

THE COLLEGE TRANSITION EXPERIENCE OF STUDENTS WITH ADHD

by

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B.A., Colorado Christian University, 1999

M.S., Kansas State University, 2001

AN ABSTRACT OF A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Special Education, Counseling, & Student Affairs

College of Education

KANSAS STATE UNIVERSITY

Manhattan, Kansas

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## **Abstract**

This qualitative study explored the college transition experience of eight first-year students with Attention Deficit Hyperactivity Disorder at a midwestern research university. Using a three-interview-series model, students participated in structured interviews designed to explore their backgrounds, discuss their current experiences on campus, and discover what they have learned from their college transition experiences. The findings reveal that these students with ADHD did not adequately plan their college transitions, relied heavily on family for assistance with their transition and medical treatment, did not utilize many campus resources available to them, and lacked strategies to manage their ADHD symptoms. Additionally, they found the process of becoming college students to be stressful due to the many responsibilities inherent in the role. Findings also indicate that students relied on medication to perform academically in college; however, they lacked knowledge of medication and treatment options. The results contribute to research addressing individuals with ADHD across the lifespan, particularly in college, as well as research of college students and college environments. Recommendations for practice and future research are discussed.

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Approved by:

Major Professor  
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## CHAPTER ONE

### Introduction

Attention-Deficit Hyperactivity Disorder (ADHD) is a chronic disorder characterized by impulsivity, hyperactivity, and inattention (American Psychiatric Association, 2000). It is the most prevalent developmental disorder, affecting an estimated 3-7% of school-aged children (American Psychiatric Association, 2000) and 1-4% of the college student population (Glutting, Youngstrom, & Watkins, 2005). It was once thought that ADHD emerged in childhood and faded during adolescence, but the current understanding of ADHD includes its persistence into adulthood, with documented persistence of symptoms in nearly 70% of cases (Weiss & Hechtman, 1993). In adults, the most common symptoms include inattention, impulsivity, disorganization, and a lack of self-regulation. The hyperactivity often associated with ADHD in childhood is frequently less apparent in adulthood (Barkley, 2005; Murphy & Gordon, 1998).

More than 30 years of disability and special education laws, such as the Americans with Disabilities Act, Individuals with Disabilities Education Act, and Section 504 of the Rehabilitation Act, have mandated special education services for students with disabilities (Wolf, 2001). As a result, increasing numbers of students with disabilities such as ADHD are successfully completing high school and attending college. Although fewer students with ADHD attempt college or university degree programs compared to their non-ADHD peers, a steady increase in the number of young adults with ADHD enrolling in colleges and professional schools has been reported (Dunn, 1995; Vogel & Adelman, 1992; Weiss & Hechtman, 1993; Wolf, 2001). The greatest increase in disabilities on college campuses is in students with “hidden disabilities,” such as ADHD (Wolf, 2001). Students with ADHD are not required to

report to disability support services; therefore, the actual number of college students with ADHD is speculative (Weyandt & DuPaul, 2006).

Stage and Manning (1992) assert that colleges which recruit and admit students with learning disabilities have a moral obligation to provide academic support resources necessary for those students to succeed. This obligation is a substantial undertaking for colleges and universities, as the academic and social challenges for students with ADHD are numerous. Even though the research on these students is limited, the literature clearly illuminates the adverse impact ADHD has on many aspects of life as well as the additional challenges that face them (Toner, O'Donoghue, & Houghton, 2006).

Individuals with ADHD are more likely to earn lower grades, fail or repeat grades, and complete fewer years of education (Mannuzza, Klein, Bessler, Malloy, & Hynes, 1997; Slomkowski, Klein, & Mannuzza, 1995; Wilson & Marcotte, 1996). They also report lower levels of self-esteem than non-ADHD peers (Dooling-Liftin & Rosen, 1997) and display increased psychological symptoms (Weyandt, Rice, Linterman, Mitzlaff, & Emert, 1998). College students with ADHD experience a lower quality of life than students without ADHD (Grenwald-Mayes, 2002) and report higher ratings of internal restlessness (Weyandt et al., 2003).

Upon graduation from high school, college-bound students with ADHD are faced with a new set of challenges related to the college transition. The college transition has been defined by Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, and Jalomo (1994) as the "human relationships, experiences, and themes characteristic of the processes by which students become (or fail to become) members of the academic communities on campus" (p. 57). In addition to the traditional challenges inherent to the college transition, this time in life is often the first time students with ADHD have been in an unstructured setting, without parents or teachers to provide

or enforce boundaries. Variable course schedules and the freedom and distractions of college life can be difficult for even the most promising college students with ADHD. With little external structure and lack of personal skills to manage the academic and social demands of college life, many students with ADHD have difficulty adjusting (Farrell, 2003; Quinn, Ratey, & Maitland, 2001; Turnock, 1998).

Students with ADHD face obstacles in dealing with the information overload, new interpersonal relationships, unfamiliar physical environments, and increased responsibilities in all areas of their lives (Jones, Kalivoda, & Higbee, 1997). Students with ADHD often feel overwhelmed and frustrated with the multifaceted role of college student, and the increased responsibilities therein (Barkley, 2005; Quinn, 1994; Weiss, 1992). Wolf (2001) stated, “vulnerability is seen in the first two years of college, with notable difficulty in transition from secondary to postsecondary settings, particularly among young people with...ADHD” (p. 387). The attrition rate among college students with learning disabilities and “other” disabilities (e.g., ADHD) is double the dropout rate of students without disabilities (Wolf, 2001). In addition to the academic challenges they face, college students with ADHD are at greater risk for substance abuse, social interaction problems, low self-esteem, and high-risk sexual behaviors (Barkley, 2005; Kilcarr, 2001; McCormick, 1998; Weiss & Hechtman, 1993). Poor decision making and a chaotic college lifestyle can lead to academic failure, health-risk behaviors (e.g., smoking, drinking, and illicit drug use), aggressive driving behaviors, and decreased quality of life for students with ADHD (Farrell, 2003; Grenwald-Mayes, 2002; Richards, Deffenbacher, & Rosen, 2002).

Some of the difficulty in transitioning to college is suspected to be due to social factors. Kern, Rasmussen, Burd, and Wittschen (1999) suggested that college students with ADHD may

have difficulty obtaining social support from others, which could interfere with their adjustment to college. Another study found that few college students with ADHD have experience advocating for themselves and that most have a limited awareness of the full ramifications of ADHD, which affects the success or failure of these students (Meaux, Green, & Broussard, 2009).

Students' use of ADHD medication may play a role in the college transition process (Meaux et al., 2009; Rabiner, Anastopoulos, Costello, Hoyle, & Schwartzelder, 2008). Stimulant medications (e.g., Ritalin and Adderall) are often considered a primary treatment option and are well established in their ability to reduce symptoms of ADHD. However, little is known about how college students with ADHD use medications in their transition to college. The greater independence of adolescence may explain the decision made by many students with ADHD to stop taking stimulant medications (Meaux et al., 2009). Participants in a study by Meaux et al. (2009) reported that their parents and teachers believed that stimulant medications were beneficial, but the students decided to handle their ADHD independently without medication or mental health providers. Meaux et al. (2009) found that after the initial diagnosis of ADHD, healthcare professionals were rarely involved in the decision to stop or restart medications. The research on medications among college students with ADHD raises more questions than answers and indicates that the role of medication use of transitioning college students with ADHD deserves further exploration.

Research also suggests family of origin dynamics may impact the transition to college for students with ADHD (Grenwald-Mayes, 2001). Family provides an important context in which children learn to relate to the world. Families teach students how to carry on relationships, solve problems, set goals, and negotiate tensions between individual desires and societal expectations.

These are challenging tasks for all children, but especially for children with ADHD (Kendall, 1998). How parents of children with ADHD teach desired behaviors, handle misbehavior, set limits and expectations, and establish family identity and emotional climate may have an especially important impact on the social adjustment and developmental trajectory of children with ADHD (Hechtman, 1996; Kendall, 1998). A positive family emotional environment may foster resilience and help to buffer the effects of frustrating and difficult experiences and to build self-efficacy and self-esteem in children with ADHD (Brooks, 1994). Studies consistently confirm the importance of the family, particularly the primary caretaker, which is often the mother, in managing the lives of children with ADHD (Firmin & Phillips, 2009; Hansen & Hansen, 2006; Kendall, Hatton, Beckett, & Leo, 2003). One study of families with children with ADHD found that these families are characterized by vigilant and proactive family involvement in all aspects of their children's lives (Firmin & Phillips, 2009). This research supports the idea that parents of children with ADHD become strategists for ensuring their children accomplish established objectives, and these strategies center around the specific constructs of routine and structure. What is unknown is how families assist their children with ADHD through the transition to college and the role the family continues to serve in the college students' lives on campus.

Though the challenges facing students with ADHD are apparent and well documented, little is known about how best to support students with ADHD as they make the transition from high school to college (Meaux et al., 2009; Rabiner et al., 2008). Stage and Manning (1992) noted that the guidance available to college officials who seek to inform themselves of the needs of students with learning disabilities, including ADHD, is lacking. This sentiment is echoed by the results of numerous studies exploring ADHD in college students (e.g., DuPaul et al., 2001;

Weyandt, Linterman, & Rice, 1995; Wolf, 2001). Although research clearly details the substantial number of students with ADHD enrolling in colleges and universities as well as the challenges they face (Dunn, 1995; DuPaul et al., 2001; Vogel & Adelman, 1992; Weyandt et al., 1995; Wolf, 2001), research is not sufficient to identify the needs of this population and determine how best to support these students as they make the transition from high school to college (Meaux et al., 2009; Rabiner et al., 2008).

### **Need for the Study**

Calls for research on ADHD in college students include those that address “other possible predictors of adjustment, which may help college and university staff implement better strategies for ensuring that undergraduate students with ADHD are more successful in meeting their individual goals” (Shaw-Zirt, Popali-Lehane, Chaplin, & Bergman, 2005, p. 118). Despite interest in the subject and the work of various authors in the area (e.g., Dooling-Liftin & Rosen, 1997; Rabiner et al., 2008; Shaw-Zirt et al., 2005; Weyandt & DuPaul, 2006; Wolf, 2001), there continues to be a dearth of information exploring the ways that individuals with ADHD adapt to the varied and unique challenges of college life (Shaw-Zirt et al., 2005).

Understanding the college transition is important not only to higher education, but also to the understanding of ADHD across the lifespan. In their summary of current research on adult ADHD, Ramsay and Rostain (2008) stated:

Adult ADHD research should continue to target various life transitions and challenges faced during the course of adult development and do so at the “point of performance” as much as possible. For example, the transition to the workplace and/or college (including community college) represents nodal points during which ADHD adults experience

predictable problems that lead them to seek help. Research conducted in these settings would yield valuable data. (p. 625)

Greater understanding of the college transition process as experienced by students with ADHD is needed to better serve these students whose numbers are increasing on campus. In response, this qualitative study devoted to understanding students' lived experience examined how students with ADHD transition from high school to college.

### **Problem Statement**

Research indicates that students with ADHD are entering college at higher rates than ever before, comprising an estimated 1-4 % of college students (American Psychiatric Association, 2000; Glutting et al., 2005). Research has also documented the struggles that students with ADHD often experience upon leaving home and beginning an independent lifestyle (Farrell, 2003; Quinn et al., 2001; Turnock, 1998). Despite an increase in the research of school-aged children with ADHD and knowledge about ADHD as a developmental disorder, little is known about how to help students with ADHD successfully transition to college.

### **Statement of Purpose and Research Questions**

The purpose of this qualitative study was to explore the experiences of the college transition process with a sample of first-year college students diagnosed with ADHD. It was anticipated that the personal experiences, challenges, and obstacles revealed in this study could inform practices within higher education to better serve the growing number of college students with ADHD. This knowledge may also help high school counselors and parents of students with ADHD in preparing students to manage the transition to the college environment.

From a review of literature relating to college students with ADHD, five research questions evolved to guide this exploratory study. These questions sought to understand the

college transition experience of students with ADHD as they move from living and studying at home to living and studying in the college environment. The research questions that framed this study are:

1. How do college students with ADHD plan for and manage the college decision-making process?
2. What roles do family members and others play in the transition to college?
3. What campus resources and personal strategies do students with ADHD utilize in the transition to college?
4. What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?
5. How do students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?

### **Limitations**

While this study yielded valuable insight into the college transition of students with ADHD, several limitations to the study should be considered. First, the sample included in this study was small, with three interviews for each of the eight participants, for a total of 24 interviews. This group of students likely share similar experiences with many other college students with ADHD, but cannot speak for the entire population of students. Therefore, these findings are representative of their experiences and cannot be generalized to all students with ADHD. Second, all of the students in this study were enrolled at the same university. The perceptions and experiences of students with ADHD at a different institution may differ significantly from those in this study. For these reasons, it is important that the implications drawn from these findings are specific to the experiences of the sample group under study. A



third limitation is that all students in the study were Caucasian. The sample was selected using criterion based selection, and those who met the criteria and contacted the researcher were included in the study. The only students who expressed interest in participating in the study were Caucasian students. Very little research exists on minorities with ADHD, and this study cannot shed light on their experiences due to the fact that none are represented in this study. Finally, the study depended on students with ADHD responding to announcements seeking students with ADHD to participate in the study. This required initiative on the students' part to follow through by contacting the researcher and completing the required paperwork and interviews. It is possible that the students who did participate may be more responsible or motivated than those who did not participate in the study.

### **Definitions of Terms**

Attention Deficit Hyperactivity Disorder (ADHD): a chronic disorder characterized by impulsivity, hyperactivity, and inattention (American Psychiatric Association, 2000). It is the most prevalent developmental disorder, affecting an estimated 3-7% of school-aged children (American Psychiatric Association, 2000) and 1-4% of the college student population (Glutting et al., 2005).

College Transition: the “human relationships, experiences, and themes characteristic of the processes by which students become (or fail to become) members of the academic communities on campus” (Terenzini et al., 1994, p. 57).

Students with ADHD: For the purposes of this research project, students with ADHD will be first-year college students who have had an active diagnosis of ADHD for at least two years, and are currently attending college at least one hour away from their family of origin.

## CHAPTER TWO

### Literature Review

The purpose of this qualitative study was to explore the experiences of the college transition with a sample of first-year college students diagnosed with ADHD. To gain insight and establish a foundation upon which to build this study, the following topics related to the proposed research are addressed in this chapter: (a) background and prevalence of ADHD, (b) gender and ADHD, (c) family and ADHD, (d) problems and challenges of ADHD, (e) medication treatment for ADHD, (f) ADHD on campus, and (g) the college transition.

#### Background and Prevalence

Attention Deficit Hyperactivity Disorder (ADHD) is the most prevalent developmental disorder, currently described by the *Diagnostic and Statistical Manual of Mental Disorders* as a persistent and frequent pattern of developmentally inappropriate inattention and impulsiveness with or without hyperactivity (American Psychiatric Association, 1994). ADHD's documented origin dates back over 100 years with George Still's 1902 research (as cited in Shaw, 2004). For years, ADHD was viewed as a controversial condition (Kendall et al., 2003), but is now among the most thoroughly researched conditions affecting children, and evidence strongly suggests that biology is responsible for behavioral disinhibition and other core symptoms (Barkley, 2005). ADHD is now widely publicized and acknowledged by individuals and organizations in the professional and private sector (Shaw, 2004).

ADHD accounts for the largest number of referrals to child mental health clinics of all psychiatric and behavioral problems in childhood (Kendall et al., 2003). Prevalence rates of ADHD are believed to be between 3% and 7% of school-aged children (APA, 2001). Recent studies indicate that 4.4 million children in the U.S. have a history of ADHD diagnosis (US

Department of Health and Human Services, 2007). These numbers are believed to be an underestimation due to the fact that many children, particularly girls, often go undiagnosed (Shaw, 2004). While it was once thought that children outgrow ADHD, the presence of ADHD symptoms in adulthood is well documented (Biederman, Faraone, Taylor, Sienna, Williamson, & Fine, 1998; Cantwell, 1996; Gittelman, Mannuzza, Shenker, & Bonagura, 1985). Studies suggest that up to 80% of children with ADHD continue to show significant symptoms of the disorder into late adolescence and adulthood (Klein & Mannuzza, 1991; Weiss & Hechtman, 1993).

### **Gender and ADHD**

Although ADHD affects both genders, most of the research exploring ADHD is devoted to males (Seidman, Biederman, Monuteaux, Valera, Doyle, & Faraone, 2005). Proportions of males with ADHD to females with ADHD vary from 2:1 to 10:1, depending on the study cited (Barkley, 2005; Kessler et al., 2006; McKee, 2008). The under-representation of girls in these studies is believed to be due to the fact that girls typically manifest symptoms in a less rebellious, defiant, and difficult manner than do boys. Girls are more likely to display a cooperative attitude within the home and school settings than do boys with ADHD (Shaw, 2004). Based on some clinical adult samples, Arnold (1996) suggested a more even sex ratio than in children, possibly because of more female self-referral (Biederman, Lapey, Milberger, Faraone, Reed, & Seidman, 1994) associated with a suggested greater willingness of females to admit ADHD symptoms to themselves and others. Arnold (1996) noted that when the age of self-referral is reached, males may neglect treatment more than females do.

In a study comparing the features of ADHD in symptomatic males and females, more similarities than differences were observed (Biederman et al., 2002). There are few significant gender-based differences in symptomology of ADHD or in overall level of psychopathology,

personality, emotional functioning, achievement, intelligence, or response to medications (Gingerich, Turnock, Liftin, & Rosen, 1998). Brown, Madan-Swain, and Baldwin (1991) hypothesized that females are socialized to internalize symptoms of ADHD (e.g., anxiety and low self-esteem) while males are socialized to externalize (e.g., aggression and hyperactivity). Females also present with the same degree of distractibility as males, but with fewer aggressive or hyperactive traits (Faraone, Biederman, Keenan, & Tsuang, 1991).

Diversity variables such as age, gender, race, ethnicity, and socioeconomic status have been relatively neglected in ADHD research (Gingerich et al., 1998). A review of literature in this area by Gaub and Carlson (1997) found that few studies included sufficient numbers of female participants to warrant gender-based conclusions. Research indicates that females tend to be just as disabled by ADHD as males. Despite this knowledge, females “tend to be excluded from most intervention and research regarding [ADHD] despite seeming similar in prognosis and response to intervention” (Gingerich et al., 1998, p. 421).

### **Family and ADHD**

The role of the family in the lives of people with ADHD is significant. Family provides an important context in which children learn to relate to the world. It is in the context of the family that children learn how to carry on relationships, solve problems, set goals, and balance individual desires and societal expectations. These tasks are challenging for all children, but especially for children with ADHD, which makes the role of family all the more important (Grenwald-Mayes, 2001).

Grenwald-Mayes (2001) found that families of individuals with ADHD showed no significant differences between participants with and without ADHD with respect to parental occupations. Fathers of those with ADHD were significantly more likely to have graduated from

college than those without ADHD. Those with ADHD were more likely to have a family member with ADHD than participants without ADHD.

Research indicates that ADHD takes a toll on family functioning. Many families of children with ADHD have been found to be characterized by conflict, more marital problems, more punitive child-rearing methods, a more negative emotional climate, higher levels of stress, and fewer positives than families with no children diagnosed with ADHD (Grenwald-Mayes, 2001). Mothers of children with ADHD have been reported as more negative, controlling, and coercive, as well as less positive in parent-child interactions than mothers of non-ADHD children (Johnston, 1996). An interesting finding is that these negative mother-child interactions appear to be initiated by characteristics and behaviors of children with ADHD, not the personality characteristics or parenting style of the mothers. Even though this negativity is child-initiated, research indicates that a fairly stable pattern of conflict and reciprocal negativity may develop in parent-child interactions (Barkley, Fischer, Edelbrock, & Smallish, 1991). Research indicates that ADHD in children predicts depression in mothers, even in the absence of comorbid conditions (Pelham et al., 1997).

Parents of children with ADHD have been found to have lower parental self-esteem than parents of children without ADHD, and this parental self-esteem was found to be inversely related to parents' perceptions of their children's behavior problems (Johnston, 1996). Perceptions of behavior problems reported by mothers of children with ADHD have been found to be related to an increase in parental stress (Lewis-Abney, 1993). Low parental self-esteem and parental stress are often compounded by the social isolation many families with children with ADHD experience due to the stress, criticism, and self-blame they experience during contacts with extended family and social contacts (Mash & Johnston, 1983). Research on the

effect of ADHD on the family indicates that parents of children with ADHD experience more negativity in their social life, less positivity in parenting, and higher levels of child-related stress than do parents of children who do not have ADHD (Barkley, 2005; Barkley, Anastopoulos, Guevremont, & Fletcher, 1992; Lewis-Abney, 1993).

Studies indicate that when children with ADHD receive medication and behavior improves, the quality of the parent-child interaction also improves (Cunningham & Barkley, 1997; Hechtman, 1996). However, a residual negative quality remains with children with ADHD and their mothers such that further problems in children's self-esteem and social competence may develop (Cunningham & Barkley, 1997; Hechtman, 1996). A 10-year follow-up of hyperactive children found that over time the use of punitive child-rearing methods decreased, but the emotional climate in the home did not become more positive until the child with ADHD left home (Hechtman, 1981, 1996).

While it is clear that the family unit is strained by ADHD, it is also clear that the family plays a critical role in the development of a child with ADHD. Parents are the immediate gatekeeper in decisions regarding help seeking for ADHD (Hansen & Hansen, 2006). In a qualitative study of college students with ADHD, Meaux et al. (2009) found that participants with ADHD all described positive relationships with their parents and indicated that parental support and reinforcement helped these students make it to college.

