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Career Decision Making for Male Students with Attention Deficit Hyperactivity Disorder: A Model of Critical Factors Aiding in Transitional Efforts

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CAREER DECISION MAKING FOR MALE STUDENTS WITH ATTENTION
DEFICIT HYPERACTIVITY DISORDER: A MODEL OF CRITICAL
FACTORS AIDING IN TRANSITIONAL EFFORTS

by

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Gregory B. Gray, Ph.D.

Western Michigan University, 2009

This study is intended to reveal helpful information that will guide high school

practitioners in serving students with attention deficit hyperactivity disorder (ADHD)

more effectively. ADHD is neurological in origin, making it invisible. This disorder

makes people susceptible to distractibility, impulsivity, disorganization, frustration,

anxiety, and moodiness (Janus, 1999). Fifteen percent or more of the U.S. population has

ADHD. These individuals, who often are viewed by career counselors, teachers, and

employers as frustrating or difficult, are uniquely vulnerable in high school and beyond.

Because individuals with ADHD have invisible handicaps, their academic performance

and social behaviors can be interpreted incorrectly. Thus, ADHD must be recognized

and its effects understood if the consequences of the disorder are to be mitigated.

Understanding the disorder and responding to the academic needs of individuals with

ADHD will increase their chances of success.

This phenomenological study inquired into the participants' life experience,

including their early, adolescent, and high school experiences; critical factors they

identify as important in achieving their career success; and the important mentors in their

lives. The sample for this study included 9 men who are recent graduates from a

Midwestern school system ranging in age from 19 to 23 years. Interviews were conducted either in person at the participant's residence or over the phone. The first part of the interviews involved collecting general information about the participant, such as age, level of education, and employment status. The second part of the interview asked questions on how they negotiated their secondary program with their disability and how they made their career decisions.

Through vigorous data analysis, three critical factors have been identified: (a) academic and social relationships with staff members, (b) curriculum offered, and (c) family encouragement. The findings have implications for educating key stakeholders such as teachers, principals, and parents in early identification and instructional strategies to help ensure student's success.

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CHAPTER I

INTRODUCTION TO THE STUDY

Historical Background of Problem

Joe Smith began his day just as many other high school seniors do, with an early-morning wake-up and a hearty breakfast before heading to school. Once at school; however, Joe was faced with many challenges that other students do not encounter. Joe sat in algebra class trying to focus on the teacher's instruction, but found himself having trouble sitting still, completing assignments, and generally fitting in with the other students. As Joe's teacher tried to redirect his behavior, he was distracted by other students' movements and normal classroom noises. Joe drifted away to other activities going on in the classroom, distracting other students and causing them to become frustrated and complain. As Joe settled on his assignment for the day, he continued to fidget aimlessly, becoming more and more frustrated with written and oral details. Joe's algebra teacher believed that this may be due to the student's lack of enthusiasm about the subject matter; however, Joe had a much more complex problem than lack of enthusiasm. He had attention deficit hyperactivity disorder (ADHD). This disorder was unrecognized by this teacher and others throughout the day, and in each of Joe's classes he seemed to follow the same pattern. He had been labeled, incorrectly as a problem student, not as one who battles ADHD daily.

Joe was not alone in his frustrating battle; however, most days he felt that he was on his own. Many students like Joe suffered through 13 years of agonizing confusion. Many of these students never realized that there are supports that could have aided in

making them successful. Unfortunately, a growing number of these students ended their high school careers with untapped potential. A few of these students gained self-regulating skills that helped tap that potential and use it to their advantage. Students who learned these skills moved on to successful careers; however, for those who did not learn such skills, mediocrity seemed to be the norm. I understand these frustrations well because I was Joe.

The percentage of college freshmen with a disability has more than tripled over the last 20 years (3% in 1978 to more than 9% in 1998). One in 11 first time, full-time freshmen entering college in 1998 self-reported a disability; hearing loss, speech, orthopedic, learning, health-related, partial sight or blindness, or other conditions (HEATH Resource Center, 2003). More than 50% of students with disabilities enrolling in postsecondary education persisted to earn a degree or credential (Frieden, 2003). Nearly all public postsecondary institutions enroll students with disabilities (approximately 98% of public institutions in 1998). In fact, the Americans With Disabilities Act (ADA) mandated that all postsecondary institutions "are required by law to provide any reasonable accommodation that may be necessary for those people with an identified disability to have equal access to the educational opportunities and services available to non-disabled peers, if requested" (Frieden, 2003, p. 23). Presently there is a lack of knowledge and follow through in training, identification, and the accommodation skills needed to help these students. "Career counselors and educators alike need to be able to distinguish between 'traditional' clients and those with attention deficit hyperactivity disorder (ADHD), in order to identify accurately each student's strengths and limitations with regard to emotional, intellectual, and social functions" (Janus, 1999).

