., Joseph J. Ryan, Lori J. Miller, and Summer D. Schnakenberg-Ott. 2004. "Relationships among Attention Deficit Hyperactivity Disorder, Induced Labor, and Selected Physiological and Demographic Variables." *Journal of Clinical Psychology J. Clin. Psychol.* 60(6):689–93.
- Connor, David J. 2012. "Helping Students with Disabilities Transition to College." *TEACHING Exceptional Children* 44(5):16–25.
- Daley, D. and J. Birchwood. 2010. "ADHD and Academic Performance: Why Does ADHD Impact on Academic Performance and What Can Be Done to Support ADHD Children in the Classroom?" *Child: Care, Health and Development* 36(4):455–64.
- Döpfner, Manfred, Dieter Breuer, Nora Wille, Michael Erhart, and Ulrike Ravens-Sieberer. 2008. "How Often Do Children Meet ICD-10/DSM-IV Criteria of Attention Deficit-/Hyperactivity Disorder and Hyperkinetic Disorder? Parent-Based Prevalence Rates in a National Sample – Results of the BELLA Study." *European Child & Adolescent Psychiatry Eur Child Adolesc Psychiatry* 17(S1):59–70.

- Efron, D., Fc Jarman, and Mj Barker. 1998. "Child and Parent Perceptions of Stimulant Medication Treatment in Attention Deficit Hyperactivity Disorder." *Journal of Pediatrics and Child Health J Pediatric Child Health* 34(3):288–92.
- Fleming, Andrew P. and Robert J. McMahon. 2012. "Developmental Context and Treatment Principles for ADHD Among College Students." *Clinical Child and Family Psychology Review* 15(4):303–29.
- Frances, Allen. n.d. "POV. No Child Left Undiagnosed." *Psychology Today* 47:48–49. September 23, 2016 (<https://www.psychologytoday.com/blog/saving-normal/201404/no-child-left-undiagnosed>).
- Healey, Dione M., Carlin J. Miller, Katia L. Castelli, David J. Marks, and Jeffrey M. Halperin. 2008. "The Impact of Impairment Criteria on Rates of ADHD Diagnoses in Preschoolers." *Journal of Abnormal Child Psychology J Abnorm Child Psychol* 36(5):771–78.
- Huang, Angela, Kapila Seshadri, Tara Anne Matthews, and Barbara M. Ostfeld. 2013. "Parental Perspectives on Use, Benefits, and Physician Knowledge of Complementary and Alternative Medicine in Children with Autistic Disorder and Attention-Deficit/Hyperactivity Disorder." *The Journal of Alternative and Complementary Medicine* 19(9):746–50.

- Hutchinson, E. et al. 2001. "Can Parents Accurately Perceive Hyperactivity in Their Child?" *Child: Care, Health and Development Child Care Health Dev* 27(3):241–50.
- Kaminski, Patricia L., Patrick M. Turnock, Lee A. Rosén, and Stephanie A. Laster. 2006. "Predictors of Academic Success Among College Students with Attention Disorders." *Journal of College Counseling* 9(1):60–71.
- Koerting, J. et al. 2013. "Barriers to, and Facilitators of, Parenting Programmes for Childhood Behaviour Problems: a Qualitative Synthesis of Studies of Parents' and Professionals' Perceptions." *European Child & Adolescent Psychiatry* 22(11):653–70.
- Koerting, J. et al. 2013. "Barriers to, and Facilitators of, Parenting Programmes for Childhood Behaviour Problems: A Qualitative Synthesis of Studies of Parents' and Professionals' Perceptions." *European Child & Adolescent Psychiatry Eur Child Adolesc Psychiatry* 22(11):653–70.
- Larsson, J.-O., P. Lichtenstein, I. Fried, E. El-Sayed, and P.-A. Rydelius. 2000. "Parents' Perception of Mental Development and Behavioural Problems in 8 to 9-Year-Old Children." *Acta Paediatrica* 89(12):1469–73.
- Larsson, J.-O., P. Lichtenstein, I. Fried, E. El-Sayed, and P.-A. Rydelius. 2000. "Parents' Perception of Mental Development and Behavioural Problems in 8 to 9-Year-Old Children." *Acta Paediatrica* 89(12):1469–73.

- Lee, Dong Hun, T. Oakland, G. Jackson, and J. Glutting. 2008. "Estimated Prevalence of Attention-Deficit/ Hyperactivity Disorder Symptoms Among College Freshmen: Gender, Race, and Rater Effects." *Journal of Learning Disabilities* 41(4):371–84.
- Levy, Sharon et al. 2014. "Childhood ADHD and Risk for Substance Dependence in Adulthood: A Longitudinal, Population-Based Study." *PLoS ONE* 9(8).
- Lewis-Morton, Ruth, Rudi Dallos, Lynn McClelland, and Rachel Clempson. 2013. "“There Is Something Not Quite Right with Brad...’: The Ways in Which Families Construct ADHD Before Receiving a Diagnosis." *Contemp Fam Ther Contemporary Family Therapy* 36(2):260–80.
- Lo, Herman H. M., Samuel Y. S. Wong, Janet Y. H. Wong, Simpson W. L. Wong, and Jerf W. K. Yeung. 2016. "The Effect of a Family-Based Mindfulness Intervention on Children with Attention Deficit and Hyperactivity Symptoms and Their Parents: Design and Rationale for a Randomized, Controlled Clinical Trial (Study Protocol)." *BMC Psychiatry* 16(1).
- Lunau, Kate. 2013. "Giving ADHD A Rest." *Maclean's* 127(8):48–50.
- Morgan, Paul L., Marianne M. Hillemeier, George Farkas, and Steve Maczuga. 2014. "Racial/Ethnic Disparities in ADHD Diagnosis by Kindergarten Entry." *J Child Psychol Psychiatr Journal of Child Psychology and Psychiatry* 55(8):905–13.
- Parker, David R. and Karen Boutelle. 2009. "Executive Function Coaching for College Students with Learning Disabilities and ADHD: A New Approach for Fostering Self-Determination." *Learning Disabilities Research & Practice* 24(4):204–15.