In addition, Kendall et al. (2003) conducted a qualitative study of children with ADHD in which the importance of the mother in the life of a child with ADHD was clearly visible. Participants with ADHD noted that their mothers were the people who helped most with their ADHD, and that the participants themselves worried about their own mothers because of the effects of ADHD on them and the family. Studies show that in two-parent families, mothers tend

to assume more responsibility than fathers related to their children's health care (Pelchat, Lefebvre, & Perreault, 2003; Petersson, Petersson, & Hakansson, 2003).

A qualitative study conducted with parents of children with ADHD revealed that for most parents, learning of their child's ADHD diagnosis was a positive experience (Hansen & Hansen, 2006). Parents viewed the problem as medical rather than psychological, although they experienced periods of great guilt and concern as a result of their doctors blaming them for their children's problems (Hansen & Hansen, 2006). Another qualitative study found that during the period following diagnosis, mothers adopted a medical explanation for their children's problems and, in turn, viewed medication positively (Singh, 2004). Fathers were more skeptical and were classified as either "reluctant believers" or "tolerant believers" based on their attitudes toward ADHD and treatments (Singh, 2003).

The parenting style of parents of children with ADHD has been described as "vigilant family involvement" (Firmin & Phillips, 2009, p. 1162). Parents of children with ADHD demonstrate a high degree of involvement in their children's lives, and a willingness to devote their time and resources to assisting their children in becoming successful. Parents were found to be attuned to children's needs and proactive in making adaptations and interventions as needed to accomplish family objectives (Firmin & Phillips, 2009). Parental strategies are of particular importance in families of children with ADHD; strategies centered around routine and structure being paramount to navigating daily life successfully. The parents' close involvement in the daily routines of life enabled them to successfully predict challenges and work to minimize or overcome them with their children (Firmin & Phillips, 2009).

Hansen and Hansen's (2006) qualitative study of parents of children with ADHD found that parents hoped to see their children continue to college, but doubted they would be able to

handle the academic challenge without medication. They stated, “When one mother thought of the frequent ‘binder checks’ that were required to keep her son’s school work in order, she often wondered, ‘Will I have to follow him to university?’” (p. 1279). The level of vigilance demonstrated by families of children with ADHD enables these children to be successful while living at home, but what is unknown is how the family role continues once the children with ADHD move on to college. In a study of college students with ADHD, Grenwald-Mayes (2001) reported that the relationship between family of origin dynamics and current quality of life is stronger for the group of college students with ADHD than for peers, indicating that family variables may be more important to the academic and life success of individuals with ADHD than for their counterparts who do not have ADHD (Grenwald-Mayes, 2001).

### **Problems and Challenges Associated with ADHD**

ADHD has been explored across the lifespan, with most research focusing on childhood. Kendall et al. (2003) found that children with ADHD report having difficulty with learning, thinking, behaving, and feeling, and describe having ADHD as being “hyper,” “bad,” and “weird.” Because it was first believed that ADHD was a disorder of childhood, most research began and ended with the childhood years. Now, according to longitudinal studies, researchers believe that the hyperactivity component of ADHD improves dramatically as children increase in age (Weiss & Hechtman, 1993). The challenges, however, continue.

Poor academic performance is one of the most prominent features associated with ADHD. Throughout schooling, students with ADHD as compared to students without ADHD, tend to have more academic problems such as lower grades, more failed or repeated grades, fewer years of education completed than other students, lower scores on standardized tests, and increased occurrence of learning disabilities (Carter, Krener, Chaderjian, Northcutt, & Wolfe,



1995; Hechtman, 1991; Lambert, 1998; Wilson & Marcotte, 1996). Not only have students with ADHD been found as a group to struggle with academic underachievement, but analyses indicate that as children exhibit a greater severity and pervasiveness of ADHD behaviors (measured by the ADHD severity index), they are more likely to achieve academically at a level below what would be predicted by their intellectual level (Barry, Lyman, & Klinger, 2002). “Hence, not only a categorical diagnosis of ADHD, but also the severity and pervasiveness of the ADHD symptoms, is a good predictor of academic underachievement” (Barry et al., 2002, p. 278).

Many studies have identified time management as a major source of impairment in students with ADHD (e.g., Barkley, 2005; Brand, Dunn, & Greb, 2002; Eaton & Wyland, 1996), and it is believed that this deficiency most likely continues into adulthood (Reaser, Prevatt, Petscher, & Proctor, 2007). Students with ADHD report poor abilities in selecting main ideas on tests and test strategies, which is likely related to their inability to concentrate and focus on tasks (Reaser et al., 2007).

Dunn (1995) found that adolescents who had been diagnosed with ADHD in childhood reported lower self-esteem in adolescence than matched controls. In addition, Slomkowski et al. (1995) reported that self-esteem in adolescence was positively correlated with psychosocial adjustment and negatively correlated with ADHD symptoms. Of special interest is the finding that even children who no longer had diagnosable ADHD reported significantly lower self-esteem as compared to controls with no mental disorders (Dunn, 1995). This finding suggests that difficulties in psychosocial functioning in late adolescence may be an especially salient feature of the longitudinal course of children with ADHD (Weiss & Hechtman, 1993), and implies that low self-esteem in adolescents with ADHD may not be simply a consequence of the condition (Dunn, 1995). Self-esteem is important to consider in individuals with ADHD, as self-

esteem in adolescence is correlated with eventual educational achievement and occupational rank in adulthood (Slomkowski et al., 1995).

Individuals with ADHD are at increased risk for poor social outcomes as they age (Mannuzza & Klein, 2000). These include few friends, poor social skills, and difficulty interacting with the opposite sex (Weiss & Hechtman, 1993). Compounding the difficulties of ADHD, a study by Paulson, Buermeyer, and Nelson-Gray (2005) showed that ADHD behavior elicits substantial rejection, which is important to understanding interpersonal processes in ADHD. Even though ADHD is a disorder that is diagnostically absent of any prominent affect, it can evoke negative mood leading to interpersonal rejection similar to that caused by depressive behavior. Those with ADHD are also more likely to exhibit a comorbid psychopathology, including high rates of affective disorders (Biederman et al., 1993; Cuffe, McKeown, Jackson, Addy, Abramson, & Garrison, 2001), and anxiety disorders (Mancini, Van Ameringen, Oakman, & Figueiredo, 1999).

Among the many concerns regarding the outcomes of adolescents with ADHD is research indicating that a substantial number of adolescents with ADHD are involved with the criminal justice system in their teens (Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1989). In addition, adolescents with ADHD are 40% more likely to experience teen pregnancy, 16% more likely to contract sexually transmitted diseases, 20-30% more likely to experience depression, and 18-25% more likely to develop a personality disorder as an adult as compared to peers without ADHD (Barkley, 2002). In a study of college students with ADHD it was found that students with ADHD were also more likely to have problems with alcohol or other drugs and were more likely to have been arrested for an offense more serious than a traffic violation (Grenwald-Mayes, 2001).

It is believed that in adulthood, the primary feature of ADHD shifts from hyperactivity to internal distractions such as daydreaming and a constant flow of ideas, which may or may not be related to the task at hand (Weyandt, et al. 2003). Executive dysfunctions are correlated to ADHD, and appear to be consistent across gender and age, at least through the late teenage years (Seidman et al., 2005). The most commonly reported symptoms of adults with ADHD in a study by Downey, Stelson, Pomerlau, and Giordani (1997) were difficulty sustaining attention, impatience, and mental restlessness, described by Conners (1999) as “inner restlessness” (p. 148).

A qualitative study by Toner, O’Donoghue, and Houghton (2006) identified chaos as the core social-psychological problem facing adults with ADHD. A “double life” was developing as a way to cope with the chaos. The participants in this study described their lives as chaotic, unsettled, erratic, and turbulent. They reported regularly searching for lost items and retracing steps, wasting time, being unable to complete tasks, feeling social isolation, and lacking self-esteem. The presence of a significant adult contributed to their ability to manage symptoms. The adults with ADHD felt their disorder to have a stigma, and kept it a secret from most people, even avoiding asking for workplace accommodations. They described “winging it,” learning to act confidently while fearing failure, and feeling as though they had a dual personality with constant highs and lows (Toner et al., 2006).

In a longitudinal study of adults with ADHD, Mannuzza et al. (1997) found significant deficits in educational attainment and occupational rank of participants with ADHD. Participants with ADHD completed 2.5 years less schooling than controls, and 23% of the group with ADHD did not graduate high school compared with 2% of the control group. The long-term outcomes of people with ADHD have not been explored in depth. Unfortunately, because research has

focused almost exclusively on children with ADHD, research on adults, including college students, is scarce. The existing research has in large part been carried out with White, male, middle-class subjects. Information on women and ethnic minorities with ADHD is limited, and these individuals are likely underserved (Gingerich et al., 1998).

Ramsay and Rostain (2008) suggest that the factors that promote effective coping with ADHD be explored in future research, believing that there may be attitudes and behaviors that foster a sense of resilience with which not only to manage symptoms, but also to foster positive well-being. They stated:

Just as there are positive prognostic indicators for ADHD, such as positive or minimal comorbidities, good social support, and intact intellectual functioning, there are likely to be common psychological factors found among individuals who have learned to cope well with ADHD and optimize their personal strengths. Conversely, there are likely attitudes, beliefs, and misinformation about adult ADHD that interfere with seeking help and following through on treatment. (p. 626)

### **Medication Treatment for ADHD**

Stimulant medications are often prescribed as a treatment for ADHD. Among those with ADHD, 91.9% have received medications at some point in their lives (Grenwald-Mayes, 2001). Although ADHD as a chronic disorder and symptoms often persist into adolescence and adulthood (Barkley, 2005), the number of children treated with stimulant medications appears to peak between the ages of 9 and 12 years before steadily declining (US Department of Health and Human Services, 2007). In other words, children with ADHD appear to stop taking medications despite ongoing symptoms. Research indicates that fewer than one in five children who are prescribed stimulant medication for ADHD continue taking medications beyond one year

(Marcus, Wan, Kemner, & Olfson, 2005). The reasons this occurs are unknown, though it has been argued that the quest for independence during adolescence offers an explanation (Meaux, Hester, Smith, & Shoptaw, 2006). Participants in a study by Meaux et al. (2006) reported that their parents and teachers thought stimulant medications were “good” for them, but that they had decided to “handle it on my own.” Another explanation noted by Meaux et al. (2006) for the discontinuation of stimulant medication is the perception that these medications make them feel somber or mellow, described by participants as “killing my personality” or “taking away from the person I am” (p. 224).

After the initial diagnosis of ADHD, healthcare professionals were rarely involved in the decision to stop or restart medications. Participants who chose to restart medications typically called their mothers, who then called the pediatrician to renew the prescription. Most had not seen a healthcare provider specifically for monitoring of medication since they were very young. In fact, some did not even have their own prescription, but borrowed from others (Meaux et al., 2006).

Although many adolescents with ADHD choose to go off of medications for a time, Meaux et al. (2006) found that most (62%) of the college students with ADHD in their study chose to take medications again in college, citing the “need to study and get stuff done” (p. 221). Of these students, many only took them when needed, such as while studying, completing course work, or long classes (Meaux et al., 2006).

Meaux et al. (2006) also found that participants who had been diagnosed in early elementary school seemed to have their identities defined by ADHD and viewed medications as changing who they were. In contrast, participants who had been diagnosed later and consistently used medications were more likely to describe positive effects of medications outside the school

environment, had ongoing support and guidance from psychologists and physicians, described themselves as having “strong personalities,” and viewed medications as a means to manage the challenges of ADHD. The participants who had been diagnosed later in adolescence were also more involved in their own treatment and more educated about ADHD and medications. Meaux et al. (2006) found the level of self-management and knowledge of ADHD between early diagnosed and later diagnosed to be striking, but suggest that further research is necessary to confirm patterns.

Parents’ experiences with medicating children with ADHD is described as a “flux of dilemmas” (Hansen & Hansen, 2006, p. 1272). Parents struggle with the multitude of decisions about their children’s treatment, and balancing desired outcomes with undesirable side effects presents a constant challenge. Concerns about side effects are not limited to the present. Many parents are concerned about long-term effects of stimulant medications. An interesting finding pertains to parents’ beliefs about the role of stimulant medications in their children’s future. Some parents view medication as a temporary aid, and others believe medication would play an important role throughout their children’s lives. Hansen and Hansen (2006) stated, “It was evident that the meaning of the stimulant medication was a product of parents’ hopes and expectations for their child’s future, along with the functional improvement presently brought by the medication” (pp. 1277-1278).

### **ADHD on Campus**

Compared with their peers who do not have ADHD, fewer individuals with ADHD attempt college. However, admissions departments and offices of disability student services report an increasing number of students with ADHD on campus (Weiss & Hechtman, 1993). With improved diagnosis and treatment, adolescents with ADHD are attending college at

increasing rates and are currently estimated to comprise 1-4% of all college students (Glutting et al., 2005), of which approximately 42% are female (Weyandt & DuPaul, 2006). ADHD greatly impacts college students who must learn to function and succeed in a college setting while managing the disorder (Grenwald-Mayes, 2002).

In recent years, colleges and universities have begun to recognize ADHD as a significant issue, as more than 30 years of disability and special education laws have mandated special education services for students with disabilities (Weyandt & DuPaul, 2006). Support services for postsecondary students with ADHD are provided through an extension of requirements for children as specified under Section 504 of the Rehabilitation Act of 1973 (Glutting, Monaghan, Adams, & Sheslow, 2002). In 1996, as many as 9% of all college students reported having a disability (Mull & Sitlington, 2003). Of the disabilities represented on campus, the greatest increase is in students with “hidden disabilities,” such as ADHD (Weyandt & DuPaul, 2006). Approximately 25% of students receiving disability support services receive accommodations for ADHD (Weyandt & DuPaul, 2006), and this percentage has increased substantially since 1975 (HEATH, 1993; Wolf, 2001). Students with ADHD are not required to document their conditions; therefore, the actual number of college students with the condition is speculative (Weyandt & DuPaul, 2006).

Research indicates that college students with learning disabilities have average or above-average intellectual functioning (Hughes & Smith, 1990). They also seem to have greater academic self-awareness than their peers (Stage & Milne, 1996). Students with disabilities are particularly vulnerable in the first two years of college, experiencing difficulty transitioning from secondary to postsecondary settings (Gerber, Reiff, & Ginsburg, 1996).

Despite the growing numbers of students with ADHD on campus, knowledge and practice regarding college students with ADHD lags significantly behind that of younger children (DuPaul et al., 2001; Toner et al., 2006). DuPaul et al. (2001) stated, “At the university level, we lack basic epidemiological information regarding the symptomatology of ADHD at this developmental stage as well as empirically validated assessment methods for diagnosis and treatment evaluation” (p. 370).

College students comprise a unique subset of the total population with ADHD; the results from outcome studies of children with ADHD may not apply to college students. College students with ADHD are likely to have (a) higher ability levels, (b) have had greater academic success during primary and secondary school, and (c) possess better compensatory skills than individuals with ADHD from the general population (Glutting et al., 2002). In choosing to attend college, these students also experience a different set of life events than those students with ADHD who do not pursue higher education. These experiences require them to adapt to the academic challenges and demands that accompany higher education.

Although students with ADHD seem capable of learning, with intelligence in the average or above average category, their hyperactivity, impulsivity, and/or inattention make concentration difficult and negatively affect their performance (Barkley, 2005). Zwart and Kallemeyn (2001) in a study of peer-based coaching for college students with ADHD reported problems among students with ADHD related to study skills, note taking, summarizing, outlining, and test taking. Wallace, Winsler, and NeSmith (1999) found that college students with ADHD demonstrated motivational impairments characterized by a preference for easy work, less enjoyment of learning, less persistence, and greater reliance on external than on internal standards to judge their performance. These students also reported having more



difficulty paying attention and having more distracting thoughts in lectures than do other students (Weyandt et al., 2003). Students with ADHD were also found to have lower mean GPAs, more academic problems, and were more likely to be on academic probation than comparable college students without ADHD (Heiligenstein, Guenther, Levy, Savino, & Fulwiler, 1999). Students with ADHD often have difficulty limiting campus involvement, focusing on immediate tasks, and completing assignments (McCormick, 1998). They also tend not to utilize academic coping strategies and have lower academic achievement than college students who do not have ADHD (Turnock, 1998). Research by Carlson, Booth, Shin, and Canu (2002) suggests that students with ADHD learn well when they are highly interested and show improved behavior or academic performance when tasks are made more salient, novel, or interesting.

Self-esteem has been found to be lower in college students with ADHD than in that of the general college population (Dooling-Liftin & Rosen, 1997). Within the ADHD group, higher levels of self-esteem were associated with more effective social skills and fewer current ADHD symptoms (Dooling-Liftin & Rosen, 1997). The relationship between ADHD and college adjustment has been found to be partially mediated by self-reported levels of self-esteem (Shaw-Zirt et al., 2005).

Students with ADHD encounter significant barriers in adjusting to college, given the information overload, new interpersonal relationships, unfamiliar physical environment, and increased responsibilities a college campus presents. Jones, Kalivoda, and Higbee (1997) stated:

Students with [ADHD] who enter college are usually bright, talented individuals who were not academically challenged in high school. Once they begin college level courses and experience the hectic pace of campus life, they easily become overwhelmed by the more competitive academic environment, the pressure of short academic deadlines, the

heavier workload, and the time-consuming demands of a burgeoning social life. The short attention span and pervasive tendency to become distracted associated with [ADHD] significantly impairs a student's ability to sort through information and organize it in a meaningful way. Young adults with [ADHD] are apt to feel overwhelmed, confused, and extremely frustrated with the new multifaceted role of college student, especially if in the past they have relied extensively upon high school teachers and parents to provide them with structure, organization, and stability. (p. 263)

In addition to the stress brought on by the demands of college, leaving the stability of home is another event that may trigger vulnerability and isolation. The situation is further compounded for those with critical academic gaps as a result of undiagnosed or untreated ADHD (Barkley, 2005). Silver (1992) reported that many students with ADHD lack the necessary coping skills to equip them for the intellectual and social challenges of the college experience, thereby facing a higher risk of academic failure, even if they are intellectually gifted.

College is often the first time students with ADHD have been in an unstructured setting, with no parents or teachers providing boundaries. With little external structure and deficient internal structure, many of these students have difficulties in adjustment (Turnock, 1998). Loe and Cuttino (2008) reported in their study that every college student with ADHD who was interviewed noted the challenges of the college environment. They found that the transition to college required a reevaluation of self in the context of the college environment.

Outside of academics, the social and personal aspects of college for students with ADHD pose additional challenges. Female college students report having better social skills than males with ADHD; however, they report that ADHD posed a problem in social relationships and that they engage in significantly more negative social behaviors than peers without ADHD (Meaux et

al., 2009). A study by Shaw-Zirt et al. (2005) found that students with ADHD functioned one standard deviation below the normative sample mean in terms of adjustment. Students with ADHD also described a lower quality of life than other students (Rabiner et al., 2008).

Hechtman (1996) found strong evidence that an ADHD child's emotional and behavioral adjustment is significantly impacted by environmental as well as genetic factors, with family being one of the most important providers of a child's social environment. In addition, Grenwald-Mayes (2001) found that positive emotional climate and activities were the most important factors in predicting current quality of life for college students with ADHD. A positive family emotional environment may foster resilience in children with ADHD, helping to buffer the effects of frustrating and difficult experiences and to build self-efficacy and self-esteem (Brooks, 1994).

The environment within which an individual with ADHD functions is of primary importance, as it provides a level of feedback and structure which influences the presentation of symptoms. It also provides a lens through which an individual with ADHD is understood and treated. Many factors contribute to the environmental situation—family, society, culture (Gingerich et al., 1998). In the transition to college, that environmental situation is changed entirely, and a new way of functioning and managing life must be developed.

A qualitative study by Meaux et al. (2009) explored the self-management of college students with ADHD. They found that all of their study's participants struggled with persistent symptoms of ADHD including inattention, impulsivity, and hyperactivity. These symptoms created challenges to academic success because of poor time management skills, difficulty staying focused, failure to complete work on time, poor motivation, poor reading skills, and difficulty sleeping and waking in the morning. While parents had been the main source of

support prior to college, friends filled that role while in college. The researchers discovered that few college students with ADHD had experience in advocating for themselves and that most had limited knowledge of the full ramifications of ADHD and the resources and support available to them. In fact, many students expressed the sentiment that despite the chronic nature of ADHD, they should not need additional help to manage the condition. The college students with ADHD in Meaux et al.'s (2009) study described efforts to keep their ADHD diagnosis a secret prior to college, but once they got to college, they became more open about it. They reported that they had previously relied on their mothers to answer questions regarding ADHD, but once at college, about half began to seek information independently, most often from the Internet.

The experiences of the college students with ADHD in the study by Meaux et al. (2009) clearly described the ongoing struggle with ADHD. The students revealed two hindrances to managing life: (a) persistent ADHD symptoms and (b) addictive behaviors related to alcohol and video games. The study also illuminated seven factors that helped college students cope with ADHD: (a) being accountable, (b) learning from consequences, (c) setting alarms and reminders, (d) taking/using stimulant medications, (e) engaging in self-talk, (f) removing distractions, and (g) staying busy. The authors discovered that knowledge about ADHD offers students greater acceptance of their condition and some measure of control. They found that students who were more knowledgeable about ADHD were very articulate about their own difficulties and described more success in planning and implementing strategies to manage their symptoms as well as the demands of college life. According to Meaux et al. (2009), "Early education regarding ADHD and self-management is desperately needed, ideally, beginning with diagnosis and continuing throughout life as important transitions such as the transition to college pose new challenges for those with ADHD" (p. 254).