The value of a postsecondary education to students with disabilities cannot be overstated. Individuals with disabilities such as ADHD were more than twice as likely to live below the poverty line as those without disabilities (Frieden, 2003). In 2002, approximately 67% of youths with disabilities who held a Bachelor of Arts degree were working full time, as compared with 73% people without disabilities holding the same degree (Frieden, 2003).

Of those people with disabilities who were employed, less than one half of 1% were in professional (4-year-degree) positions. Instead, the vast majority of individuals with disabilities who were employed worked in low-paying, nonprofessional jobs that required no higher education, were associated with less prestige, and provided no security, room for advancement, or significant medical or retirement benefits (Stoddard, Jans, Ripple, & Krauss, 1998).

Problem Statement

Since the early 1900s, physicians and psychiatrists have applied various labels to students who exhibit hyperactive, impulsive, and inordinately inattentive symptoms. Examples of these labels include "fidgety behavior," "minimal brain dysfunction," "hyper-kinetic reaction or syndrome," "hyperactive child syndrome" and most recently, ADHD. The many name changes have reflected just how uncertain researchers have been about the underlying causes or even the precise diagnosis of the disorder. Although significant, these conceptual changes have been inadequate.

Current researchers' view of the basis of ADHD is much different from that of just a few years ago. Researchers have found that ADHD is not a disorder of attention, nor is it the result of poor parenting, moral degradation, or even one's life experiences.

Within the past several years, researchers have made great strides in clarifying symptoms, diagnostics, and treatments for ADHD. Enormous numbers of people have been affected by this disorder. Researchers have estimated that between 2% and 9% of all school-age children have been diagnosed with ADHD, not to mention the large number who have gone undiagnosed (Hallowell & Raley, 1994, as cited in Janus, 1999). Moreover, the condition, once thought to ease with age, has often persisted into adulthood.

To help children and adults, researchers, psychiatrists, psychologists, and physicians have continued to explore the cause, diagnosis, and treatments that are effective for ADHD. Unfortunately, as the condition has gained more publicity, the confusion and incorrect information regarding this disorder has continued to proliferate. Although no immediate cure has been in sight, a new understanding of ADHD may be realized in the future. Using a variety of research tools and methods, researchers have begun to uncover new information on how this disorder can be treated. As the body of knowledge grows, scientists someday may learn how to prevent the disorder, or at least how to treat it effectively. Such research ultimately will aid in improving the personal fulfillment and productivity of people with ADHD.

Purpose of the Study

In this study I examined the paths of nine male students with ADHD who used their high school's College and Career Center throughout their secondary career. The study is designed to determine the critical factors that influenced their decision making process of entering higher education or choosing a career. Because of their different learning and social/emotional needs, students with ADHD may have required special support and guidance in making appropriate career decisions and developing the skills

and attitudes necessary to become self-sufficient, productive adults. Career development theory provided a framework for exploring how high school and college students gained career maturity and an understanding of the world of work. Many educators have argued that traditional approaches to career development cannot be applied to students with disabilities (Stoltz-Loike, 1996). Thus, there needs to have been a holistic view of the career education and transitional service needs of students with disabilities that encompassed both academic learning and experiential education.

Research Questions

Four research questions were posed to guide the collection of data for this study:

1. What variables influence the range of career decisions among secondary students with ADHD?

2. What encouragement or discouragement from friends, family, and educators did successful high school alumni with ADHD experience?

3. What critical incidents made the transition to postsecondary education successful and brought the alumni to their current positions?

4. In what ways did their secondary institutions influence their career decision-making process?

To answer these questions, I explored students' demographic information; their early, adolescent, and high school experiences; critical factors they identified as important in achieving career success; and whether or not the high school College and Career Center assisted in their career decision making. To gather this information I conducted in-depth interviews with 9 male students, ages 19 to 23, who had been diagnosed with ADHD.

Significance of the Study

With increased levels of accountability from mandated legislation and reduced

funding, a study of this nature that helps to pinpoint critical factors for success can be

very useful in K–12 education. "Students with disabilities often did not actively

participate in the decision making when determining their support systems" (Wehmeyer

& Gardner 1996, p. 263). Nevertheless, critical components of successful postsecondary

education were self-determination and self-advocacy skills (i.e., decision making,

problem solving, and goal setting). Over the past 20 years efforts have been made to

teach these skills to youths with ADHD. However, these efforts should be based on

providing students with real, authentic opportunities to make decisions and accept

consequences (Brinkerhoff, 1996; Izzo & Lamb, 2002).