Pfiffner, Linda J., Miguel Villodas, Nina Kaiser, Mary Rooney, and Keith Mcburnett.

2013. "Educational Outcomes of a Collaborative School–Home Behavioral Intervention for ADHD." *School Psychology Quarterly* 28(1):25–36.

Price-Ellingstad, Debra et al. 2000. *A Guide to the Individualized Education Program*.

Washington, DC: Office of Special Education and Rehabilitative Services, U.S. Dept. of Education.

Reaser, Abigail, Frances Prevatt, Yaacov Petscher, and Briley Proctor. 2007. "The

Learning and Study Strategies of College Students with ADHD." *Psychology in the Schools* 44(6):627–38.

Ryan, Joseph B., Antonis Katsiyannis, and Elizabeth M. Hughes. n.d. "Medication

Treatment for Attention Deficit Hyperactivity Disorder." *Routledge Taylor & Francis Group*.

Shaffer, David and Xavier Castellanos. 2013. "Neurodevelopmental Disorders." Pp. 59–

66 in *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C.: American Psychiatric Association.

Sonuga-Barke, E. J. S., E. Williams, M. Hall, and T. Saxton. 1996. "Hyperactivity and

Delay Aversion III: The Effect on Cognitive Style of Imposing Delay After Errors." *Journal of Child Psychology and Psychiatry* 37(2):189–94.

Ostergaard, Søren D. et al. 2016. "Predicting ADHD by Assessment of Rutter's

Indicators of Adversity in Infancy." *PLOS ONE PLoS ONE* 11(6).

- Stolzer, J. M. 2009. "Attention Deficit Hyperactivity Disorder: Valid Medical Condition or Culturally Constructed Myth?" *Ethical Human Psychology and Psychiatry Ethic Hum Psychol Psych* 11(1):5–15.
- Stroh, Jennifer, William Frankenberger, La Vonne Cornell-Swanson, Courtney Wood, and Stephanie Pahl. 2007. "The Use of Stimulant Medication and Behavioral Interventions for the Treatment of Attention Deficit Hyperactivity Disorder: A Survey of Parents' Knowledge, Attitudes, and Experiences." *Journal of Child and Family Studies* 17(3):385–401.
- Szymanski, Kate, Linda Sapanski, and Francine Conway. 2011. "Trauma and ADHD – Association or Diagnostic Confusion? A Clinical Perspective." *Journal of Infant, Child, and Adolescent Psychotherapy* 10(1):51–59.
- Theule, Jennifer, Judith Wiener, Maria A. Rogers, and Imola Marton. 2010. "Predicting Parenting Stress in Families of Children with ADHD: Parent and Contextual Factors." *Journal of Child and Family Studies J Child Fam Stud* 20(5):640–47.
- Troiano, Peter F., Julie Ann Liefeld, and Jennifer V. Trachtenberg. 2010. "Academic Support and College Success for Postsecondary Students with Learning Disabilities." *Journal of College Reading and Learning* 40(2):35–44.
- Uretsky, Michael and Donna Andrews. 2013. "Finding the Right Fit: Using the College Search Process to Reduce Anxiety for Students with Learning Disabilities and Adhd." *Journal of college admission* 221:46–52.

- Vaughan, Brigette S., John S. March, and Christopher J. Kratochvil. 2011. "The Evidence-Based Pharmacological Treatment of Paediatric ADHD." *The International Journal of Neuropsychopharmacology* 15(01):27–39.
- Walker, Lenore E. and David L. Shapiro. 2010. "Parental Alienation Disorder: Why Label Children with a Mental Diagnosis?" *Journal of Child Custody* 7(4):266–86.
- Weiss, Gabrielle and Lily Trokenberg. Hechtman. 1993. *Hyperactive Children Grown up: ADHD in Children, Adolescents, and Adults*. New York: Guilford Press.
- Weyandt, Lisa L. and George J. Dupaul. 2008. "ADHD in College Students: Developmental Findings." *Developmental Disabilities Research Reviews Dev Disabil Res Revs* 14(4):311–19.
- Whalen, Carol K. 2000. "Attention-Deficit/Hyperactivity Disorder." in *Encyclopedia of psychology*, vol. 8, edited by A. E. Kazdin. Washington, D.C.: American Psychological Association.