In another qualitative study, Stage and Milne (1996) explored the experiences of successful college students with ADHD. The researchers found that the most important attitudinal factor affecting these students was the individual student's self-perception. The successful students with ADHD had developed management techniques to compensate for their disabilities. Their tactics ranged from stress relief exercises to study schemes to methods for handling emotions. However, the most common strategy mentioned was putting in more time than peers on their coursework.

Similarly, Kaminski, Turnock, Rosten, and Laster (2006) found that among students with ADHD at a selective college, innate ability and baseline severity of their disorder may be less important to academic success than are compensatory strategies (e.g., structuring time) and time-intensive, effortful studying. They found that the overall availability of coping resources differentiated academically high-achieving students with ADHD from their less academically successful peers with ADHD. Academically successful students with ADHD may rely on a number of coping resources to prevent or endure stresses that overwhelm less-resilient students with ADHD (Wheaton, 1983). This study also revealed a correlational finding that freedom from financial concerns and better time management were associated with academic success, bolstering the argument that the available time students have for studying is a key determinant of academic success (Kaminski et al., 2006).

### **The College Transition**

The leading theory describing the college transition process, offered by Tinto (1993), describes three stages of freshman adjustment to college life. The first stage is separation, wherein first-year students distance themselves from membership in past communities, homes, schools, and work places. They may go through a process of questioning the values of previous

communities in order to adopt values perceived as appropriate to college. The second stage, transition, is a “bridge” between the old and the new. New students may not yet be fully integrated into their new college environment. They may be searching for a connection with their new environment and exploring the norms, values, and relationships there. Extreme differences between the old and new environments may make adjustment more difficult. The third stage is called incorporation, when first-year students become fully involved in the social and academic communities at their new campus. They establish connections with other students and professors, which decreases the risk of dropping out. In this final stage, students enjoy success in the new situations they encounter.

Tinto’s (1993) model is a socialization model that focuses on individual adjustment to the college environment and has been foundational in the development of theories of college retention. While it has been useful in identifying factors that contribute to institutional attachment, it has also been criticized for failing to take into account potentially different transition processes for minorities (Nora, 1987; Nora & Rendon, 1990; Tierney, 1992, 1999), and older and/or community college students (Ashar & Skenes, 1993; Bean & Metzner, 1985; Fox, 1986). Concerns have also been raised that the model excludes factors external to the institution and those related to individual psychological processes that may also affect the college transition (Braxton, 2000). Tinto’s (1993) model highlights the importance of student social and academic integration into college. However, it does not link these integrative processes to specific needs of students (Guffrida, 2009). In *Questions That Matter* (Social Science Research Council, 2006), an interdisciplinary team of scholars reviewed the state of knowledge on college transitions and noted the need to take into account of the developmental needs of students. The team concluded that theories of identity development, especially identity development that occurs “among

different racial/ethnic/gender/income groups and subgroups” (p. 10), appeared especially fertile for developing an understanding of the college transition process among diverse students. It would seem that an understanding of the transition of students with learning disabilities and other special needs, such as ADHD, is also needed.

Chickering (1969) noted that progressing to higher education should involve a series of changes and transition that influence student growth beginning in the first year and continuing through graduation. Research on college student development indicates that the first year of college is vital to future development. First, it is the foundational year, wherein students develop or fail to develop the attitudes, behaviors, skills, knowledge, and habits on which their future success will depend (Reason, Terenzini, & Domingo, 2006). Second, it is a period of intense learning. Pascarella and Terenzini (2005) reported that two-thirds or more of the gains students make in their general learning and cognitive development occur in their first two years of college.

One construct related to psychosocial development, “social and personal competence,” has received attention from higher education researchers (e.g., Belcheir, 2001; Filkins & Doyle, 2002; Reason et al., 2006). Studies on this construct highlight the connection between students’ sense of support at an institution and their reports of increased social and personal competence (Belcheir, 2001; Filkins & Doyle, 2002). Filkins and Doyle (2002) found that students’ ratings of institutional support were the strongest predictors of gains in social and personal development.

While the classroom is often the first aspect considered in the college experience, many students indicate that the “real learning” of the college transition includes developing survival skills (e.g., money management, time management, goal setting); developing self-discipline to “just do it” when needed; taking responsibility for physical, financial, and academic well-being;

and developing a clearer understanding of oneself and one's goals through interactions with faculty and peers (Terenzini et al., 1994). The transition to college is the result of conscious and intentional efforts to address challenges and pursue goals. College presents challenges that prompt students to strategize, therefore making the transition to college also prompted students to negotiate challenges and influences in their lives (Smith & Johnson, 1998).

The transition from high school to college is challenging for all students, but is more so for students with learning disabilities (Eaton & Coull, 1997). Students with disabilities are particularly vulnerable in the first two years of college, experiencing difficulty transitioning from secondary to postsecondary settings (Gerber et al., 1996). Eaton and Coull (1997) presented the top 10 difficulties experienced by students with learning disabilities as they begin their freshman year of college:

1. Being unprepared for responsibility,
2. Managing free time,
3. Being overwhelmed by workload,
4. Learning new time management skills,
5. Making new friends,
6. Missing academic support of parents,
7. Telling others of a disability,
8. Concern over failing classes,
9. Being distracted and not being able to focus, and
10. Being realistic about how the disability affects goals and ambitions.



## Summary

This chapter presents a review of literature with implications on the college transition for students with ADHD. The research cited enhances understanding of students with ADHD as well as the challenges the college transition can present to these students. In spite of all of the research that has been reported, there are several gaps in the existing literature.

Little is known about how best to support students with ADHD as they transition from high school to college. More research is critical to understanding the academic and social challenges of students with ADHD, as well as factors that may contribute to success or failure at the college level (Weyandt & DuPaul, 2006). With the increasing number of students with ADHD on campus, current research does not sufficiently identify the needs of this population. Additional studies are needed to address other possible predictors of adjustment, which can assist colleges and universities in implementing strategies to ensure students with ADHD are more successful (Shaw-Zirt et al., 2005). Ramsay and Rostain (2008) suggested that adult ADHD research should target life transitions and challenges faced during the course of adult development, and do so at the “point of performance” as much as possible. They specifically recommend the transition to college as a point during which adults with ADHD experience predictable problems that lead them to seek help, and believe that research conducted in these settings would yield valuable data.

Relatively few studies of college students with ADHD have used interviews with students with ADHD as their primary data, and no qualitative studies have focused on the transition to college as a critical juncture in the life of students with ADHD. Little is known about the college transition for students with ADHD from their own words. This has led to a lack of understanding

of the issues students with ADHD face upon entering the campus environment, as well as a lack of knowledge as to how to assist them with this transition.

This study is an attempt to contribute to the existing gaps in the literature. It is focused on a sample of first-year college students with ADHD and specifically explores the transition to college in the context of their background as an individual with ADHD, asking them to describe in their own words their experiences as transitioning college students and the factors which affected their transition to campus.

## CHAPTER THREE

### Method

The purpose of this qualitative study is to explore the experiences of the college transition process with a sample of first-year college students diagnosed with ADHD. It is anticipated that the personal experiences, challenges, and obstacles revealed in this study can inform practices within higher education to better serve the growing number of college students with ADHD. This knowledge may also assist high school counselors and parents of students with ADHD in preparing them to manage the transition to the college environment. In seeking to understand the college transition experience for students with ADHD, the study addresses five research questions:

1. How do college students with ADHD plan for and manage the college decision-making process?
2. What roles do family members and others play in the transition to college?
3. What campus resources and personal strategies do students with ADHD utilize in the transition to college?
4. What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?
5. How do you students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?

This chapter includes a discussion of the study's research methodology. The following topics are addressed: (a) rationale for qualitative research design, (b) description of research sample, (c) overview of research procedures, (d) data collection, (e) analysis and synthesis of data, (f) ethical considerations, and (g) issues of trustworthiness.

## **Rationale for Qualitative Research Design**

Qualitative methodology implies an emphasis on discovery and description, with the objectives focused on extracting and interpreting the meaning of experience (Merriam, 1998; Patton, 2002). A qualitative approach was chosen to answer the research questions of this study for several reasons, identified by Creswell (1998). First, the research questions focus on the *process* of the transition for students with ADHD, the “how” and “what” questions that seek to describe their experiences (Creswell, 1998; Patton, 2002). Second, the issue of college transition among students with ADHD is one in which exploration is needed and theories do not exist to describe the experiences of these students. Third, the intent of the researcher is to present an in-depth view of the college transition of students with ADHD. Fourth, the research questions posed in this study are most appropriately addressed in the words of the students themselves, from an emic perspective as it is known in qualitative research (Merriam, 2009). Patton (2002) illuminates the humanizing impact of qualitative research in the following: “The personal nature of qualitative inquiry derives from its openness, the evaluator’s close contact...the procedures of evaluation and in-depth interviewing...that communicate respect to respondents by making *their* ideas and opinions (stated in their own terms) the important data source for evaluation” (p. 176). And finally, a qualitative methodology was chosen because the nature of ADHD research lends itself to this type of exploration. Segal (1998) advocated that the qualitative method of research is conducive—by the nature of the research process—to the study of understanding and treating ADHD. He notes that to fully grasp the symptoms and effects of this disorder, data should be gathered directly from those who are most affected.

Within a qualitative framework, the research topic is explored through the lens of phenomenology. From the phenomenological perspective, the question asked is as follows:

“What is the meaning, structure, or essence of the lived experience of this phenomenon for this person or group of people?” (Patton, 2002, p. 104). Many approaches to phenomenology have been identified, but “what they all share in common is a focus on exploring how human beings make sense of experience and transform experience into consciousness” (Patton, 2002, p. 104). Patton (2002) argued that such data can only be gathered via in-depth interviews with those with first-hand experience with the phenomenon. A phenomenological approach allows participants to answer directly the research questions posed in this study, thus providing an insider’s perspective on the college transition for a student with ADHD.

### **The Research Sample**

Criterion-based selection guided the sampling strategy. LeCompte and Preissle (1993) described this method as one in which the researcher “creates a list of the attributes essential” to the study and then “proceed[s] to find or locate a unit matching the list” (p. 70). This strategy allows the researcher to deliberately select participants in order to provide important information that cannot be accessed as well from other choices (Maxwell, 1996). Based on the research questions guiding this study, specific criteria for participants were developed. The research sample was composed of eight students, based on “expected reasonable coverage of the phenomenon given the purpose of the study” (Patton, 2002, p. 246). Disability Support Services (DSS) and Health Services assisted with identifying potential participants. These offices have regular contact with students with ADHD were able to assist with identifying a suitable sample. In addition, the researcher posted flyers throughout campus informing students of the study and the criteria for participants, which yielded several participants. The participant criteria and rationale for each criterion follow:

- First-year student. Because this study focuses on the construct of transition from home and family life to the college environment, students in their first year of college are most able to report on that transition.
- Students living 40 miles or more from home. This study is concerned with how students with ADHD manage the transition from living at home to living in a college environment. As a result, the researcher focused this study on students who are geographically separated from family or other support structures they may have had prior to entering college.
- Diagnosed with ADHD at least two years prior to beginning college. This criterion was developed to allow for a greater understanding on the part of the students regarding ADHD and how their condition affected them prior to entering college. Students who have recently been diagnosed with ADHD may not have the same understanding of how their ADHD affects their daily living.

### **Data Collection**

Prior to the first interview, each participant received an Informed Consent Form, Medical/Educational Records Release Form, and Demographic Survey. The forms were completed by the participants prior to or during the first meeting with the researcher.

**Informed Consent Form.** This form reviewed the aims of the study, identified any possible risks to participants, and required a signature from each participant indicating their volunteer status as a participant. The informed consent form is included as Appendix A.

**Medical/Educational Records Release Form.** This form requested release of medical or academic records to the researcher so that the participants' ADHD diagnoses may be confirmed

with their health care providers and/or DSS office. The informed consent form is included as Appendix B.

**Demographic Survey.** This survey was designed to allow the researcher to learn more about each participant's academic, family, and medical background. This survey was developed by the researcher and questions were based on a review of related literature as well as the research questions of this study. This survey is presented in Appendix C.

**Interviews.** This study followed a phenomenological approach and utilized interviews as the primary data source. Because qualitative research is ideally flexible, the details of the interviews and specific questions used were changed at times to accommodate changing conditions or emerging themes of the study in progress; however, they closely followed format described.

Most commonly, the qualitative interview is conducted as a person-to-person encounter. The person-to-person encounter can be described as a conversation in which the purpose is to access a special kind of information—what is “in and on someone's mind” (Patton, 2002, p. 341). “The purpose of interviewing, then, is to allow us to enter into the other person's perspective” (Patton, 2002, pp. 341-342). Interviewing is necessary when behavior, feelings, or how people interpret the world around them cannot be directly observed, as in this study. Therefore, the researcher engaged students with ADHD in person-to-person encounters directed at what is in and on their minds for the purpose of answering the research questions.

The interview process followed Seidman's (2006) Three-Interview Series of qualitative inquiry. In this approach, researchers use open-ended questions to build upon and explore participants' experiences. The aim of this approach was for participants to reconstruct their experience within the topic under study. This approach involves conducting a series of three

separate interviews with each participant, asserting that people's "behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them" (Seidman, 2006, p. 16). In the absence of context there is little possibility of exploring the meaning of an experience (Patton, 1989).

The first interview aimed to establish context and explores the participants' early experiences and life history as they relate to the study topic. The second interview allowed participants to reconstruct the details of their experience in the context where it occurs. It explored the concrete details of participants' current lived experience. In the third interview, participants were encouraged to reflect on the meaning their experience holds for them (Seidman, 2006). The question of "meaning" addresses the intellectual and emotional connections between the participants' work and life (Seidman, 2006). Even though the third interview focused entirely on the participants' understanding of their experiences, the process of making meaning is a theme throughout all three interviews. The very process of putting experience into language is a meaning-making process (Vygotsky, 1987).

The study's research questions and Seidman's (2006) Three-Interview Series were used as the framework from which to develop the interview guides. Interview questions were carefully constructed using matrices based on a design described by Patton (2002) in which qualitative question categories are related to the aims of each of the three interviews in Seidman's (2006) approach. The question categories described by Patton were: (a) Behavioral/Experience Questions, (b) Opinion/Value Questions, (c) Feeling/Emotion Questions, and (d) Knowledge Questions. The aims of the interviews, as described by Seidman (2006) were (a) Focused Life History, (b) Details of the Experience, and (c) Reflection on the Meaning. These categories and interview aims created the framework for the interview matrix. The matrix was then completed



by developing questions related to each interview question in light of Patton's (2002) categories and Seidman's (2006) interview aims. The questions were also checked for congruence with the determinants of interview questions as described by Weiss (1994). These determinants include: (a) relationship to the problem or purpose of the study; (b) "a sense of the breadth and density of the material we want to collect" (p. 41); (c) "a repertoire of understandings based on previous work, study, awareness of the literature, and experience in living" (p. 41); and (d) "a sense of what will give substance to the eventual report" (p. 41). The interview matrices are included as Appendix D.

Interview guides were constructed based on the interview matrices. The initial draft of each interview guide was reviewed by the researcher's advisor and a psychologist who specializes in ADHD. Feedback from each reviewer was provided to the researcher. The questions were then revised and the interview guides presented in Appendices E, F, and G.

Following approval of the Institutional Review Board, a pilot interview was conducted to allow the researcher opportunity to rehearse the process as well as to learn whether any changes should be made to the interview guides. Following the pilot interview, the interview guides were edited to reflect any changes noted during the pilot study. At that point, a final revision was made to the interview guides to be used for the remainder of the study's interviews.

### **Analysis and Synthesis of Data**

Data analysis presents the challenge of making meaning by consolidating, reducing, and interpreting what the participants said and what the researcher observed and read (Merriam, 2009). A constant comparative method of analysis, as first proposed by Glaser and Strauss (1967), was utilized in this study. This method was first developed for use in grounded theory,

but has been widely used throughout all types of qualitative research because it is inductive and comparative and thus useful for meaning making (Merriam, 2009).

The first step in qualitative data analysis is category construction, in which the researcher identifies segments of data within each interview transcript that relate to the research questions posed in the study. To do this, open coding was used to notate any bits of data that were interesting, relevant, or important. Each of the transcripts was coded by the researcher using word processing software. The coded documents were then imported into an Excel database, where data could be easily sorted by codes, and these codes were then clustered into categories. Categories are “conceptual elements that ‘cover’ or span many individual examples of the category” (Merriam, 2009, p. 181). Once clear categories had emerged, the researcher wrote summaries of each participant related to each category (Hatch, 2002). These summaries were compared and evaluated to develop themes within the categories among all the participants. The researcher then evaluated these themes to determine if they were supported by data, and looked for contradictions to themes (Glaser & Strauss, 1967). The themes were then related back to the research questions posed by the study to determine what answers were revealed through the data. The answers produced by this process became the findings of this study.

**Peer Debriefing.** Research methods texts recommend peer debriefing as a tool to enhance the credibility or validity of qualitative research (Creswell, 1998; Lincoln & Guba, 1985; Maxwell, 1996; Merriam, 2009). The purpose of peer debriefing, according to Lincoln and Guba (1985), is to enhance the credibility, or truth value, of a qualitative study, by providing "an external check on the inquiry process" (p. 301). Peer debriefing was utilized in this study to assist the researcher in identifying and eliminating personal biases. It also helps to ensure that the data is accurately represented in the coding process, and thus analyzed and presented correctly in

the research report. The peer reviewer in this study was a faculty member with knowledge of the study who also has expertise in qualitative methods. To conduct peer debriefing, the researcher sent files of the data analysis processes and a description of how it was carried out to the peer reviewer, who evaluated the process and gave feedback to the researcher.

**Member Checks.** Following the interview series and during the data analysis process, the researcher presented full interview transcripts via email to each of the participants. Participants were asked to give feedback or make corrections to what was presented by the researcher. No concerns were raised by the participants in the study and all who responded felt the interview transcripts were accurate.

### **Overview of Research Procedures**

The following list presents a description of the research procedures used in this study.

1. Prior to data collection, a review of the literature was conducted to apprise the researcher of previous research in the areas of college transition and ADHD along the lifespan.
2. Following approval of the proposal, the researcher applied for the required approval from the appropriate Institutional Review Board.
3. The research study was publicized through Disability Support Services and Health Services, as well as through flyers hung on bulletin boards in residence halls and campus buildings. A cash incentive was offered and structured as follows: \$10 for participation in Interview One, \$15 for participation in Interview Two, and \$20 for participation in Interview Three. Students were directed to contact the researcher if interested in participating. After contacting the researcher, the researcher conducted

- phone visits with each potential participant to explain the nature of the study, confirm that potential participants meet the criteria for the sample, and schedule interviews.
4. Participants were mailed an informed consent form, medical and educational records release form, and demographic survey to complete prior to their first interview.
  5. After the medical and educational records release form was completed and returned to the interviewer, the researcher contacted each participant's DSS office or health services provider to confirm his or her ADHD diagnosis.
  6. The first round of semi-structured interviews was conducted in October 2010 with eight first-year college students with ADHD. This interview focused on each participant's life history as it relates to ADHD. Interviews were held at times convenient to participants and in quiet, semi-private locations on their campus. Interviews lasted 30-60 minutes, depending on the time required to address the questions in the interview protocol. Interviews were recorded using a digital voice recorder and back-up recorder, and were transcribed verbatim by a professional transcriptionist or the researcher prior to the researcher's analysis.
  7. A second round of semi-structured interviews were conducted in early November 2010 and focused on college transition issues related to experienced by students with ADHD.
  8. A third round of semi-structured interviews were conducted in mid-November 2010, reflecting on what it means to have ADHD throughout the college transition. These interviews were held two to three weeks following the second interview.
  9. Interviews were transcribed and analyzed using a constant comparative method.

10. Peer debriefing was conducted to assist the researcher in accurate analysis and interpretation of data.
11. Member checks were conducted to ensure credibility of findings.

### **Ethical Considerations**

In any research study, ethical considerations protecting the rights of the participants must be factored into the design (Merriam, 1998). The participants in this study were volunteers, fully aware of the purposes of this study. While it was anticipated that no ethical threats would be posed to participants, the researcher ensured reasonable safeguards to protect the rights and confidentiality of the participants.

First, informed consent was of primary importance throughout the study. Participants were not misled about the purposes of the study, and gave informed consent to volunteer as participants. Second, confidentiality of participants was maintained by changing names and other identifying information in the reporting of the study. Third, the researcher ensured the security of the data collected, and the data were only accessed by the researcher and transcriptionist assisting with the research.

### **Issues of Trustworthiness**

Trustworthiness in academic research refers to efforts on the part of the researcher to attend to the issue of validity, the degree to which something measures what it purports to measure, and reliability, the extent to which research findings can be replicated. Maxwell (1996) argued, “the main threat to valid description...is the inaccuracy or incompleteness of the data” (p. 89). For this reason, interviews were recorded by digital voice recorder as well as mini-cassette, and transcribed verbatim for use in analysis. These efforts ensured complete data for analysis and prevented the potential problems of lost or partial data. To prevent the possibility of

incomplete data resulting from inadequate interviews, interview guides were carefully constructed using matrices to ensure the research questions were fully addressed.

“The main threat to valid interpretation is imposing one’s own framework or meaning, rather than understanding the perspective of the people studied and the meanings they attach to their words and actions” (Maxwell, 1996, pp. 89-90). Member checks (also called participant validation) were conducted to ensure that participants were given adequate opportunity to reveal their own perspectives. “This is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying [the researcher’s] biases and misunderstanding of what you observed” (Maxwell, 2005, p. 111). Lincoln and Guba (1985) consider member checking “the most critical technique for establishing credibility” (p. 341). Peer debriefing provides an external check of the research process and provides additional credibility to the findings of the study.