American society and the campus culture put substantial effort into searching for

ways to help the maturing individuals cope with the transitions of leaving community ties

(i.e., parents) and finding new friends and colleagues. During high school, college, and

career counseling appointments, students with disabilities may have reported the

following problems (Hallowell & Raley, 1994, as cited in Janus, 1999): a sense of

underachievement, of not meeting one's goals (regardless of how much one had actually

accomplished); difficulty getting organized; chronic procrastination or trouble getting

started; many projects going simultaneously; trouble with follow-through; a tendency to

say what came to mind without considering the timing or appropriateness of the remark;

an intolerance of boredom; trouble focusing attention; a low tolerance of frustration;

impulsiveness; a tendency to worry needlessly; and chronic problems with self-esteem.

According to Janus (1999), these symptoms have been among those most often cited by

adults with ADHD as their presenting problem. Many of these adults have already been labeled as 'scatterbrain,' 'space cadet,' 'air head,' or 'motor mouth,' or as having knee-jerk reactions, ants in their pants, or having a Jekyll and Hyde personality" (p. 76). Sometimes the very qualities that create the disorder are the source of a unique capacity of academic skills, which is what high school, college, and career counselors need to focus on during appointments.

The findings from this study will be useful to many stakeholders in the field of K–12 education and beyond. Using these findings, I intended to create a formula for successful interventions that allowed students, teachers, and parents to help students with ADHD achieve greater success during their academic careers.

<center>Conceptual Framework</center>

The conceptual framework for this study is depicted in Figure 1. The framework maps the transitional period of male students throughout their high school experience. Figure 1 demonstrates the many interventions students can access throughout their high school career. It also shows at what stages ADHD interacts with their experience. The in-depth interview involving the students from this study provides a more clearly defined look at the critical factors that either enhance or inhibit male students' ability to attain higher education or employment opportunities.
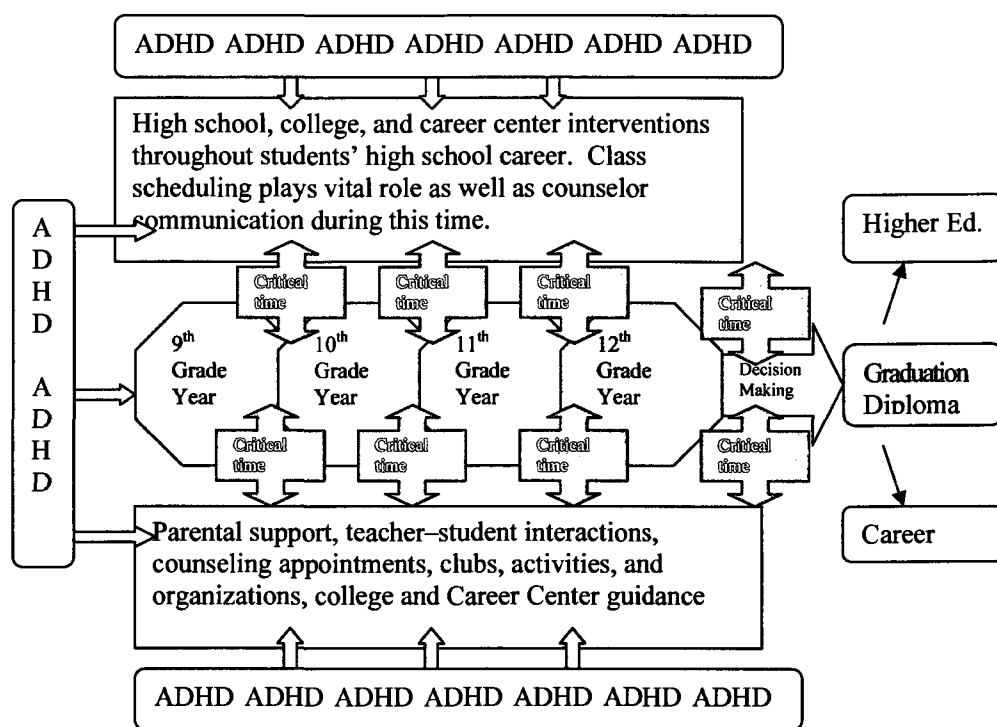
Figure 1. Career Decision Making for Male Students With ADHD. A Model for Critical Factors Aiding in Transitional Efforts

Definition of Terms

The following terms are defined in the context in which they are used in this dissertation.