In addition to the aforementioned methodological efforts to achieve validity, the Three-Interview Series used in this research design incorporates features that enhance the accomplishment of validity. Seidman (2006) explained:

[The method] places participants’ comments in context. It encourages interviewing participants over the course of 1-3 weeks to account for idiosyncratic days and to check for the internal consistency of what they say. Furthermore, by interviewing a number of participants, we can connect their experiences and check the comments of one participant against those of others. Finally, the goal of the process is to understand how our participants understand and make meaning of their experience. If the interview structure

works to allow them to make sense to themselves as well as to the interviewer, then it has gone a long way toward validity. (p. 24)

Reliability, the extent to which research findings can be replicated, is problematic in social sciences due to the fact that human behavior is never static (Merriam, 2009). Reliability rests on the assumption that there is a single reality and that studying it repeatedly will yield the same results. In contrast, qualitative research seeks not to isolate human behavior, but to “describe and explain the world as those in the world experience it” (Merriam, 2009, p. 220). Replicating a qualitative study will not produce the same results, but this does not discredit the results of any particular study, as numerous interpretations of the same data may exist. Merriam (2009) stated, “The more important question for qualitative research is *whether the results are consistent with the data collected*” (p. 221). This concept is sometimes termed “dependability” or “consistency” in qualitative research. Therefore, rather than requiring replication yield the same results, a researcher seeks to achieve consistency between data collected and results presented. To this end, peer review was incorporated into this study to provide an extra layer of accountability and verification that the findings are supported by the data collected.

## **CHAPTER FOUR**

### **Results**

The purpose of this qualitative study was to explore the college transition process with a sample of first-year college students diagnosed with ADHD. It was anticipated that the personal experiences, challenges, and obstacles revealed in this study could inform practices within higher education to better serve the growing number of college students with ADHD. This knowledge may also help high school counselors and parents of students with ADHD in preparing students obtained from 24 in-depth interviews conducted throughout the first semester of college for eight students who have been diagnosed with ADHD.

### **Setting**

This study was conducted at a medium sized land-grant research university in the Midwestern United States. It will be referred to as “State U” throughout this paper. The university has a total enrollment of 23,000 students, with 66 percent of those being in-state students. Among the services available to all students are a university health center, counseling center, tutoring services, library resources, recreation center, academic assistance center, and disability support services. All of the students participating in the study were enrolled on the main campus of the university as full-time, first-year students.

### **Participant Profiles**

Ten students were interviewed for this study; however, one failed to provide documentation of her diagnosis and one had completed a year of community college prior to transferring to the university and was therefore not a true freshman. As a result, those two interviews were excluded from analysis. The eight students whose information was used in this study were all first-year students at State U. All had all been diagnosed with ADHD at least two



years prior to starting college with the earliest diagnosis being at age six. All were living in residence halls on campus and their hometowns ranged from 50 to 700 miles from campus.

**Sam.** Sam is a 19-year-old Caucasian freshman from a suburban area two hours from campus. He is majoring in Architectural Engineering because he had worked construction in high school and enjoyed that line of work. He has been surprised at how difficult his course work was and is struggling academically, particularly with trigonometry. Sam is not working during his first year of college and is not involved in any other activities on a consistent basis, though he described having an active social life.

Sam was diagnosed with ADHD when he was six years old, after a teacher suggested his parents have him evaluated. He started taking Strattera, an ADHD medication, at age six, and had taken the same medication ever since, with some gaps due to his own periodic resistance to taking medications. He described his main ADHD symptom as inability to focus. He received minimal accommodations in high school to assist with his test taking, but usually resisted the idea of accommodations for his ADHD. In addition to his current hometown, he has lived in Louisiana and Iowa. His parents are married and college educated, and he has one sister who is two years older. His family is supportive of him and encouraged him to attend college. He went home for visits several times over his first semester of college.

**Hannah.** Hannah is an 18-year-old Caucasian freshman from a small town 100 miles from campus. She is majoring in Biology/Pre-Medicine with aspirations of becoming a physician. She is working 20 hours a week as a CNA while in college and is also on the rowing team, which requires early morning practices every day. She had a high school GPA of 3.92 on a 4.0 scale and was very active in sports and dance while in high school.

Hannah was diagnosed with ADHD at the age of six and started taking Ritalin. At age 10, she switched medication to Adderall and was still taking it at the time of the interviews. She described herself as being a hyper child, but believed she had outgrown her hyperactivity. Her primary symptom in college was inability to focus. When asked to describe her family, Hannah described them as “dysfunctional.” Her parents divorced when she was young and her mother remarried. When she was in high school, her mother left her stepfather and Hannah stayed with her stepfather. By her senior year of high school, Hannah moved in with her boyfriend’s family, who were her main support system in her college decision-making process. Hannah explained that her mother had been helpful regarding her ADHD early in her life, but indicated that later, her mother stopped caring.

She said that her treatment for ADHD was a contentious subject between her biological parents who shared custody, with her mother wanting her to be medicated and her father disapproving of that decision. She remembered that her mother would work hard to get her on a medication, but she would go to her father’s house for a weekend and he would not abide by her mother’s rules. She maintained a positive relationship with her stepfather, but received no financial support from any of her family. Her mother and biological father traveled to campus to help her move in, but Hannah had to pay for their gas to get them to accompany her. She has very little contact with her mother, who is not divorced but has a new boyfriend, and when she visits home every other weekend, she stays with her boyfriend’s family.

**Leslie.** Leslie is a 19-year-old Caucasian freshman from a town 120 miles from campus. She is studying Wildlife Biology and had a high school GPA of 3.3 on a 4.0 scale. She does not have a job at college, but is in the Wildlife Society and is training to be a docent at the local zoo. Her parents were both military officers. As a result, she moved around quite a bit growing up,

but always felt she had a very supportive, close-knit family. Her parents recently divorced and she maintains positive relationships with both parents and sees them frequently. Her parents are both college educated and her father was especially helpful in planning her college transition. She described him as a very organized military type and found his organization to be beneficial to her. She has one sister, age 14, who her family suspects also has ADHD. In addition to her family, she also has a boyfriend in her hometown. Her greatest challenge in college has been homesickness and she travels home frequently to visit. Her family also comes to visit her at college, which she appreciates. Leslie was diagnosed at age 10 after her parents suspected she may have ADHD and they had her evaluated. She has taken Concerta since her initial diagnosis, with increasing dosage as needed over the years. She describes her primary symptom of ADHD as inability to focus.

**Carrie.** Carrie is an 18-year-old Caucasian freshman from a small town 300 miles from campus. She is studying Biology/Pre-Medicine in hopes of becoming a pediatrician. Her high school GPA was 3.29 on a 4.0 scale. She is working 30 hours a week at a local grocery store while attending college. She also plays tennis occasionally, but is not involved in any other activities on campus. She has a boyfriend, who is a sophomore and lives in an on-campus apartment. Even though she has a room in the residence halls, she spends most of her time at her boyfriend's apartment and plans to move in with him next year.

Her parents divorced when she was young and she maintains a positive relationship with both parents. Her father attended State U and encouraged her to attend there as well. Her mother did not attend college, but is very proud that Carrie is doing so. Her mother cannot support her much financially, but provides moral support. Her father assists with some of her financial needs at college, but she still feels financial strain. Due to the distance from her hometown to college,

she has not been able to visit home while at school. She hoped to make a visit home over Thanksgiving break, but was not sure she would be able to do so as a result of her work schedule.

Carrie was diagnosed with ADHD at age seven, after having significant behavioral difficulties in school. She began taking Ritalin at that time, which helped with her behavior. At age 12, she and her mother spoke to her doctor about switching to a longer-acting medication so that she would not have to take medication at school, which she always disliked having to do. She switched to Strattera, which made her feel tired. Since she did not like the side effects of Strattera, she stopped taking it without telling her mother. When her mother found out, she chose to stay off the medication and said she and her mother never discussed putting her on another medication. She believed she had outgrown her ADHD until her freshman year of college, when she realized she still had ADHD symptoms, including inability to focus, and that they were more apparent now that she was in college. She indicated that she would probably consider going back on medication, but could not see herself going through all the trouble to get a prescription again on her own.

**Adam.** Adam is an 18-year-old Caucasian freshman studying Athletic Training. He graduated high school with a GPA of 2.8 on a 4.0 scale. He was born in Louisiana and lived there and in Florida before his family moved to a suburban area 120 miles from campus. He is not working while at college and is not involved in any activities, choosing to pace himself and not overload his schedule during his first year. Adam's parents are divorced and he grew up with his mother, brother (age 24), and step-father, with whom he has good relationships. His parents both attended some college and were supportive and helpful in his college transition and planning process. They also support him financially while he is in college.

Adam was diagnosed with ADHD at age 14, which was the latest of all the participants. He was also diagnosed with Asperger's Syndrome at that time. He has taken four medications over the last four years, having inconsistent results with Concerta, Focalin, and Daytrana. Currently, he now takes Vyvanse and plans to stay on it indefinitely. His symptoms include distractability and inability to focus.

**Nathan.** Nathan is an 18-year-old Caucasian freshman from a city 50 miles from campus and is studying Business Management. He works 20 hours a week at a dining center on campus and is not involved in any campus activities at this time. He was diagnosed with ADHD at age seven due to difficulty at school. He took Ritalin for two years, then switched to Strattera, which caused some unwanted side effects. As a result, he switched to Concerta at age 13 and still takes it. His ADHD symptoms include inability to focus, difficulty with time management, distractability, and impulsivity. His parents both attended college and have professional jobs. They are divorced, but still communicate about his ADHD treatment, though it had sometimes been a source of contention between them. He said that his father often doubted his diagnosis or needs for medication, but that his father finally agreed that he needed medication when he compared report cards from semesters he took medications to those from semesters when he did not take medications. His grades were consistently better when he took medication. Nathan's parents were supportive of his college plans and assist financially with his expenses.

**Rachel.** Rachel is an 18-year-old freshman from a suburban area 700 miles from campus. She was the only out-of-state student in the study. Her parents and sisters (who are five and ten years older) all attended State U and she always wanted to do the same. She is studying Biology/Pre-Medicine and would like to become an allergist. She maintains a busy schedule on

campus and is involved in a sorority, the Pre-med Club, and the Paintball Club. She is not working at this time and her parents assist with her expenses while she is at college.

Rachel was diagnosed with ADHD at age eight, but knows that her parents suspected it much sooner. They waited to have her diagnosed because they did not want her to take medications when she was so young. Her primary symptom is difficulty focusing. She started taking Adderall at age eight, but it caused insomnia. As a result, she switched to Concerta, which she still takes. Her parents are both college educated and her father is now retired. Her parents and sisters gave advice while she was growing up and continue to throughout her college experience. She referred to her mother as her advocate and spoke of the strategies her mother taught her to assist her with her ADHD. She had a very high level of support in her transition due to the campus connections her family had prior to her enrollment.

**Matt.** Matt is an 18-year-old Caucasian freshman from a suburban area 120 miles from campus. He began studying Mechanical Engineering, but switched to Civil Engineering midway through his first semester. He is not working during his freshman year, but does participate in some intramural sports. He was the only participant who chose to live with friends he already knew. He lives in a 4-person suite, which proved to be more challenging than he had anticipated due to incompatible sleep/waking schedules.

He was diagnosed with ADHD at age eight and felt like his mother, a pre-school teacher, knew the signs to look for and knew that he had it. He had difficulty paying attention in class and was frequently in trouble in the classroom. Although he feels like he outgrew much of hyperactivity, he continues to struggle with maintaining focus and tuning out distractions. His parents are both college educated and very supportive of him and his two younger brothers. He

started taking Adderall at age eight, and still takes it in college. He did not notice any negative side effects and found it to be very helpful to him.

### **Research Questions**

From a review of literature relating to college students with ADHD, five research questions evolved to guide this exploratory study. These questions sought to describe and provide insight into the experience of students with ADHD transitioning from living and studying at home to living and studying in the college environment. The research questions that framed this study are:

1. How do college students with ADHD plan for and manage the college decision-making process?
2. What roles do family members and others play in the transition to college?
3. What campus resources and personal strategies do students with ADHD utilize in the transition to college?
4. What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?
5. How do students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?

The remainder of this chapter will be a presentation of the results of this study, accompanied by details and description that support each finding. “Thick description” (Denzin, 2001) is used to document a broad range of experiences and thereby provide an opportunity for the reader to better understand the reality of the research participants. Quotations and excerpts illustrating the students’ experiences are highlighted to provide insight into the lived experiences

of the students and allow their own words to speak for them. The findings are clustered by research question.

**Research Question 1: How do college students with ADHD plan for and manage the college decision-making process?**

*Finding: The majority of participants indicated that their ADHD was not a factor in their college decision-making process.*

When asked about the factors they considered in their college decision-making process, many responses were given. Location was a common concern, with most students wanting to be close enough to see family regularly, but far enough away to live independently. Other factors considered included costs, availability of major, quality of athletic teams, family affiliation, size of the institution, and friendliness of the student body, staff, and faculty.

Only two of the students evaluated college choices in light of their ADHD. These students were aware of the academic needs they had related to their ADHD, which impacted their college decision making. Their ADHD was not the sole consideration in their decision making; however, their awareness of the services available to them at State U made them more comfortable in their college choice. Adam related that the availability of services was an important factor to him and he had been advised of services while still in high school. He stated, “I mean, my guidance counselor in school said it would be a great place for me because they already have programs set up for students like me who need a little extra help and they’re really great about doing that.”

Rachel also had an awareness of resources before arriving on campus because her older sister had utilized them when she was a student at State U. She explained:



My sister was with DSS (Disability Support Services), so before I came here I already had registration, we did stop in here and talked to [director of DSS] and she worked with my sister and she knew I was coming, so just knowing that ahead of time, that was nice that was like a big...that's kind of one of the reasons why we kind of strayed away from other schools, not really, but just like, we were unsure of how to handle things. So we knew it worked here and it was perfect.

For the majority of the participants, though, ADHD was not a factor in their college decision making. When asked what she knew about campus in light of her ADHD, Hannah responded that she knew nothing and never considered it: "I didn't know they even cared or recognized it. I have put it on medical forms that I sent in but they never said anything about it." For the remainder of the participants, the answer to the question, "How did having ADHD shape your decisions or your plans about college?" was simply, "It didn't." Although all participants indicated that they had always planned to attend college, the majority did not see their ADHD diagnosis as a factor that should be taken into account in their college selection process.

**Research Question 2: What roles do family members and others play in the transition to college?**

***Finding: The majority of participants reported that their families played a critical role in their college transition process.***

Students reported that their families were very involved in their college transition, playing roles such as supporter, coach, and personal assistant as the students entered this phase of life. Parents were the most commonly mentioned source of support for the students. As Adam explained:

[My family] supported me and they said, “You know, if you need anything, just feel free to call whenever you need something. Whether it be that I need money, or food, or just someone to talk to.” They’re there, and I just let them know.

Leslie echoed the same feelings:

They’re definitely a big help just because, like if I need-- my dad will come up, or if I need-- I’m going to call for my mom or someone, they will come up if I need them. I can always go home, you know...they are really proud of me and stuff and they let me know that, so that really helps when it comes to succeeding and stuff. It pushes me a little bit more even though I know I want to succeed myself. It pushes me a little bit more, so I can make them proud too.

Matt reflected on a new appreciation for his family after being away at college:

There were a couple of nights when things just wouldn't be going right and I'd be having a horrible day and I think I called my mom two or three times at ten o' clock at night and she was always there to pick it up and have the conversation and I really like that.

Many of the students reported that their parents took on coaching roles for their children; they were actively involved in the details and preparations for life at college. Adam explained how he prepared for college:

[My family] helped me fill out my stuff. They made me – well, they didn’t make me, I kind of wanted to – do summer classes just to help me get in that routine. And instead of making them all back-to-back over the summer, I spread them out just because all my classes are spread out here, just to help me with the time management. And this past summer, compared to last summer, I took a lot more classes and it’s just all to help me build it up and get into that transition.

Nathan's family also had an active role in his transition:

My parents hounded me. Brother gave me advice from a college standpoint on what I needed to do and that kind of thing. And uh, kind of warned me about how hard it was going to be. And I came in thinking it was going to be absolutely terrifying and it's really not quite so bad. Like classes aren't too much harder but they are harder. Um, so he helped me kind of get here and be like oh, this ain't so bad. But my parents are the ones that kind of helped me over the summer and made sure I got into a school and that kind of thing.

Rachel revealed that although her mother's help was important to her success, it was not always appreciated:

Sometimes she would be like, "Do this." And I would be like, "No." But if she didn't haggle me, it would not have been done. Just because all the stuff I had for high school, like I said the long days, a ton of stuff. I would not have been able to do it by myself.

In addition to the moral support and coaching that students reported their parents provided, several students also relied on their families to accomplish the tasks involved in the college transition. They served as personal assistants and used their strengths for the students' benefit. Rachel explained one of the most influential ways her family helped with her transition:

When I had Rush, I was in really long days, so my sister and my mom organized my room. Thank God! Because I just put all my stuff in boxes, like those little flat ones, so they got bins, they organized it, put my stuff away, put my stuff on hangers. My sister is perfect at organizing. She's great at that. So she had little shelves for my shoes underneath my hanging clothes, so my room looks great. And just think of like my bed is lofted and in the corner is my alarm clock. She got those things that you put on the back

of doors like a pantry, she had one of those and she put it up on the window thing and it's where my alarm clock is and my glasses are too. She thinks of all that stuff. So I had it made once I moved in. Once I came back I didn't have to worry about any of that stuff. I felt sorry for everyone else that had to unpack and organize the room.

When asked who helped with her application process, Rachel explained:

My mother. She pretty much did them all, because I had AP Biology and she helped me with my essays, almost wrote my essays...well I'm a horrible writer. I would write rough drafts and she would fix them. So she helped with those a lot and she had a file with my school activities, my scores, transcripts, and all that stuff, she had all that together in a file, that made filling out stuff. She would scan it or copy it and write it in pencil and then go back in pen and do it on the original. She had all that down pat.

Leslie explained how her father assisted in her transition to college:

My dad helped me pack and helped me to get things on this check off list that he had and he made sure I had everything and they all came up when I moved in. So it was helpful...My dad helped me a lot with deadlines and stuff because he's a really organized military guy...It's good. Sometimes I'm like "ugh" then in the end I'm grateful for it because he keeps me on top of everything.

Adam indicated that his family continues to assist as needed even while he is away from them:

I wouldn't have been up here without them and their support in guiding me through issues I may have had. And just like, for instance...I can still e-mail a paper to my brother and my mom, stepdad [for editing]. And I wouldn't really be here without them.

Though most students reported families who were very active in their transition process, one student, Hannah, handled the responsibilities of the college transition independently. Her

family's lack of involvement added additional stress to her transition. She wished her family had been able to be more involved, but ultimately decided she could handle everything on her own.

She explained:

Really the only people that cared about me coming is my boyfriend's mom and dad. It's kind of sad, but my stepdad obviously misses me a lot. He calls me every day but no one else [calls]. My dad didn't want me to come at all, he was like, "You're making a bad decision, you should have went to community college and it would have been cheaper if you went here for two years." He just acts like State U isn't important. It hurt my feelings a lot...I had to do all my FAFSA by myself. But I know there's a lot of people at school that their parents made them do that, but there's also a lot that their parents did it all for them. I had to do all my scholarships by myself, my FAFSA, and this girl at our school got 17 scholarships because her mom filled them all out for her and she has all State U paid for because her mom. I was like, I wish my mom would do that for me. I did everything myself. When I went on a college visit, I came up and got my books and on my college visit, I brought my boyfriend with me because my stepdad would go but he was watching the kids, they're working...[When I moved in] my stepdad and my mom actually came and then my boyfriend. But I had to pay for gas for them to drive up...Them not caring really made me want to try harder so that they'd notice. So I think it really helped. But mostly I just do it myself. It's just easier if I just do it.

***Finding: A majority of the participants rely on their parents' management of their ADHD and depend on their parents to make doctor appointments and obtain medications.***

For the majority of students in the study, parents maintained the responsibility for treatment of ADHD for their children even while they were away at college. None of the

students switched to local doctors when they started college, nor had they taken on any responsibilities for the management of their care. In the following excerpt, Matt explained the way his care is managed:

Researcher: Who handles the relationship with your doctor?

Matt: It's my mom.

Researcher: So if you wanted to change meds or something, what would you do?

Matt: I would call her up and we'd probably have an appt, I don't really know. I haven't really changed meds in a while. It's just usually through, just a prescription refill.

Researcher: So she just kind of takes care of it for you? Do you get them sent up here?

Matt: Yeah, and I go home every once in a while and I'll pick some up.

Researcher: So who would you say made the decisions regarding how your treatment would be handled?

Matt: My mom.

Researcher: And are you okay with that?

Matt: Yeah, I trust her.

The students whose parents managed their care were appreciative of their parents' involvement, but revealed feelings that they perhaps "should" know how to manage their own care. When Nathan was asked about the management of his medication, he responded, "I call Mom. And she does it. I don't know who she goes through. I should probably figure that out so I can..."

Only one student, Hannah, felt she had the primary responsibility for her own treatment. She stated, "It's definitely me now [handling treatment], because my parents don't go with me to my doctor's appointments. I just go in by myself. So what I say, [my mom] can't over exaggerate

and say it's wrong." Being responsible for her own care also came with a financial burden as she was the only student who pays for her own medication.

**Research Question 3: What campus resources and personal strategies do students with ADHD utilize in the transition to college?**

*Finding: All of the participants expressed appreciation and awareness of the greater availability of resources offered in college as compared to high school.*

All of the students in the study were impressed with the availability of resources on campus, including tutoring programs (mentioned by all the students), Residence Life (mentioned by all the students), DSS, advising, Recreation Services, the university email system, the library, and the faculty and staff. They felt supported by the campus and thought the university provided the necessary tools to succeed in college. Nathan stated,

State U is great. I mean, tutoring was there, free, right there with you. Every teacher's got their own office. Everybody tells you [that] you can call, you can email. Every single time I've had like a mishap happen, turn in a paper late, besides my English teacher because she kind of screwed me over this past week. I'll throw her an email and you know, hey, I mean, I just texted my freshman experience teacher and said, "Hey, I'm late on this assignment." And it's a freshman experience class for the kids that don't like turning in their homework and they're still acting like it's high school and she said there's no issue here, I mean you've turned in every assignment so far. I trust you. So as far as you shoot them an email, I've found them to be very accommodating. Of course, I haven't found a real jerk teacher yet. But it's great. I like this place.

Sam has similar feelings about campus resources:

It's like the support here, like, all the help that I can get around here is amazing, compared to high school, there is no comparison. This is ten times better than what I had in high school and um...High school was okay with the accommodations. They could help a little bit, but mostly you had to figure it out on your own or really go in after class and talk to teachers...A big difference that I see is that here you have a 24 hour, well, almost 24 hour center where you can go in anytime and get help from different students who have been in the class and have had As and stuff...I go to tutoring all the time. I have for Trig and for uh, Calculus, um, Chemistry.

Overwhelmingly, the students were pleasantly surprised by how approachable the faculty are, with many of them sharing that their preconceptions of faculty as distant and unavailable were incorrect. While they held professors in high esteem, they also felt the faculty truly cared about them, and expressed how assuring that was to them. Carrie explained,

I think I learned also, as everyone just tells you, nobody is going to care about you in college, but I know that there is, my professors anyway seem like they legitimately care. I mean they've asked for our input and so far they've put our input to use. So I think people have that wrong, what they're saying. "College professors don't care." No, they're not going to track you down, "Where's that paper?" But they do care. If you come to them and you need help, they will help you.

Living in the residence halls was a positive experience for all of the students in the study. They had chosen to live on campus, and all were glad they had done so. From meeting new friends to getting advice from their Resident Assistant to participating in floor and hall events to free printing available in residence hall lobbies, benefits of residence hall living were mentioned by all of the students. Although several of the students plan to move to Greek houses or off-



campus apartments for the following year, they all felt that the residence halls were the best place for them during their first year of college. Sam explained,

If it wasn't the residence halls, it would have been a Greek house, and I think both of them would accommodate plenty of friends and lots of support. I know that without the residence hall, I'd probably be a very worried person and I'd probably be very, very stressed out right now and I probably wouldn't come back next semester.

***Finding: Although all students indicated appreciation and awareness of campus resources, only half of the students fully utilized services available to them.***

Two students in the study were registered with Disability Support Services and received academic accommodations to assist with their ADHD, including extra test-taking time and a quiet place to take tests. Two additional students were aware of this service, but did not feel they needed it because they were good test takers and were doing well academically. The remaining students were unaware (prior to participating in this study) that these services were available to them. The following interview excerpt reveals the resistance Nathan felt toward accommodations:

Researcher: Are you registered with Disability Support Services?

Nathan: No. Can I get money from them?

Researcher: No, they provide accommodations for your classes or assistance. They coordinate that for any verified learning disabilities.

Nathan: Ah, I think I'd be too embarrassed when it comes to that kind of thing, so no, I did not. I would not really go do that unless someone told me I had to.

Later in the interview process, Nathan explained that he had forgotten to take his medicine on the day of a test, then ran out of time to complete the test and subsequently failed

the test. He ended up dropping the class, and as a result, fell below full-time student status, causing significant problems for his financial aid. He discovered that accommodations offered through DSS included a quiet test space and additional test time. He believed that if he had utilized such services, he would have been able to complete the test. Upon learning about DSS, his opinion of his need for accommodations changed significantly:

Well, I could have really used that...Cause I ran out, that's the only reason I failed my final is cause I ran out of time completely ran out of time...I couldn't sit there. I forgot to take my pill that day that was the number one mistake and then I kind of sat there like you know looking and you hear people like [making noise] at their computers and you look at them and screw around, lose your train of thought and have to get back on it and that takes time.

Other students found the processes surrounding accessing services to be more cumbersome than they wanted. Sam initially used DSS, but got frustrated and found services elsewhere:

I was using them...I was trying to sign up for a tutor before my Chemistry test, which was a week away and I signed up with them and miscommunication happened and the tutor they assigned me to was no longer a tutor, so that got scrapped and they assigned me to another guy that I couldn't get in contact with until a day or two before the test. So I got frustrated with that, so I just dropped the uh, Disability Support Services, um, tutor and I went over to [tutoring services] and they immediately put me in a class and had me come in two days in a row and go over all my Chemistry stuff, so I just went with them.

DSS was not the only underutilized office on campus that could provide services to students with ADHD. At the time of the interviews, none of the students had used the Health Center or Counseling Services on campus, though many felt they should. Nathan explained his

hesitation to use health services for his ADHD treatment: “I think I should, but I never considered it. I don't know what steps I'd have to do. You just go there and say, hey I need a doctor and give me a physical and get in the system and that kind of thing?”

Though some of the students seemed unaware of the services available to them, they admitted to overlooking information coming into college. Nathan explained that he should have paid closer attention coming into college:

It was information that I missed through negligence, procrastination. I mean it was there, the information was there. I could have found out what I needed to find out but I chose not to, which would also be my advice for [anyone with ADHD] coming in the next semester. You need to go out and look at that stuff and take notice of the stuff that people, the advice they will give you.

***Finding: The strategies utilized for study and organization were most frequently those that were established prior to college.***

All of the students who had strategies in place to manage their lives in college had begun practicing those strategies while they were still living at home with their families. Adam's family added in responsibilities at home to assist him as he transitioned to college:

I started doing my own laundry and stuff over the summer, and my mom was out of town a lot this summer. So I kind of had to grocery shop for myself and cook my own food. So it helped me out to get ready for State U.

Matt's description of how he studies in college mirrors the way he learned to study growing up:

I would say find a place that you can just make your own for study and for homework and stuff. Find a place you can make your own and you feel like it's yours, because I know; when I was at home, I would always do homework in the exact same place every

single day and it wasn't too distracting. I wasn't darting all around the room. So I would say find a nice quiet place that you can be alone but also get help if you need it, like I always go to the "great room" in the library. Have you been in there? It's quiet and it's open. I always go there. I can put my headphones in and I can just concentrate on my work and nothing's really going to bug me.

Rachel grew up with many strategies in place to help her, and she continued to use and expand on those strategies in college. She now uses them to manage everything from waking up in the morning to going to sleep at night. Rachel explains some of her strategies in the following interview excerpt:

Rachel: I will get up in the morning with my alarm clock. I have, it's called a Sonic Alert, a little thing you put under your pillow and it vibrates so since my roommate sleeps in that actually works out. I was going to get that either way, but it has a really loud buzzer but I don't really want to turn up the volume. And then I have another alarm clock, a normal one, that wakes me up. So I have two alarm clocks and I have three of them and I have one for my six o'clock, seven o'clock, eight o'clock for the three different times I need to get up. So I trade those out because I set the wrong day for one of the times I did that it was bad...I usually take my showers at night though, so I'll take it around eight and sit and do homework and dry my hair and then I make sure I set my alarm clock and look at the weather and lay out my clothes, put my books in my backpack at night and I jump into bed.

Researcher: It sounds like you're pretty organized in terms of how you plan for your day. Is that something that you grew up doing?

Rachel: Because of ADHD, first of all I can't decide on an outfit. It takes me, I can't just throw something on, I have to work out the whole outfit. Sometimes it will take me an hour at night to do that. I honestly say I'm not going to get up more, I'm a night owl so I can do all that stuff at night and that's not going to happen in the morning especially with [my roommate] sleeping, I have to turn lights off so I'm quiet then but, yeah, that's how that works.

While some students had family members who implemented structure and developed strategies to help them succeed, other students revealed that the absence of strategies to help with their ADHD while growing up has carried over to their college experience. Carrie explained that her struggle to study has not changed much since entering college.

Um, well, I don't want to say that my mom, she didn't do it right, but I think she should have been more involved in my school work because from as early as I can remember, my homework was my responsibility and my mom signed my agenda, we had to get it signed, so she knew what homework we had, but I mean, I kind of just tried to just I mean, not turn on the TV, not have anything on, but as a young kid, I mean, that's really hard to do. Basically, now I just try to, I try to just go somewhere, no windows because that's a hard thing too is just looking out the windows and just trying to pay attention, I mean that's hard because even when you're, nothing is going on, your brain is still going everywhere else.

Nathan grew up with little structure and now struggles to organize his time and study consistently.

Well, my parents worked and we were divorced [when I was in high school], and my parents worked late, so it was just me in the house. And I didn't have to do anything. I

didn't have to do my homework or anything like that. It wasn't ever enforced...[I] watched TV. Played video games, relaxed, ride the 4-wheeler, that kind of thing. Not what I should be doing.

When asked what strategies he had for managing his ADHD symptoms, Nathan answered, I didn't really. I did a really bad job of doing that. I mean, I will sit there, when I don't take my pill, I will sit there and tell myself ten times the day that I have to do something and I will never sit down and do it. Um, finding the willpower to do that, takes a lot, so I kick myself in the butt all day about getting stuff done, but I just don't. Just get sidetracked, start talking to somebody, start doing something else, start thinking about the night.

**Research Question 4: What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?**

***Finding: The majority of students found their college transition to be stressful as they adjusted to increased freedom and increased responsibility.***

In their transition to college, most of the students looked forward to the freedom it would offer, but quickly discovered that their newfound freedom came with more responsibility than they had anticipated. For most of the students, college was their first experience with being independent and responsible for their own meals, laundry, schedules, finances, and other life management tasks, most of which were not things that they enjoyed. Nathan explained the challenges he faced in this area:

I didn't expect a lot of things. I expected a free lifestyle, and I expected it because I had seen in high school, I mean, you think that it's going to be all fun and games once you get there, but you still got to obey by that set of rules. In college, you're your own person, but

you're living by the power of your rules and stuff like that. So it's not--I would say that I wasn't prepared for the dorm. I wasn't prepared that--I thought I was going to be able to go and do whatever the heck I wanted whenever the heck I wanted. Nope. And you got to pay the bills. The responsibility aspect, yeah. It's a big aspect there...[I struggle with] school and stuff that you have to do for life. Like now, I am having to register for the draft and all that kind of thing. I don't like doing that kind of stuff. That's what I struggle with...I mean you're never ready for life on your own after high school. I mean, I didn't think about cleaning my room, letting clutter build up. I didn't think about haircuts or anything like that. I didn't expect to have to pay a cable bill and do that kind of thing and that just kind of creeps up on you and you're like, wow. I had to start looking at my tuition statement and see that I had holds on my account and start actually checking my grades and talking to my professors, cause they are not going to talk to me. I have to talk to them.

Adam also found the responsibilities for everyday activities to be substantial.

I don't think I was prepared to be away from home at first, because I was like, I got to wake up on my own and go get my own food and I think that was probably one way I can think of right now I wasn't prepared...Just like having to do everything on my own now...It's a lot busier than high school and you don't always have somebody there like your parents to look over your shoulder or make sure you're where you need to be on time, or that you're getting up on time and eating breakfast.

Most of the students also reported going through a phase of skipping classes because they knew they were not being so closely monitored as they had been in high school. Carrie explained in an excerpt from her interview:

Carrie: I think I was unprepared, and like I always felt that I was already so independent in high school that I would be ready here, but there's like, I never, ever, ever skipped in high school and then I got a little carried away for a little while. I'm better now. I'm back on track but there was like I think that week; it was horrible. I didn't have any motivation at the time, I guess, and I was unprepared for not so much—I mean the responsibility of life, I already knew that, because working and I already paid for a lot of my own stuff, so not so much that but as far as responsibility of getting to school. Not even so much my work done because that was my responsibility already. But the going to school was the part, I think...

Researcher: Nobody's going to check up on you if you didn't show up?

Carrie: Yeah. That was kind of it.

Researcher: So you're going again?

Carrie: Yeah. I never skipped my biology classes, the one thing I've never, ever skipped because I just knew how important that was, but there was a lot of classes. But I'm back on track now but there was a time where I was just not going. It's not good. I think it's good I got it out of my system.

Leslie had also realized the dangers of skipping class after a few weeks of doing so:

[I go to class] pretty consistently, but the first few—not the first few weeks but like a few weeks in, there were a few classes that I missed because I was kind of lazy, but after that one week or two weeks that I did it, I realized I had to go to class. It's just because I could that I guess I did it, because, you know, I'm like—I can, I might as well, I guess that was the thought. But I don't skip class anymore because I really know that it's really going to mess me up.



The struggle to find a balance between the activities the students wanted to do and the activities they needed to do was mentioned by most of the students. This excerpt from Matt's interview explains his effort to find balance between studying and partying:

Matt: I'm doing much better than I expected. I was just discussing this actually. I could see myself partying a lot, but I've come to find out that I am coming to realize that the partying comes with responsibility, so I am taking on more responsibility of doing what I need to succeed, so it's really balancing out more than it did in high school...Just this weekend, I had a chemistry test last night and I knew I didn't want to stay in all weekend, so every single day, Friday, Saturday and Sunday, I would set aside two hours just to study chemistry and do all my homework so I could go out and have fun Friday night, Saturday night, and Sunday night.

Researcher: Blowing it off completely wasn't an option?

Matt: No, never...Just because I actually have friends starting to do that and he's not coming back next semester and I don't want that to happen. I want to get college over with. I just, I feel like I'd be doing nothing with my life if I just blew it off.

By the end of the semester, many of the students felt that they were finding a sense of balance between freedom and responsibility, but that they had struggled along the way. Sam related his experience:

I didn't know how much free time I would have. You really have to plan out your time a lot more than you did in high school because here, they really don't care if you show up to class or not. They're getting paid, either way. So I've had to really learn how to balance my schedule, balance studying with hanging with friends and all sorts of stuff that involves that ...I think I made it a balance, because I figured out how to study for

most of my classes and I've incorporated that with what I do on a day-to-day basis. So I think I've gotten into a rhythm where I have equal time for both.

***Finding: The majority of participants reported experiencing financial challenges during the first semester of college.***

Adding to the stress of the college transition was the financial strain of college mentioned by seven of the eight students in the study. Some students had financial help from family, but still had the responsibility of staying within a certain spending budget, which proved challenging while away at college. Other students were responsible for all of their own expenses while at college. The only student who did not see finances to be a stressor was Rachel, whose parents were paying for all of her expenses and had not set limits on her spending. For the rest, finances were a struggle. Carrie indicated finances were a major concern in her transition to college:

I think my stress level went up a whole lot. Money didn't used to be too much of an issue because I was working 40 hours a week out there. I was making \$13.00 an hour at my CNA job. So I had a whole lot of money saved up, but then it just kind of went "poof" like this...and I never believed anybody, "Yeah, you have money now, but just wait." And oh man, I couldn't believe how fast my amount went down. That has been a big stress now. I should be able to make my car payments but it's just, ok, I've got to stop buying stuff I don't need, which I didn't do a whole lot, but there's a lot of stuff I can live without, type thing.

Sam had learned that money did not last as long as he had hoped in college:

I have learned that if you're not careful, you will spend a lot of money here. Yes, I have gone through more money than I thought was possible, and it's all my money and I'm a little worried about it. [I spent it on] nothing. I mean, nothing. It's pizza. It's food. It's

this. It's just junk that I don't need, but I have the urge to buy it every now and again.

I've gone through close to \$1,000 so far. No, I have gone through \$1,000...And that's half my bank account right now. So I'm a little bit worried about that.

A few of the students share accounts with their parents, who monitor and rein in their spending as necessary. All of those students had been asked by their parents to cut back on their spending within a short time at college. Each of those students felt as though they had gotten their spending back under control after their parents intervened. Matt explained his experience in the following interview excerpt:

Matt: It was tricky at the beginning, and then I got a couple of calls from my mom saying, "You need to cut back," and it's actually been really easy. It's just controlling yourself and not going to Chipotle or going to McDonald's every day. Because the [dining facility] gives pretty good food and you can get a lot of it. So if there's ever the option between going to [dining facility] or going to McDonald's to eat, it'll be [dining facility] for me.

Researcher: So do your parents monitor your spending?

Matt: Yeah, we have a joint account so she'll always check in on my account when she does check on hers, and she'll tell me how it's doing.

Adam related a similar experience in the following interview excerpt:

Adam: [I wish I'd known] how much you need to save money. Like at first, I just blew money like it was nothing and my parents were like, "Let's start using your money." [I spent it on] food and stuff because my schedule, I'm still getting used to that, and when the dining centers opened and I didn't know if I had enough time to make it so I just go get something. I just spent it on like useless stuff.

Researcher: So did you scale back then?

Adam: I kind of had to....I got the big talk.

Researcher: So do you eat more now in the dining center?

Adam: Yeah, like everything's figured out, but I know it's a lot better.

***Finding: All of the participants experienced academic stress and found college to be more difficult than expected.***

While all of the students expected that college would be more academically challenging than high school, they still felt overwhelmed at how much more difficult it was than expected. Adjusting to the academic rigor of college was a stressful experience for the students in this study.

Adam had completed 12 credit hours at a community college prior to his freshman year, but still found classes at State U to be more challenging than expected, as explained in the following interview excerpt:

Researcher: Is it harder than you thought it was going to be?

Adam: Yes. And I thought – it's even harder than a community college just because things such as class sizes are a little bit bigger, and the work's a lot tougher...Surprisingly. I thought it'd be close to the same, but there's a noticeable difference.

His feelings were echoed throughout the interviews with the remaining seven students. Carrie stated,

I figured it would be hard. I thought it would be hard just not so hard my first year. I didn't realize how much of an adjustment it would be...it was a bigger adjustment than I thought it was going to be. I think that if I honestly apply...because I really notice that

my test grades come out...like if I got a B then yeah, I put some effort in it. If I got an A, then I put a lot of effort into it, but it's really showing how much effort I put into it at least my test grades maybe not just regular work. So I realized that I really do need to put in the effort that I want to get out. I never saw that in high school. I could do nothing and get an A, and I am not trying to do that now but you know what I mean.

Hannah, who had a 3.8 GPA in high school, felt unprepared for the academic challenges in college. She stated,

High school didn't teach me like anything. When I went to biology, I was clueless. Our school was really poor, so it seemed like we hadn't learned as much as other schools did. We had a few really good teachers that prepared us, but they didn't prepare us enough...I was from like a little town. We have little classes. The teachers are one on one, like, "You forgot an assignment. It's okay. You can turn it in in a couple of days." It's not like that here, and then it was like all homework grades, not tests, like tests were barely anything. [High school] is like a lot of homework.

Many of the students felt unprepared for the exam-based grading system prevalent in college after years of schooling in which homework made up a great portion of a student's grade. Learning how to study for college-level exams was a difficult trial-and-error experience for most of the students, including Leslie, who stated,

I wish I would have known how hard, how different the exams would have been. I wish I knew what I had done to prepare for the first few ones because I wasn't, you know, I didn't do good on those. I wish I had known that and stuff. Yeah...I don't know. I was caught up in the fact that I was at college and stuff. I didn't really realize how much I had to study. I've been told and stuff but I was like, "Oh, I'm fine." And then after the

first exam, like “Oop, got to study a little bit more.” (Laughs) Yeah...So I definitely learned from that...I know what I need to focus on, because I know what’s going to be usually on the exam. So I utilize all the resources I get, because before, I was like, whatever I don't need to do the practice problems because I’m not grading it, but if I’m like, “I got to sit there and do those because I know it would be helpful,” it’s just like, you know, but first, I was like, “I don’t need to do them because I don’t get graded on it.” Then I’m like, “I need to do them for myself.”

**Research Question 5: How do students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?**

*Finding: A strong majority of participants believed medication to be critical to their success in college.*

While the use of medication to treat ADHD can often be controversial among the public, there was no controversy among these students as to the role of medication in their lives. Seven of the eight participants took medications to treat their ADHD, and all believed the medications were critical to their success in college. When asked about the role of medication in his life, Nathan explained,

I've got to [take meds]. Have to. Or else I am going to fail out of college...Without them I'd be out of college already. And I am so glad I got that prescription again. I mean, I didn't ever think I needed it in high school. Just, get Cs and not have to worry about it and screw around and walk around in the hallway like you're going to the bathroom. In college, you gotta put your work in. I didn't realize I needed [meds] that much. [I feel fine about using medication] because I need it. Used to hate it in high school and in grade

school. I was like, “I don't need this crap.” And my teachers saw that I did. I didn't think that I had an issue, but get to college and I need it. Bad. It's keeping me afloat.

Some of the students believed they could function fairly well without medication, but all seven of the students who were taking medication strongly preferred being medicated for the sake of their academic success in college. Sam explained his perspective of medication:

It's not a necessity, but it helps a lot and I can definitely can tell when I the effects when I haven't taken it as opposed to when I have taken it. When I don't take it, I'm usually not able to focus, I'm usually thinking of things. I don't want to be stuck in a chair. I want to be outside. I want to be listening to music. I want to be hanging with some friends. Anything but what I am doing right now. And when I do take my medicine I am able to at least focus on what I am doing and try to force myself to continue to pay attention through the lectures and all of that. Yeah, I can definitely tell a difference when I take it. It's like night and day when I take it.

While most of the students believed medication to be critical to success, they also expressed the desire to be off medication as adults. Most felt that they were on medication indefinitely, but hoped to be able to manage their adult lives without medication. Matt explained,

I kind of want to get off it. I kind of want to be able to control myself when I become an adult, but right now it doesn't really matter because I can clearly see the difference between when I am on it and when I am off it. So I know I am not to the point where I can stop taking it. But then again I am aware of when I need to settle down. I just don't want to be on the pills forever, pretty much what I feel about them.

***Finding: All of the participants lacked basic knowledge of their ADHD diagnosis and understanding of how medications worked.***

All of the students in the study had been diagnosed with ADHD years prior to attending college, with years since diagnosis ranging from four to 12 years. Despite the years spent living with ADHD, the students lacked basic knowledge of their diagnosis, and most were unaware of how ADHD affects them physiologically. Carrie believed that her young age at diagnosis was part of the reason she does not know more about the medical aspects of ADHD:

Well, when I was younger, I just thought it means that I can't concentrate, and now that I am older I know that like, that's part of it and that I'm like restless sometimes and I know that it affects you that way. I haven't really done, to tell you the truth, I haven't really done research on a whole lot of it, just because I haven't been, I mean I've had it long enough to know how to deal with it I guess, so I never really, I guess I would have if I'd have found out like in sixth grade that I had ADHD, I guess I would have gone more into looking at it, but since I was so young, I know I wouldn't have looked it up, a 6 or 7 year old isn't going to look something like that up.

When asked how ADHD works medically, Matt was equally unaware and stated, "I have no idea medically. I just know what ADHD stands for, and that's about it." Leslie also lacked information and responded, "Now that I think about it, I don't really know and I should. I should know."

Not only did the students lack knowledge of their condition, but they also lacked knowledge of their medications. Seven of the eight students in the study, three of whom were pre-medicine majors, have taken medications for years, but none could explain how their medications worked. When asked if she knew how her medication worked, Hannah answered,

I actually don't...I know they've told me but I don't know at all and it kind of makes me feel stupid because I'm taking it and I don't know what it does...I know that it has



different effects for different people. So it's kind of hard to know what its effects are because they're different for everyone. But I don't know exactly what's in it and what it does, what it's supposed to do.

Sam also knew little about his medication, but was unconcerned. He stated, "I don't really know how it works. I have never looked into it that much honestly." Carrie was the only student to attempt to explain how the medications worked, but still came up short:

I only know really theories and what I've heard. From what I've heard it's a little more depressants, a little more...well, not depressants. From what I heard is that it's like a depressant, but I don't know if that's even true or not. Is that it just makes you...it does something with the chemicals that belong in your brain. But that's all I really know...

***Finding: The consistency with which ADHD medications were taken was influenced by the side effects experienced by the students.***

While the majority of students believed they needed medications to be academically successful, some of the male students resisted taking medications consistently because they perceived that being unmedicated was more fun. One of the male students, Adam, takes his medication very consistently. The other three males in the study intentionally take medication breaks for periods of time including summers, vacations, and weekends. They also skip days periodically just because they want to do so. Sam explained that he feels life is more fun without medication:

During the summers, I don't take it and I see a big difference in how I act and how I think. So I think it's my personal decision to continue to take it, because it's fun without it. It really is. It's a lot more stress-free, but I wouldn't have the grades I have right now without it.

While Sam explained in his interview that he takes medications consistently at college, he admitted in one interview that he had not taken medications for a few days because he preferred to feel the effects of ADHD than to feel focused on weekends. He explained in the following interview excerpt:

Sam: If I didn't take my meds, I think I would notice, I can notice actually, that I am not as focused as I should be. Like right now I have forgotten to take my meds during the weekend and I think that was on purpose and right now I am having a little trouble staying focused, but I can still keep on a conversation.

Researcher: [Your medication] has to build up in your system, right?

Sam: Right, yeah, usually they want it to be in your body about 42 hours before you really need it, but...

Researcher: You didn't take it because...why didn't you take it?

Sam: Uh, I don't know.

Researcher: Just didn't want to?

Sam: Um, sometimes it's better to be a little ADHD than super focused on the weekends.

Nathan also struggles with taking his medication consistently because he thinks life without it is more fun. He stated, "I just don't like taking the pill because it bogs you down. You're just not cool socially. I like to have a good time with my friends and be happy, and that seems like that stuff just stresses me out."

While some of the female students also thought they had more fun when they did not take medication, the fun they experienced while not medicated was less important to them than the focus that the medication provides. Hannah explained:

I can definitely tell when I'm off of it. I can tell and other people can tell, but it's not a big deal with them because I'm just more fun, but for me, I'm not as focused and I don't get my homework done. I'll go to the library with a friend and we'll talk the whole time, and I look down and I'm like, "Something that could have took 10 minutes took 2 hours." So it's important for me to take it if I want to do good at school.

Appetite suppression was a side effect of ADHD that was mentioned in a positive light by a few of the female students. The women who had taken medication while growing up had always been thin and were grateful for that side effect. When considering the reasons she preferred to be medicated, appetite suppression was a consideration for Leslie, as indicated in the following interview excerpt:

Leslie: It helps me focus more and it definitely curbs my appetite because I have a really big appetite if I don't take it, which, that's the main thing that I notice. But my dad will notice I am more hyper and not focusing or something like that. It just helps me focus and get on track with things that I have to do, which is good, and definitely the food thing.

Researcher: Did you lose weight when you started it?

Leslie: Yes, well it stopped me from gaining. I think I lost some weight just because...I mean I wasn't overweight or anything when I started taking it but I was a little chunky. I was just a little chunky but you could definitely tell when I was not taking it and when I started taking it because I got down to normal instead of a bit chunky. I didn't even remember that I was but you can look at pictures and it's just like a little bit.

In a later interview, Leslie's reasons for taking medication remained the same:

I think it keeps me focused. It's not like it's changing who I am. It's like making me more focused of a person. It's not like it's a big—it doesn't really change you, which I

like because I don't want to be controlled by it. But it does help and it does help me keep my appetite down and things like that.

While the other women did not mention appetite suppression as a reason to stay on medication, they all had experienced it as a positive side effect of medication. None of the male participants mentioned experiencing a suppressed appetite as a side effect of the medications.

***Finding: All of the students accessed ADHD care through their family doctor or pediatrician, and all considered ADHD treatment to be primarily medication based.***

The students in this study who were currently taking medication all reported that they accessed medication through a family doctor or pediatrician in their hometowns. Three of the students mentioned having seen counselors or psychiatrists earlier in life, and one student was in an ADHD support group while in elementary school. As they grew older, they used counseling services less, and by the time of this study, the primary sources of ADHD care for the seven students receiving treatment were physicians and the only form of treatment utilized was medication. Sam explained how his ADHD care was managed:

It's our family doctor and I'm not sure how to describe her really. We've always gone to her. She's always filled out the prescription. We went and got the pills over at either Walmart or Walgreens. But other than that, they just asked me how I was feeling about it, how it was affecting my school life, my grades, all of the usual questions you ask people with ADHD. Other than that, that's almost all she did. She'd ask me how I was feeling about possibly upping the dose if I needed to.

Although State U offers counseling services and a health center that provide treatment to students with ADHD, none of the students had transferred their care there, or even inquired about the possibility of doing so. When the students were asked whether they had considered

using the university health center for their care, most had not. Nathan began considering it after learning about it during his first interview, but said, “I think I should, but I never considered it. I don't know what steps I'd have to do. You just go there and say, hey I need a doctor and give me a physical and get in the system and that kind of thing?”

### **Summary**

The findings of this study help to shed light on the college transition experience of students with ADHD. The ADHD diagnosis was not a factor in the college decision-making process for the students in this study. Families played a critical role in the college transition process and beyond, with parents bearing the responsibilities of ADHD treatment for the majority of students. All of the participants expressed appreciation and awareness of the greater availability of resources offered in college as compared to high school, yet only half of the students fully utilized services available to them. The students who utilized strategies in college for study and organization had established those strategies prior to starting college. The college transition was stressful as students sought to balance their newfound freedom with the responsibilities of college life. Students also experienced stress during the college transition due to financial and academic challenges. Medication played a major role in the college transition, with most students believing it to be critical to their success in college, although the students did not know much about their medications or their diagnoses. The consistency with which ADHD medications were taken was influenced by the side effects experienced by the students. ADHD care was accessed through family doctors or pediatricians, and medication was the primary form of treatment.

## CHAPTER FIVE

### Discussion

Between 3% and 7 % of school-aged children are diagnosed with ADHD (Barkley, 2005; McKee, 2008). While it was once believed that ADHD was a childhood illness, studies now suggest that up to 80% of children with ADHD continue to show significant symptoms of the disorder into late adolescence and adulthood (Klein & Mannuzza, 1991; Weiss & Hechtman, 1993). The number of students with ADHD on campus continues to increase, and current research does not sufficiently identify the needs of this population, which comprises 1-4% of the total college population (Glutting et al., 2005). A thorough review of literature related to the study revealed that little is known about how students with ADHD manage the transition from high school to college.

Research indicates that the family plays a critical role in the development of a child with ADHD (Segal, 1998, Hechtman, 1996). Parents are the immediate gatekeepers in decisions regarding help seeking for ADHD (Hansen & Hansen, 2006). The parenting style of parents of children with ADHD has been described as “vigilant family involvement” (Firmin & Phillips, 2009, p. 1162), characterized by a high degree of involvement in children’s lives, and a willingness to devote time and resources to assisting their children in becoming successful.

ADHD has been explored across the lifespan, with most research focusing on childhood. Throughout schooling, students with ADHD as compared to students without ADHD, tend to have more academic problems, struggle with time management, have lower self-esteem, and experience challenges in social relationships (Carter, Krener, Chaderjian, Northcutt, & Wolfe, 1995; Hechtman, 1991; Lambert, 1998; Wilson & Marcotte, 1996). In adulthood, the primary feature of ADHD shifts from hyperactivity to internal distractions, such as daydreaming and a

constant flow of ideas, which may or may not be related to the task at hand (Weyandt et al., 2003).

Among those with ADHD, 91.9% have received medications at some point in their lives (Grenwald-Mayes, 2001). Many adolescents with ADHD choose to go off of medications for a time, but a study by Meaux et al. (2006) indicated that most (62%) of the college students with ADHD in their study chose to take medications again in college, citing the “need to study and get stuff done” (p. 221). With improved diagnosis and treatment, adolescents with ADHD are attending college at increasing rates and are currently estimated to comprise 1-4% of all college students (Glutting et al., 2005), of which approximately 42% are female (Weyandt & DuPaul, 2006). ADHD greatly impacts college students who must learn to function and succeed in a college setting while managing the disorder (Grenwald-Mayes, 2002).

The purpose of this qualitative study was to explore the experiences of the college transition process with a sample of first-year college students diagnosed with ADHD. Five research questions evolved to guide this exploratory study. These questions were intended to help gain insight into the experience of students with ADHD transitioning from living and studying at home to living and studying in the college environment. The research questions that framed this study are:

1. How do college students with ADHD plan for and manage the college decision-making process?
2. What roles do family members and others play in the transition to college?
3. What campus resources and personal strategies do students with ADHD utilize in the transition to college?

4. What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?
5. How do students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?

Participant selection was conducted using criterion-based selection, in which criteria were established to best meet the goals of this study. The criteria for participants were: (a) students must be enrolled in their first year of college; (b) students must be living 40 miles or more from home; and (c) students must have been diagnosed with ADHD at least two years prior to beginning college. Through contact with DSS, University Counseling Services, and Residence Life, and the placement of flyers throughout campus buildings, eight students were identified. Each student participated in a series of three interviews designed to explore his or her experiences as a first year college student with ADHD. The interviews were conducted in October and November of 2010 in student services offices on the campus where the students attended. Interviews were then transcribed verbatim and analyzed using a constant comparison method of data analysis.

Data analysis revealed findings that addressed the research questions guiding this study. The findings were as follows:

1. The majority of participants indicated that their ADHD was not a factor in their college decision-making process.
2. The majority of participants reported that their families played a critical role in their college transition process.
3. A majority of the participants rely on their parents' management of their ADHD and depend on their parents to make doctor appointments and obtain medications.



4. All of the participants expressed appreciation and awareness of the greater availability of resources offered in college as compared to high school.
5. Although all students indicated appreciation and awareness of campus resources, only half of the students fully utilized services available to them.
6. The strategies utilized for study and organization were most frequently those that were established prior to college.
7. The majority of students found their college transition to be stressful as they adjusted to increased freedom and increased responsibility.
8. The majority of participants reported experiencing financial challenges during the first semester of college.
9. All of the participants experienced academic stress and found college to be more difficult than expected.
10. A strong majority of participants believed medication to be critical to their success in college.
11. All of the participants lacked basic knowledge of their ADHD diagnosis and understanding of how medications worked.
12. The consistency with which ADHD medications were taken was influenced by the side effects experienced by the students.
13. All of the students accessed ADHD care through their family doctor or pediatrician, and all considered ADHD treatment to be primarily medication based.

### **Interpretation**

The findings of this study indicate that college students with ADHD face unique challenges in their transition to the college environment. This interpretation will discuss each of

the research questions through an analysis of the findings of the present study as well as existing relevant literature.

**Research Question 1: How do college students with ADHD plan for and manage the college decision-making process?**

The students in this study did not plan adequately for their transition to college. Most could not articulate how they planned for college or steps they took in the process. In addition, most did not consider their ADHD diagnosis to be a factor in their college decision making. When asked how they planned for college, most could not give a clear answer. They completed steps toward college with the help of external assistance, such as parents, campus visits, and high school curriculum, rather than their own efforts.

The lack of planning on the part of the students with ADHD is not surprising when considered in light of research. Research suggests that the core childhood symptoms of ADHD shift with development. Hyperactivity declines as they near adulthood and attention problems remain constant. Impulsivity may transform into difficulties in executive functions (Wasserstein, 2005). ADHD is considered to many to be a disorder of central executive functioning, which is hypothesized to mediate the ability to plan, organize, and use information to solve problems (Adam, 2008; Barkley, 1997, 2005). Wasserstein (2005) defined executive functions as “an evolving construct...a shorthand for complex regulative processes. Many other terms are used interchangeably with executive functions. These include self-reflection, self-control, planning, forethought, delay of gratification, anticipatory set, future orientation, working memory...” (p. 536). As individuals with ADHD mature, executive function deficits are among of the main diagnostic markers of ADHD. Because the ability to plan is so closely tied with executive

functions, it follows that college students with ADHD would experience difficulty in planning such a complex transition as the transition to college.

Another important factor in how these students described their college planning is research suggesting that the episodic self-knowledge of ADHD individuals is less organized into a personal narrative than it is for persons not suffering from ADHD (Klein, Gangi, & Lax, 2011). This could mean that some of the students simply did not convey the efforts they made in their college planning due to a lack of a narrative to support it. However, research supports the idea that it is reasonable to infer that the ability of individuals with ADHD to perform normally in tasks involving executive functions related to future-oriented personal activities, such as planning for the future and using information to solve problems of person relevance, is likely to be impaired (Barkley, 1997; Klein et al., 2011; Sarkis, Sarkis, Marshall, & Archer, 2005; Willcutt, Doyle, Nigg, Faraone, & Pennington, 2005).

While no other studies have explored specifically the college transition of students with ADHD, other research on students with ADHD is consistent with the results of this study. A study by Meaux et al. (2009) found that few college students with ADHD have experience advocating for themselves, having depended on family and schools to prepare them for each new stage in life. In addition, they found that most have limited awareness of the full ramifications of ADHD. This limited awareness could cause students to underestimate their needs in college, and therefore not take their condition into account in their college selection and planning. This can result in difficulties when students fail to consider whether a college can support their academic and personal needs. It can also cause students to discount the possibility that they could benefit from academic and personal resources on campus. The students in this study felt as though State U was able to meet their needs through the many resources offered, but most denied needing any

assistance until they had been in college for a period of weeks or months. Because they discovered these needs after enrollment, they had not viewed academic support and resources as a critical aspect of their college decision-making process.

**Research Question 2: What roles do family members and others play in the transition to college?**

For most students in this study, family was instrumental in many facets of their college transition process. Families assisted with everything from applications to waking up for classes each morning. In addition, a majority of the students relied on their parents to manage their ADHD treatment. Studies consistently confirm the importance of the family, particularly the primary caretaker, which is often the mother, in managing the lives of children with ADHD (Firmin & Phillips, 2009; Hansen & Hansen, 2006; Kendall et al., 2003). One study of families with children with ADHD found that these families are characterized by vigilant and proactive family involvement in all aspects of their children's lives (Firmin & Phillips, 2009), similar to what most of the students in this study described. Most students felt that their parents gave generously of their time and resources to assist them in the college transition and manage their ADHD treatment.

Almost all of the students in this study reported very positive relationships with their parents, which differs from some of the literature on families of children with ADHD. Comfort (1992) found that families of adolescents with ADHD reported that fostering a child's independence is more ambiguous and inflammatory than the experience of families with non-ADHD adolescents. Additionally, Lobar and Phillips (1995) found that the symptoms of ADHD may create more dependence in the child for the parent and cause more hostility in their pursuit of autonomy. In addition, families of children and adolescents with ADHD are at increased risk

for interpersonal conflict, increased rate of separation and divorce, decreased parenting self-esteem, higher levels of depression, and higher levels of social isolation (Rostain, Power, & Atkins, 1993). Evidence also indicates that ADHD predicts increased stress within families and depression in mothers (Faraone, Biederman, Mennin, Gershon, & Tsuang, 1996; Faraone, Biederman, Chen, Milberger, Warburton & Tsuang, 1995; Hechtman, 1996; Wender, 1995). It is unclear whether the students in this study differ significantly from other adolescents with ADHD, or whether their impressions of their family dynamics are inaccurate. Brinkman et al. (2012) found strong evidence that children with ADHD have unrealistically high self-views of skills and competence compared to children without ADHD, and noted that differences of opinion on functional impairments may be a source of conflict between teens and their parents. It is certainly possible that the students in this study underestimated the impact of their ADHD on their family functioning.

Research indicates that mothers and fathers often view ADHD diagnoses differently. One study found that during the period following diagnosis, mothers adopted a medical explanation for their children's problems and, in turn, viewed medication positively (Singh, 2004). Fathers were more skeptical and were classified as either "reluctant believers" or "tolerant believers" based on their attitudes toward ADHD and treatments (Singh, 2003). While parents were not interviewed in this study, the students indicated that this was true of their families as well. Most students received the bulk of their assistance with ADHD from their mothers who were more accepting of their diagnoses. The discrepancy between acceptance of ADHD diagnosis between mothers and fathers was more pronounced among the students whose parents had divorced. Those students were also the most likely to report ADHD as a contentious issue between their parents.

Hansen and Hansen (2006) found that parents are the immediate gatekeepers in decisions about help seeking for ADHD. A qualitative study of students with ADHD by Meaux et al. (2009) found that participants with ADHD described positive relationships with their parents and indicated that parental support and reinforcement helped them make it to college. The students in the present study also experienced having parents who served as gatekeepers and, for the most part, described parents as instrumental to the college transition as well as their medical treatment. A study by Meaux et al. (2006) revealed similar findings. After the initial diagnosis of ADHD, healthcare professionals were rarely involved in the decision to stop or restart medications. Participants who chose to restart medications typically called their mothers, who then called the pediatrician to renew the prescription (Meaux et al., 2006), which is how the majority of students in this study reported managing their prescriptions. Brinkman et al. (2012), however, reported that adolescents with ADHD in their study described involvement in discussions and decision making with their parents and doctor that increased over time. They do not, however, address when these adolescents with ADHD begin to manage their ADHD treatment independently.

**Research Question 3: What campus resources and personal strategies do students with ADHD utilize in the transition to college?**

While they spoke highly of the available resources on campus and felt confident that the resources offered could be of assistance, the students in this study underutilized campus resources for a variety of reasons, including lack of knowledge of resources, feeling that resources did not apply to them, and discomfort with asking for help. Strategies such as scheduling study time, utilizing study and test taking methods, and developing daily schedules were also underutilized, primarily because they had not been well-developed prior to starting college.

**Resources.** Many of the students in this study began college with the notion that they should not need help and therefore paid little attention to the services and resources available to them. What they learned over the course of their first semester was that some campus resources could be beneficial to them. Some students overlooked services because they did not see their relevance to their situation. When Nathan was asked if he received services from DSS, he immediately asked, “Can I get money from them?” He had never considered utilizing their services because he did not think of ADHD as a disability. A study by Toner et al. (2006) found that adults with ADHD often feel that the condition has a stigma, and therefore keep their diagnosis a secret from most people, even avoiding asking for workplace accommodations. This is consistent with the feelings of some of the participants in this study. Even if they think they might benefit from assistance, they are uncomfortable with the idea of receiving help. Meaux et al. (2009) found that many students with ADHD felt that despite the chronic nature of ADHD, they should not need additional help to manage the condition. The students in their study tried to keep their ADHD diagnosis a secret prior to college, but once they got to college, they became more open about it. The students in the present study were also uncomfortable with their diagnoses prior to college, but reported being more likely to reveal that they had ADHD when they felt they really needed help, which was occurring more frequently as a result of the academic rigor of college.

Some students in this study did not utilize services because they were unaware they were offered. Hannah said she had never heard the university offered any help for ADHD, despite mentioning her ADHD diagnosis on her application. With the information overload of the first semester, it is easy for important information to be overlooked by incoming students. In addition, the self-referral and documentation required to use services in an office such as DSS may

overwhelm a student who is already struggling to manage the new pace of independent living and a college schedule. Sam recalled having registered for personal tutoring sessions, but became frustrated when they were not easily obtained. After a few days of not being able to set up a tutor through DSS, he obtained services elsewhere, which could be due to low frustration tolerance, a common symptom of ADHD. What may be a minor inconvenience to most students can be a major issue for a student with ADHD. The steps required to obtain services can sometimes prevent students with ADHD from receiving the assistance they need.

The presence of available resources on campus, even for those students who were not consistently using them, provided a sense of belonging throughout their college transition process. From their first contacts with State U, the students reported that they felt that the university cared about students. All of the students continued to feel that sense of caring throughout their first semester and had positive regard for the institution despite any personal and academic challenges they were facing. Studies have reported a connection between students' sense of support at an institution and their reports of increased social and personal competence (Belcheir, 2001; Filkins & Doyle, 2002). Filkins and Doyle (2002) found that students' ratings of institutional support were the strongest predictors of gains in social and personal development. The support provided through formalized resources, contact with faculty and staff, and personal interactions on campus provided these students with a sense of security throughout a challenging time in their transition to college.

***Strategies.*** This study found that students with ADHD benefit from developing strategies to help manage their ADHD prior to entering college. Most of the students had difficulty articulating strategies they used to study and manage time effectively. Despite these being two major challenges for people with ADHD, most felt that they were using trial-and-error methods



that were largely ineffective. Prevatt, Reaser, Proctor, and Petscher (2007) studied the learning and study strategies of college students with ADHD and found that students with ADHD reported lower scores for time management, concentration, selecting main ideas, and test strategies than both learning disability groups and non-disability groups. Their research aligns with the findings of the present study, in which students with ADHD lacked strategies for dealing with these problem areas.

The students in the present study who could articulate their strategies had been utilizing them for years and had been taught these strategies by their parents while they were still living at home. Research indicates that parental strategies are of particular importance in families of children with ADHD. Firmin and Phillips (2009) found that strategies centered around routine and structure are paramount to navigating daily life successfully. Parents' close involvement in the daily routines of the lives of their children with ADHD enabled them to successfully predict challenges and work to minimize or overcome them with their children. In a study of successful college students with ADHD, Stage and Milne (1996) found that the most important attitudinal factor affecting these students with learning disabilities, including ADHD, was the individual student's self-perception, with successful students developing awareness of disabilities as well as management techniques to compensate for their disabilities. Their tactics ranged from stress relief exercises to study schemes to methods for handling emotions. However, the most common strategy mentioned was spending more time than peers on their coursework. In the present study, the students who utilized strategies were better attuned to their weaknesses and had developed compensatory strategies to deal with them. They also were aware that they needed to dedicate more time to projects than other people did, which helped them to be less frustrated when things appeared more difficult for them than it was for others.

**Research Question 4: What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?**

Terenzini et al. (1994) studied the college transition in first year students and argued that “real learning” of the college transition includes developing survival skills (e.g., money management, time management, goal setting); developing self-discipline to “just do it” when needed; taking responsibility for physical, financial, and academic well-being; and developing a clearer understanding of oneself and one’s goals through interactions with faculty and peers. These survival skills present a challenge for all students, and are certainly challenging for students with ADHD, who are very likely to experience difficulties related to executive functions, which are a set of fundamental neurological processes necessary for “independent” and “socially responsible” living (Lezak, 1982). The students in this study reported dealing with significant stress and challenges throughout their college transition. The responsibilities of managing their lives independently for the first time coupled with a more academically rigorous environment than previously experienced made this period of their lives particularly difficult. The students in this study struggled to manage multiple responsibilities, financial challenges, and academic stress they experienced throughout the college transition.

***Multiple Responsibilities.*** Research indicates that the lack of external structure in college combined with inadequate personal skills of college students with ADHD can cause these students to have difficulty adjusting to the academic and social demands of college life (Farrell, 2003; Quinn et al., 2001; Turnock, 1998). Students with ADHD face obstacles in dealing with the information overload, new interpersonal relationships, unfamiliar physical environments, and increased responsibilities in all areas of their lives (Jones, Kalivoda, & Higbee, 1997). They also often feel overwhelmed and frustrated with the multifaceted role of

college student, and the increased responsibilities therein (Barkley, 2005; Quinn, 1994; Weiss, 1992).

Not only do students with ADHD experience the weight of multiple responsibilities, they may also have deficient skills to manage them in an unfamiliar and less structured environment than they have previously experienced. Loe and Cuttino (2008) found that college students with ADHD in their study reported the challenges of the college environment. A study of college students with ADHD by Rabiner et al. (2008) noted the difficulties of first-year college students with ADHD,

Relative to what most students would have experienced in high school, the typical college freshman has substantially increased amounts of unstructured time and confronts a new set of academic demands where the steps to success are likely to be less straightforward. This places a premium on executive and organizational skills that may pose particular challenges for students with ADHD who are confronting this new set of challenges without the structure and support that parents and high school teachers may have provided (p. 697).

The findings of the present study aligned with those of past studies. For the students in this study, responsibilities such as paying bills, remembering when the dining centers were open, and doing laundry were unanticipated and, when added to the responsibilities of a full-time student, felt overwhelming.

***Financial Stress.*** The majority of students in this study experienced financial stress during their transition to college. Most had not anticipated spending as much as they had, and some were adapting to paying bills on their own for the first time. The financial stress added pressure to what they were already experiencing as first-year college students. Most were

grateful for their parents' involvement in monitoring spending and assisting with financial needs. While many families cannot afford to cover all of their children's expenses, two of the students had parents who paid for all of their needs while at college. As a result, those students experienced much less stress over financial concerns than the other students in the study. A study by Kaminski et al. (2006) revealed a correlational finding that freedom from financial concerns and better time management were associated with academic success. It is believed that the freedom from financial concerns allows more time for studying. While the present study cannot claim causation or correlation, it is reasonable that reducing financial stress for students with ADHD during their college transition would be beneficial.

*Academic Challenges.* For the majority of the students in this study, college presented significant academic challenges. They felt unprepared for exams, lacked study strategies, and experienced trouble maintaining focus in classes. Research has found that these types of academic stress are fairly common among students with ADHD. Rabiner et al. (2008), in a study of college students with ADHD, found that that even when students with ADHD have achieved sufficient academic success to enroll in college, including a highly competitive institution such as the private university in their study, they still experience greater concerns about academic performance during their initial semester than their peers.

Zwart and Kallemeyn (2001) found that students with ADHD reported problems related to study skills, note taking, summarizing, outlining, and test taking. Wallace et al. (1999) found that college students with ADHD reported having more difficulty paying attention and having more distracting thoughts in lectures than do other students. In addition, Reaser et al. (2007) in a study of college students with ADHD, reported that these students had poorer time management skills and deficient test-taking strategies. A study by Norvilitis et al. (2010) found lower levels of

academic adjustment and poorer study skills among college students with ADHD, both in the United States and in China. The students in the present study strongly preferred classes in which they felt they excelled and instruction that was given in their preferred learning styles. This is consistent with research by Carlson et al. (2002), which suggests that students with ADHD learn well when they are highly interested and show improved behavior or academic performance when tasks are made more salient, novel, or interesting.

**Research Question 5: How do students with ADHD use medications, mental health providers, physicians, and accommodations in managing their ADHD?**

The primary treatment option reported by students with ADHD was medication. A few of the students had tried other options such as counseling earlier in life, but now relied on medication to achieve focus and help them succeed in college. The students in this study who were currently taking medication believed that medication was critical to their academic performance in college. While some had wanted to give up medication as they grew older, all were convinced that college was not the time to stop taking medication due to the need for focus, time management, and ability to tune out distractions.

A study by Brinkman et al. (2012) found that adolescents observed improvement in school performance while taking medication, and most cited an enhanced ability to focus on schoolwork and achieve favorable outcomes. Hansen and Hansen (2006), in a qualitative study of parents of children with ADHD, found that parents doubted their children would be able to handle the academic challenge of college without medication. While the parents of the students in this study were not interviewed, several students mentioned that their parents felt it was important for their children to take medication in college, and even those students who had been reluctant to medicate while in high school were becoming aware of their need for medication

while in college. Brinkman et al. (2012) reported similar findings, with adolescents making deliberate choices to medicate depending on their perceived need to complete daily tasks such as tests and team sports.

Although the students in this study felt the need to take medication while in college, most admitted to not knowing much about their diagnoses and their medications, and felt that they probably should know more. Most of the students were diagnosed fairly early, between ages six and nine. Carrie felt that part of the reason she knew little about her condition was because of her early diagnosis. She explained,

I haven't really done, to tell you the truth, I haven't really done research a whole lot of it, just because I haven't been, I mean I've had it long enough to know how to deal with it I guess, so I never really, I guess I would have if I'd have found out like in sixth grade that I had ADHD, I guess I would have gone more into looking at it, but since I was so young, I know I wouldn't have looked it up, a six or seven year old isn't going to look something like that up.

Carrie's feelings may help explain research by Meaux et al. (2006), which found that the level of self-management and knowledge of ADHD between early diagnosed and later diagnosed college students with ADHD was striking. Participants who had been diagnosed in middle school or later were more likely to describe positive effects of stimulant medications outside of their school environment. They also were more likely to have ongoing support and guidance from both psychologists and physicians, which was likely to have been beneficial to them. Research indicates that structured management of medications and frequent collaboration with healthcare providers are significantly more effective in treating ADHD than less structured management with infrequent contact with healthcare providers (Kollins, Barkley, & DuPaul, 2001).

They also discovered that students who were more knowledgeable about ADHD were very articulate about their own difficulties and described more success in planning and implementing strategies to manage their symptoms as well as the demands of college life. This was true of the present study as well. The students who were most knowledgeable about their condition were also the ones who felt they had implemented strategies beyond medication to manage their ADHD symptoms.

Meaux et al. (2009) believed that early education regarding ADHD was critical, and that education should begin with diagnosis and “continue throughout life as important transitions such as the transition to college pose new challenges for those with ADHD” (p. 254). It was clear that most of the students in this study had not been educated about ADHD and its implications, yet felt as though they could benefit from knowing more. Education about their diagnoses can help them better understand their treatment options, develop personal and study strategies, and utilize resources that will best serve them as they strive to succeed in college.

Meaux et al. (2006) found that participants who had been diagnosed early seemed to have their identities defined by ADHD and viewed medications as changing who they were. In contrast, participants who had been diagnosed later and consistently used medications were more likely to describe positive effects of medications outside the school environment, had ongoing support and guidance from psychologists and physicians, and viewed medications as a means to manage the challenges of ADHD. Only one student in the present study, Adam, had been diagnosed after elementary school. Adam was diagnosed at age 14 and described the same viewpoint that was found in the later diagnosed students from study by Meaux et al. He felt a sense of relief with his diagnosis and gratefulness for the self-control and focus his medication

provided. He also was the only student who had an ongoing relationship with a counselor throughout high school, which may have been because his diagnosis was still relatively recent.

The students clearly relied on medication to help them succeed in college, but it was also clear that medication can only work if it is taken. All of the students in this study claimed it was vital to their success, yet some skipped doses or took breaks from medication for periods of time. The most common reason for not taking medication was the side effects. The males in this study were more likely to skip doses and the females were more likely not to skip. Both cited side effects as their reasons for their consistency.

Most of the males in this study chose to skip medication doses on weekends and days when studying was not important, believing that their medications made them more focused and less fun. Meaux et al. (2006) found in a study of college students with ADHD that a major reason for the discontinuation of stimulant medication was the perception that medications made them feel somber or mellow, described by participants as “killing my personality” or “taking away from the person I am” (p. 224). They also found that although many adolescents with ADHD choose to go off of medications for a time, most (62%) of the college students with ADHD in their study chose to take medications again in college, citing the “need to study and get stuff done” (Meaux et al., 2006, p. 221). Of these students, many only took medication when needed, such as while studying, completing course work, or long classes (Meaux et al., 2006).

While this study did not identify differences among genders, Arnold (1996) noted that when the age of self-referral is reached, males may neglect treatment more than females do. A study by Brinkman et al. (2012) also found that many adolescents experienced negative social impacts as a result of medication. Some felt like robots on medication, only interested in school work, while others felt medication subdued parts of their personalities that were closely linked to



their identities. As a result, some adolescents reported that they, and in some cases, their peers, did not like who they were when they took medication.

The females in this study were more likely to take medication consistently, and had developed habits of taking them with other daily medications so that they were less likely to forget a dose. They did not seem to miss out on fun as a result of their medication and were more concerned with performing well in college than in having fun. The side effect of a suppressed appetite was also a motivator to stay on medication for some of the females. The difference in consistency and reasons for consistency between males and females in this study was striking. The males enjoyed experiencing their ADHD symptoms and some mentioned that they gained popularity and a reputation for fun from it. Conversely, the females seemed embarrassed by their ADHD symptoms and preferred feeling more in control of their behavior, which their medication helped them to achieve. Krueger and Kendall (2001) found that gender may be a factor in how adolescents experience and exhibit ADHD symptoms, but urged caution with regard to their findings due to the small sample size of their study. More study on in this area would be necessary to draw further conclusions.

The fact that the only treatment method used by these students was medication was of concern given the number of complementary and alternative treatments for ADHD mentioned in research literature and promoted in popular culture. Research points to promising outcomes for individuals with ADHD through dietary modification (Millichap & Yee, 2012), meta-cognitive therapy (Solanto et al., 2010), self-management training (Gureasko-Moore, DuPaul, & White, 2006), and ADHD coaching (Quinn et al., 2001). None of the students in the study had explored such options, and likely had no knowledge of them, given their scant knowledge on ADHD and its treatment in general.

## **Recommendations for Practice**

The researcher offers recommendations based on the findings and interpretations previously presented. The recommendations that follow are for: (a) high school and college students with ADHD, (b) parents of high school and college students with ADHD, (c) university administrators and faculty, (d) student affairs professionals, and (e) medical professionals.

**Recommendations for Students with ADHD.** Due to the information overload that often occurs during the first semester of college, students should familiarize themselves with campus resources prior to arriving on campus. Students could spend time researching university webpages, reviewing pamphlets and materials given to them during orientation events, and contacting offices that they anticipate utilizing, such as DSS, health services, counseling services, and tutoring, prior to arriving on campus. This preparation to become familiar with the university and its services will save them time and stress when they do find themselves in need of assistance throughout their college experience.

Additionally, the students in this study presented a strong case for living in residence halls in the first year of college. The residence halls provided built-in structure and accountability in simple ways, such as meals being offered for limited time periods in the dining centers, being surrounded by other students who maintained busy schedules, and having regular contact with Resident Assistants who can serve as monitors as well as resources to the students.

Students should also get to know their faculty and advisors early so that they may feel more comfortable approaching those from whom they may need help. Most of the difficult situations faced by the students in this study could have been prevented or easily remedied by early contact with advisors or faculty. By waiting to deal with situations, issues became larger and some cost students financially and academically.

Class schedules of students with ADHD should be developed thoughtfully. The students in this study reported difficulty in balancing free time and academic time in the college environment. Several students had made efforts to ensure that their class schedules were similar day to day as well as similar to a typical high school class schedule, with most classes between 8:30 am and 3:00 pm. This allowed them to maintain consistency day to day and build in consistent study time throughout the week. Those who had not taken care with scheduling expressed frustration with extremely variable class schedules and hoped to achieve more consistency the following semester.

Students should come to campus well versed in the ramifications of their ADHD diagnosis and equipped with strategies to best manage it. If they choose to take medication, they should follow a consistent schedule and have a plan for when and why they medicate. They should also carefully consider how and where they will access medications. If they choose to continue having family members manage their treatment, they should be kept involved in conversations and decisions that are made. The lack of knowledge about their ADHD can cause them to overlook resources that might help them, which can be detrimental to their performance in college.

Self-advocacy is an important skill that should be developed prior to beginning college. A study by Meaux et al. (2009) found that few college students with ADHD have experience advocating for themselves, having depended on family and schools to prepare them for each new stage in life. It is critical that individuals create a strong foundation for self-advocacy by developing both an understanding of their ADHD and the ability to explain their strengths and weaknesses to others (Roffman, 2000). This self-advocacy can be developed through rehearsing or role playing how to explain ADHD, how it interferes in their functioning, and what they need

to accommodate it can be helpful in achieving the necessary confidence and skill to explain it clearly to others (Murphy, 2005).

**Recommendations for Parents of Students with ADHD.** A clear theme that developed throughout this study was that the students lacked important knowledge about their diagnoses and their ramifications. Most of the students said their families did not talk about their ADHD often, perhaps due to discomfort with labeling a child or fear of the stigma sometimes associated with ADHD. While the parents may have been trying to minimize difficulties for their children, they may have also caused them to be ill-equipped for the challenges that would face them later. Parents should actively educate their children on ADHD, adopting a perspective that views the ADHD as a chronic and developmental disorder. Parents should help their children understand how it specifically affects them, as well as how they can best manage it. This education should be an ongoing conversation throughout the child's life as new challenges develop as the child grows and encounters new educational and social experiences. Parents should also encourage their children to take an increasing role in their treatment management by speaking with the doctor, and asking questions, gradually assuming responsibility for more of their treatment as they grow older (La Greca & Prinstein, 1999). Parents should maintain conversations about ADHD even after the child has begun college to ensure their student is taking medication if needed and utilizing resources and strategies that will lead to success in college.

Parents should also assist students in preparing for college by encouraging greater responsibility at home. Tasks, such as managing finances, doing laundry, and maintaining a schedule, can be taught prior to starting college and are not as overwhelming when introduced individually. Students who begin college at the same time they are expected to perform these

tasks for the first time are likely to feel stressed and unable to manage so many new responsibilities at once.

Almost all of the parents in this study were viewed as very supportive and helpful by their children. Parents should continue to maintain a supportive and helpful role in their children's lives, understanding that their children with ADHD may need their active involvement in their lives throughout the college years. Phone calls, care packages, help with packing for college, and campus visits from families were morale boosters for the students in the study and are highly recommended. Families should be present in the students' lives to be aware of the issues students are facing and act as sounding boards to help students find appropriate help on campus, but should avoid trying to solve their students' problems. By assisting their students in problem solving, rather than solving problems themselves, parents can encourage independence in their children.

Parents can help prepare their students for college by teaching self-advocacy skills, as previously discussed in regard to recommendations to students. Students with ADHD may also benefit from parents' exploration of alternative or complementary treatment options such as meta-cognitive therapy, neurofeedback, dietary modifications, working memory training, self-management training, and behavioral training.

**Recommendations for University Administrators and Faculty.** A common symptom of ADHD is low frustration tolerance, meaning that when faced with roadblocks, some people with ADHD will give up, often suffering negative outcomes as a result. This was the case for some of the students in the study. For universities seeking to best serve students with ADHD, it is recommended that services be as streamlined as possible. Contact with a campus office or faculty member should be easy and direct. Students should be able to find offices and talk to a

person who can help them quickly, rather than waiting in long lines or scheduling appointments weeks in advance.

The positive experiences on campus serve as recommendations for practice. A user friendly email system that allows students to communicate easily with faculty and staff is an excellent tool for students with ADHD who often find themselves needing to communicate at the last minute. Teaching that considers multiple learning styles, handouts that keep students engaged in learning, frequent exam review sessions, and access to past exams were all highly valued. A campus environment in which students felt welcome, cared for, and engaged helped students feel as though they belonged. Simple acts such as a staff member taking the time to walk a student to the office they need or helping them understand the enrollment process go a long way in helping students feel at home on campus.

Some of the students in this study had never heard of resources specifically for ADHD despite having revealed their diagnosis in their application materials. Universities should follow up with students with ADHD to inform them of services available to them. A flyer or guide to campus for ADHD students may also be useful tool to help students familiarize themselves with available resources. One of the reasons students were unaware of ADHD resources is that many accommodations are housed within Disability Support Services. While it may be reasonable administratively, the title did not appeal to some students who did not want to be seen as having a disability. The students in this study all replied to advertisements seeking students with ADHD, which indicates that they identified with their ADHD diagnosis. Perhaps advertising services specifically toward students with ADHD would be more effective than general disability services advertising is.

ADHD coaching is being offered at many universities, with many positive outcomes. A growing amount of research suggests its utility (Zwart & Kallemeyn, 2001), but empirical studies documenting its effectiveness are lacking. ADHD coaching involves helping clients deal with aspects of their condition that interfere with academic performance and coping with difficulties such as procrastination, lack of concentration, ineffective self-regulation, poor planning, anxiety, social incompetence, or time management (Finn, 1998; Willis, Hoben, & Myette, 1995). Despite the lack of empirical research, many professionals feel that ADHD coaching has the potential to be highly effective. As more research is conducted, universities should maintain awareness of the research and consider implementing ADHD coaching for students.

While students with ADHD make up a small percentage of the overall student body of most institutions, their issues are not insignificant. Norvilitis et al. (2010) noted that there is a strong need to assist college students with symptoms of ADHD as they enter college. They stated, "Identifying and working with students with such issues may well pay off for colleges concerned about retention, as many of these same factors, such as poor academic skills...are related to college dropout" (p. 91). Programs directed at improving study skills, self-management, self-advocacy, and strategy development may reap benefit for universities and students alike.

**Recommendations for Student Affairs Professionals.** Student affairs professionals should be educated on ADHD and seek to assist students with ADHD in ways that will promote their success at the institution. Student affairs professionals throughout campus should be aware of the challenges students with ADHD face on campus. Professionals in admissions, financial aid, residence life, tutoring programs, and DSS should be aware of and sensitive to the

challenges faced by students with ADHD, as well as appropriate resources available to help them.

Most of the students in this study reported utilizing their residence life staff on a regular basis and some expressed a desire for their Resident Assistants (RAs) to have an even more active role in their daily lives. Checking in on them to make sure they have studied and holding them accountable for responsibilities were ways the students felt RAs could assist. While this may be outside of the scope of what a para-professional staff member can provide, it does reaffirm the importance of residence life staff as key individuals in students' lives. RAs should strive to maintain awareness of students with ADHD and make a habit of checking in with them on a regular basis. RAs should also be well versed in campus resources and be able to refer students to campus offices that may be able to assist them. Finally, RAs should help to maintain respectful residence halls in which students can study and sleep as needed. While most students enjoyed the social aspects of the halls and the constant availability of friendship and fun, some had difficulty studying due to noise in the hallways and difficulty sleeping due to fire alarms being set off in the middle of the night. These may be minor inconveniences to some students, but can become major issues to students with ADHD.

Academic advisors also play an important role for students with ADHD. Class schedules were of critical importance for the students in this study. For most, the best time for them to take classes was during school day hours (8:30 am-3:00 pm), when their medication was typically most effective and they were most used to learning. Due to the fact that enrollment in classes is based on seniority, many students were unable to obtain the class schedule they would have preferred. In addition to class times, teaching methods, class size, and number of distractions in the classroom can also impact the performance of students with ADHD. Academic advisors can



help students with ADHD develop schedules by knowing classrooms, instructors, teaching methods, and other details that can significantly impact students' ability to learn. Advisors can also encourage students to fully utilize campus resources and direct them in the steps to take to utilize them. Advisors should be aware of which of their advisees has been diagnosed with ADHD and make efforts to assist them accordingly.

**Recommendations for Medical Professionals.** The American Academy of Pediatrics (AAP, 2001) recommends that primary care clinicians establish a management program that recognizes ADHD as a chronic condition. This includes educating children about ADHD in a developmentally appropriate manner, and involving them when specifying target outcomes, selecting treatment strategies, and monitoring progress toward goals (AAP, 2001). While the AAP recommends this as a standard of practice, this level of care was far from the norm among the students in this study. Medical professionals should view their roles not only as prescription writers, but also as educators and consultants on ADHD and available treatment options. Medical professionals should treat this education as an ongoing process as children mature and ADHD symptoms change. They should also engage children and adolescents in decision making about their treatment plans and encourage more responsibility for the management of their ADHD as the individual grows.

### **Recommendations for Future Research**

Based on the results of this study, the researcher became aware of several areas of study that could enhance knowledge and further assist college students with ADHD. In light of this, the following research should be considered:

1. The findings of this study naturally lead to questions of how these first-year students manage the remainder of their college careers. A longitudinal study examining

- students with ADHD over the college years would yield additional insight on the challenges they experience and the ways in which they manage them.
2. This study examined students with ADHD beginning college at a large research institution. Additional research on those attending community colleges prior to transferring to a larger institution, as well as those who attend smaller universities, would yield additional insight into the college transition experience of students with ADHD.
  3. The participants in this study were all Caucasian students from the Midwest. Additional research should seek to include a more culturally diverse sample to determine whether students with ADHD of different races experience the college transition in similar or different ways from Caucasian students with ADHD.
  4. The students in this study used few treatment methods beyond medication to manage their ADHD symptoms. Additional research on alternative treatment options for students with ADHD would add value to the existing literature as well as possibly enhance ADHD treatment for students with ADHD.
  5. At the time of this study, the students had not developed any new strategies for managing ADHD in college. Research examining ways in which strategies can be developed in college should be considered.

## **Conclusion**

This study provides insight into the college transition experience of students with ADHD. In doing so, it reveals the many facets of the college transition for students with ADHD. While most would view the transition to college as a great step toward independence, this study reveals the many ways in which gaining independence from parents meant greater dependence on other

people and on medications. The illusion of the freedom college would bring was quickly replaced by awareness of the responsibilities that college required. The students had envisioned college as a process of leaving home, but were learning it was a process of building a new home on the college campus. In doing so, the students realized the importance of their habits and strategies in organizing their day-to-day activities as well as achieving success in the classroom. The gaps in their functioning that had seemed minor prior to the demands of college were brought to light by the stress of the college environment, and students were finding themselves unprepared. As a result of their unpreparedness, the students found themselves needing more assistance, which often came in the form of medication, but also from campus resources that most had not anticipated needing. The results of this study reveal that students with ADHD can manage the transition to college; however, they can do it more effectively. The support of others, including parents, student affairs professionals, university administrators, faculty, and medical professionals, can provide invaluable support and assistance as these students take on the freedom and responsibility of the college environment.

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## **Appendix A: Informed Consent Form**

### **KANSAS STATE UNIVERSITY**

#### **INFORMED CONSENT FORM**

Project Title: The College Transition Experience of Students with Attention Deficit Hyperactivity Disorder

Thank you for agreeing to participate in this study which will take place from (date) to (date). This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

This study is designed:

- 1) To fulfill part of a doctoral research project through Kansas State University.
- 2) To gain insight into the college transition experience of students with ADHD.

The methods to be used to collect information for this study are explained below. No identifiable information will be used in the reporting of this data as names and other potentially identifiable details will be changed.

This study will consist of participants completing a demographic survey, ADHD evaluation, and 3 interviews with the researcher. Interviews will be recorded using a digital voice recorder, then transcribed to text. An incentive will be offered for each interview. \$10 will be paid for participation in the first interview, \$15 will be paid for participation in the second interview, and \$20 will be paid for participation in the third interview, for a total incentive of \$45 for each participant.

There are no foreseeable risks involved. As a result of participating in the project, it is hoped that participants may learn more about themselves and about the research process from their involvement in this study. The study will also enhance understanding of college students with ADHD and provide insight to help colleges better serve and assist these students in their transition to college.

Any participants with questions about the rationale of who want to discuss any aspect of this research may contact Dr. Kenneth Hughey at 785-532-6445. Questions about the rights of participants or the manner in which the study is conducted may contact Dr. Jerry Jaax, Associate Vice Provost for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

**TERMS OF PARTICIPATION:** I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation or penalty. I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under



the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

**Participant Name:** \_\_\_\_\_

**Participant Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Witness Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## **Appendix B: Release of Medical and Educational Records**

### **Student Consent to Release Educational and/or Medical Records**

Pursuant to the Family Educational Rights and Privacy Act of 1974 and The Health Information Portability and Accountability Act's (HIPAA) Privacy Law, I,

\_\_\_\_\_, hereby consent to the release by Lafene Health Center or Disability Student Services of Kansas State University of the information concerning my diagnosis of Attention Deficit Hyperactivity Disorder.

Party to whom such records may be released:

Name: **Kristy Morgan**

Relationship: **Researcher**

I understand that such records may not be released except on the condition that the party to whom the information is being released will not permit any other party to have access to such information without my written consent, and I do hereby consent to its use in research with the above named party. I also understand that, at my request, I shall be provided with a copy of the educational record released pursuant to this consent.

This permission may be revoked with written request at any time. This permission is valid until December 31, 2010, or such time as I otherwise discontinue attendance at Kansas State University.

Signature of Participant: \_\_\_\_\_

Date: \_\_\_\_\_

Student ID Number: \_\_\_\_\_

## Appendix C: Demographic Survey

### DEMOGRAPHIC SURVEY

Name: \_\_\_\_\_ Age: \_\_\_\_\_

Race (circle one):      Caucasian                      Hispanic/Latino                      Black  
    Asian                      Native American/Alaskan Native                      More than one race

Major(s): \_\_\_\_\_

Hometown: \_\_\_\_\_

High School GPA: \_\_\_\_\_ on a \_\_\_\_\_ scale

1<sup>st</sup> semester college GPA: \_\_\_\_\_ on a \_\_\_\_\_ scale

ACT scores: \_\_\_\_\_ English    \_\_\_\_\_ Reading    \_\_\_\_\_ Math    \_\_\_\_\_ Science    \_\_\_\_\_ Composite

SAT scores: \_\_\_\_\_ Critical Reading    \_\_\_\_\_ Mathematics    \_\_\_\_\_ Writing

College Activities: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Do you work while attending college? Yes /No (circle one)    If so, how many hours per week? \_\_\_\_\_

Current living situation (check one):

\_\_\_\_\_ Residence Hall (number of roommates: \_\_\_\_\_)

\_\_\_\_\_ Fraternity/sorority house (number of roommates: \_\_\_\_\_)

\_\_\_\_\_ On Campus Apartment (number of roommates: \_\_\_\_\_)

\_\_\_\_\_ Off Campus Apartment or House (number of roommates: \_\_\_\_\_)

\_\_\_\_\_ Other—please describe: \_\_\_\_\_

Age at which you were diagnosed with ADHD: \_\_\_\_\_

Medication history (starting with current/most recent and working backward):

Name of medication	Age when started medication	Age when stopped medication	Reason for discontinuing

Parent's Marital Status (circle one):    married    divorced    separated    widowed/widower

Father's Occupation: \_\_\_\_\_

Father's highest education attained (circle one):

high school diploma/GED    some college    associate's degree  
bachelor's degree    graduate degree

Mother's Occupation: \_\_\_\_\_

Mother's highest education attained (circle one):

high school diploma/GED    some college    associate's degree  
bachelor's degree    graduate degree

Sibling age \_\_\_\_\_ male/female (circle one)    Sibling age \_\_\_\_\_ male/female (circle one)

Sibling age \_\_\_\_\_ male/female (circle one)    Sibling age \_\_\_\_\_ male/female (circle one)

### Appendix D: Interview Question Matrix

<b>Research Question 1: How do college students with ADHD plan for and manage the college decision-making process?</b>	<b>FOCUSED LIFE HISTORY (to be explored in Interview 1)</b>	<b>DETAILS OF THE EXPERIENCE (to be explored in Interview 2)</b>	<b>REFLECTION ON THE MEANING (to be explored in Interview 3)</b>
<b>Behaviors/Experiences</b>	How were you diagnosed with ADHD? What were your symptoms? Who initiated the evaluation? In what ways did having ADHD shape your decisions and plans?	What steps did you take in selecting your college and planning the transition to living independent of your family?	What did your background tell you about how successful you would be in college? How did your background prepare you for your college experience? In what ways were you unprepared?
<b>Opinions/Values</b>	What were your plans regarding college and higher education?	What is your opinion of how successfully you planned for and managed the transition to college? What were the most important factors you considered in choosing a college?	What values led you to pursue college? Why was this an important pursuit for you?
<b>Feelings/Emotions</b>	How did you feel about your ability to achieve your goals?	What emotions did you experience as you transitioned to college?	How do you view yourself now, after having spent a while in college? Has the college experience changed your perspective of yourself?

<b>Knowledge</b>	What did having an ADHD diagnosis tell you about yourself, your abilities, gifts, and challenges?	What did you know about the campus resources and environment and how it might impact someone with ADHD?	What do you wish you would have known? And how would that knowledge have helped you?
<b>Research Question 2: What roles do family members and other play in the transition to college?</b>	<b>FOCUSED LIFE HISTORY (to be explored in Interview 1)</b>	<b>DETAILS OF THE EXPERIENCE (to be explored in Interview 2)</b>	<b>REFLECTION ON THE MEANING (to be explored in Interview 3)</b>
<b>Behaviors/Experiences</b>	What was a typical day like in the life of your family as you were growing up? Walk me through it. If I had visited you in high school, what would I have observed?	What role did family and friends play in your transition? Who helped with your decision making? Applications? Moving? Etc.? What people from home to you talk to most often? How do you stay in touch with them?	How do you view the contributions of others to your success in transitioning to college? How have they impacted you?
<b>Opinions/Values</b>	In what ways did your family and friends support and help you with your ADHD?	How did their assistance help or hinder you in the process?	What have you learned from the people in your life that has helped you in college?
<b>Feelings/Emotions</b>	What kinds of feelings did you experience in regard to their support or help?	What emotions did you experience with regard to leaving your family, high school, and home town?	What emotions do you feel regarding the people who have supported you?

<b>Knowledge</b>	How did people in your life learn how to support you?	What kind of resources did support people in your life utilize to assist you in your transition to college?	Knowing what you know now, do you feel like you have had enough support? Too much?
<b>Research Question 3: What campus resources and personal strategies do students with ADHD utilize in the transition to college?</b>	<b>FOCUSED LIFE HISTORY (to be explored in Interview 1)</b>	<b>DETAILS OF THE EXPERIENCE (to be explored in Interview 2)</b>	<b>REFLECTION ON THE MEANING (to be explored in Interview 3)</b>
<b>Behaviors/Experiences</b>	How was ADHD handled in your schools as you were growing up? What strategies did you use to help you manage your ADHD as you were growing up?	Are you registered with DSS to receive any accommodations with regard to ADHD? If so, what accommodations? How do they help you? What other resources do you use? What personal strategies do you use to help you deal with the demands of college?	Given what we've talked about regarding personal strategies and campus resources you've used to help manage your ADHD, how would you explain how they have impacted you? What has it meant to you to have them?
<b>Opinions/Values</b>	What was the most helpful strategy you found? Was the support available to you effective in meeting your needs? Why/why not?	How effective are the campus resources in supporting your specific needs with regard to ADHD? In what ways could they improve? How much responsibility should the school or instructors have to make sure you	As you reflect back on your first year of college, how important have these been to you?

		succeed?	
<b>Feelings/Emotions</b>	How did you feel about using academic resources or individuals to assist with your ADHD?	How do you feel about accessing these resources? What emotions do you feel when dealing with academic issues on campus?	
<b>Knowledge</b>	Tell me about the resources that were available to you and how they were intended to help.	What campus resources were you aware of before coming to college? What factors played into your decisions as to what college you would attend?	What recommendations would you make if asked how to assist students with ADHD on the college campus? What advice would you offer to other students with ADHD in terms of personal strategies that have helped you?
<b>Research Question 4: What obstacles, challenges, or difficulties impact the college transition process of students with ADHD? How do they respond or address them?</b>	<b>FOCUSED LIFE HISTORY (to be explored in Interview 1)</b>	<b>DETAILS OF THE EXPERIENCE (to be explored in Interview 2)</b>	<b>REFLECTION ON THE MEANING (to be explored in Interview 3)</b>
<b>Behaviors/Experiences</b>	How did having ADHD affect you as you were growing up? In your family? In school? Among your friends?	What challenges have you experienced in your transition to college? How have you managed those challenges? What unexpected	Given the challenges you've experienced in your transition to college, what meaning have you been able to make of them?



		challenges have you faced? How have you managed those?	In what ways have you learned from these experiences?
<b>Opinions/Values</b>	What challenges did you experience in regard to your ADHD? In what ways has having ADHD helped you? In your opinion, what was the greatest challenge for you with regard to your ADHD?	Do you believe additional support could have assisted you in managing those challenges more successfully? What has been the most difficult aspect of college for you? The easiest part?	In what ways do you think your transition could have been made easier? Knowing what you know now, would you change anything about your decision to attend college...or this college?
<b>Feelings/Emotions</b>	How did you feel about people being aware of your ADHD?	Walk me through a typical day in your life at college and tell me about the emotions you feel in each of your daily tasks.	What have you learned about yourself on a personal level, about your ability to handle challenges?
<b>Knowledge</b>	What did you know cognitively about ADHD and how did that knowledge affect you?	Coming to college, and knowing how your ADHD affected you, what challenges did you anticipate?	What information would have helped you to better handle the college transition?
<b>Research Question 5: How do students with ADHD use medications, mental health providers, physicians, and other accommodations in managing their ADHD?</b>	<b>FOCUSED LIFE HISTORY (to be explored in Interview 1)</b>	<b>DETAILS OF THE EXPERIENCE (to be explored in Interview 2)</b>	<b>REFLECTION ON THE MEANING (to be explored in Interview 3)</b>
<b>Behaviors/Experiences</b>	What role did	Do you currently	What role does

	<p>medications play in your management of ADHD?          What about psychiatrists/physicians/psychologists?          Describe your relationship with these people.</p>	<p>take medications to manage your ADHD?          If not, why not?          Who prescribes them? How often do you see him or her?</p>	<p>medication or a relationship with a mental health provider serve in your life? How would you characterize that relationship?</p>
<b>Opinions/Values</b>	<p>What was your opinion as to their helpfulness or effectiveness?</p>	<p>How important is your relationship with your doctor/psychologist?          How helpful is that person to you?</p>	<p>How do you explain your decision to take medications?</p>
<b>Feelings/Emotions</b>	<p>How did you feel about using/seeing them?</p>	<p>Tell me your feelings about using medications in managing ADHD.</p>	<p>How do you feel about your decision to medicate or not medicate? How do you feel that it reflects upon you?</p>
<b>Knowledge</b>	<p>What was your knowledge of why you saw or used them?          Who made the decisions regarding treatment of your ADHD?</p>	<p>What do you know about how medications work and how to use them to manage your ADHD? How often do you research medications or discuss treatment with a mental health professional?          Who makes the decisions regarding treatment of your ADHD?</p>	<p>Knowing what you know now, what advice would you give others regarding medications and physicians/psychologists/psychiatrists in managing ADHD?</p>



## **APPENDIX E: Interview One Guide**

### **Interview Guide for Interview One: Focused Life History**

This interview will focus specifically on your life prior to coming to college. Please feel free to elaborate, tell stories, and fully answer each of the questions. The focus is on life prior to college, so as you answer, please keep that in mind.

Tell me about your family. Describe each of your family members and your relationships with them.

How were you diagnosed with ADHD? What were your symptoms and who initiated an evaluation?

What did you know about having ADHD? What did that label mean to you?

As you were growing up, what were your plans or goals for the future? What were your plans and goals for college?

How did you feel about your ability to reach these goals?

In what ways did having ADHD shape your decision and plans in general? How about in regard to college?

How did you go about planning and preparing for your goals?

What did having an ADHD diagnosis tell you about yourself, your abilities, gifts, and challenges?

What was a typical day like in the life of your family as you were in high school? Walk me through it.

In what ways did your friends and family help and support you with your ADHD?

How did you feel about their involvement?

How did your family and friends learn about supporting you?

If I had visited you in high school, what would I have observed?

How was ADHD handled in your school as you were growing up?

Tell me about the resources that were available to you and how they were intended to help.

Was the support available to you effective or helpful in meeting your needs? Why or why not?

How did you feel about using academic resources to assist with your ADHD?

What personal strategies did you use to manage your symptoms as you were growing up?  
Where did you learn them?

What challenges did you experience related to your ADHD?

In what ways has having ADHD helped you?

In your opinion, what was the greatest challenge for you with regard to your ADHD?

How did having ADHD affect you as you were growing up? In your family? In school? Among your friends?

How did you feel about people being aware of your ADHD?

What did you know cognitively about ADHD and how did that knowledge affect you?

What role did medications play in your management of ADHD? What was your opinion as to their helpfulness or effectiveness? How did you feel about taking them?

What about psychiatrists/psychologists? Describe your relationship with these people.

Who made the decisions regarding treatment of your ADHD? How did you feel about that?

We've talked a lot about how your ADHD affected you prior to coming to college. Is there any area of your life that you feel we've overlooked, or anything else you would want to share?

## **APPENDIX F: Interview Two Guide**

### **Interview Guide for Interview Two: The Details of the Experience**

Tell me about where you currently live. Roommates, etc.

What is your schedule like now? How many credit hours? Extracurricular activities? Work?

What steps did you take in selecting your college and planning the transition to becoming more independent?

What were the most important factors you considered when choosing a college?

What is your opinion of how successfully you planned for and managed the transition to college? How could it have been improved?

What emotions did you experience as you transitioned to college?

What did you know about the campus resources and environment, especially in light of your ADHD?

What role did your family and friends play in your transition? Who helped with your decision making? Applications? Moving, etc.?

How did their assistance help or hinder you in the process?

What people from home do you talk to most often? How do you stay in touch with them?

What kind of resources did support people in your life utilize to assist you in your transition to college?

Are you registered with Disability Support Services to receive any accommodations? If so, what kind do you receive? How do they help you?

What personal strategies do you use to help you deal with the demands of college?

How effective are the campus resources in supporting your specific needs with regard to ADHD? In what ways could they improve?

How much responsibility does the university have to ensure you succeed?

How do you feel about using accommodations?

What campus resources were you aware of before coming to college? What factors influenced your college selection?

Coming into college, and knowing how your ADHD affected you, what challenges did you anticipate?

What challenges have you experienced in your transition to college? How have you managed them?

What has been the most difficult aspect of college life for you? The easiest part?



What unexpected challenges have you faced?

Walk me through a typical day in your life during this past year of college and tell me about the emotions you feel throughout it.

Do you currently take medications to manage your ADHD? If so, how do they help? If not, why not? Who prescribes them? How often do you see him/her?

How important are your relationships with your doctor and psychologist? How helpful are those people to you?

Tell me your feelings about using medications for managing ADHD.

What do you know about how medications work and how to use them to manage your ADHD?

How often have you researched medication options or discussed treatment options with a mental health professional?

Who makes the decisions regarding treatment of your ADHD?

We've talked a lot about how your ADHD has affected you in college. Is there any area of your life that you feel we've overlooked, or anything else you would want to share?

## **APPENDIX G: Interview Three Guide**

### **Interview Three: Reflection on the Meaning**

What values led you to pursue college? Why was this an important pursuit for you?

What did your background tell you about how successful you would be in college?

How did your background prepare you for your college experience?

In what ways were you unprepared?

How do you view yourself now, after your first year in college? Has the college experience changed your perspective of yourself? If so, how?

What do you wish you had known when you began college that you know now? How would that have helped you?

How do you view the contributions of others to your success in transitioning to college? How have they impacted you?

What have you learned from the people in your life that has helped you in college?

Knowing what you know now, how would you describe the level of support you received in your college transition? Too little? Too much?

How would you explain what campus resources and accommodations have meant to you?

What recommendations would you make if asked how to assist students with ADHD on the college campus?

What advice would you offer other students with ADHD in terms of personal strategies that have helped you?

Given the challenges you've experienced in your transition to college, what meaning have you been able to make of them? What have you learned from them?

Knowing what you know now, would you change anything about your college decisions?

What have you learned about yourself on a personal level, about your ability to handle challenges?

What information could have helped you better handle the college transition?

What role does medication serve in your life?

How do you explain your decision to medicate/not medicate?

How do you feel that decision reflects on you?

Knowing what you know now, what advice would you give others regarding medications and psychologists in managing ADHD?

We've talked a lot about how your ADHD affected your college transition experience. Is there any area of your life that you feel we've overlooked, or anything else you would want to share?