The Americans With Disabilities Act. The Americans With Disabilities Act of 1990 (P.L. 101-336) was modeled after the Civil Rights Act of 1964 and Title V of the Rehabilitation Act of 1973 (P.L. 93-112). Its purpose is to extend to people with disabilities civil rights similar to those now available to people without regard to race, color, sex, national origin, or religion. The ADA is a comprehensive civil rights law that prohibits discrimination on the basis of disability.

Attention deficit disorder (ADD) and attention deficit/hyperactivity disorder

(ADHD). The essential feature of ADHD is a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development (Criterion A). Some hyperactive-impulsive or inattentive symptoms that cause impairment must have been present before age 7 years, although many individuals are diagnosed after the symptoms have been present for a number of years (Criterion B). Some impairment from the symptoms must be present in at least two settings (e.g., at home and at school or work; Criterion C). There must be clear evidence of interference with developmentally appropriate social, academic, or occupational functioning (Criterion D). The disturbance does not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and is not better accounted for by another mental disorder (e.g., a mood disorder, anxiety disorder, dissociative disorder, or personality disorder) (Criterion E).

Career maturity. Career maturity is a term designating one's completion of the appropriate vocational development tasks relevant to each stage of development. Various traits of vocational or career maturity include planning, accepting responsibility, and awareness of various aspects of a preferred vocation (Castellanos & Septeowski, 2004).

Rehabilitation Act of 1973 and subsequent reauthorizations. Section 504 of the Rehabilitation Act (29 U.S.C. 791) prohibits discrimination against qualified individuals with disabilities in federally funded programs and activities.

Student with a disability. This term refers to any person who (a) has a physical, cognitive, affective, social, or mental impairment that substantially limits one or more

major life activities; (b) has a record of such an impairment (has a history of or has been misclassified as having a mental or physical impairment that substantially limits one or more major life activities; or (c) is regarded as having such an impairment.

Assumptions, Limitations, and Delimitations

One of the most difficult tasks associated with researching the topic of ADHD is maintaining focus on a specific area or specialty. Almost daily there are advancements in treatment options for people who suffer from this disorder. A major assumption made in this study was that a male student's career or college placement was dictated by factors related to ADHD.

There are some limitations when using a qualitative approach. Bias, cost, time, and logistics are four factors that presented challenges during this study. In addition, I personally know many of the former students whom I interviewed, and this bias could have skewed some of their answers or my interpretation of their answers. The length of the interview questions might have also posed a problem because of ADHD subjects' short attention span. The sample size of 9 was, itself, a limitation, as was the restriction to only male participants. Futhermore, I selected the sample students from one high school at a particular time. This snapshot aided in restricting the size of the data set, but ' it can also be seen as a limitation in terms of the scope of the project. There was also a possibility that some of the topics addressed might have been emotionally painful for students to discuss. Thus, I allowed time during the interviews to convey empathy and respect for the students.

Summary and Recommendation for This Study

Chapter I provides background information on students coping with ADHD. Although this disorder can be debilitating for many students, in some situations students learn methods of self-regulation that can allow them to become successful with their K–12 experience. However, the critical factors for success remain a mystery for many. Therefore, my purpose in this study was to examine the paths of male students with ADHD who utilized their high school's College and Career Center throughout their secondary career in order to determine the critical factors that influenced their decision making of whether to attend college or enter a profession. The in-depth interviews conducted in this study allowed me to identify what critical factors for success may have been prevalent for some or all of the participants.

The research questions posed to guide the collection of data for the study are included in this chapter. The significance of the study is also detailed many times throughout the study. The conceptual framework that I created to show the processes of intervention throughout the K–12 experience is delineated, and key terms are defined. Assumptions, limitations, and determinations are set forth.

ADHD is a disability that has gained attention in recent years. Many studies have been conducted on what causes the disorder, how to treat it, and even some behavioral intervention strategies that allow students to help regulate their own behavior. Unfortunately, no formula for success has been created for the many students with this disorder. Male students with ADHD have had a difficult time gaining postsecondary and career success. As a result, the dropout rate for this population has risen, and career success for these students has remained below average. This study was designed to shed

light on strategies that 9 young men used during their secondary and postsecondary

education to become successful. The ultimate goal of this study was to create a

structured plan to enable secondary school students and the organizations in which they

study or work to tap into their unique abilities.

CHAPTER II

LITERATURE REVIEW

Chapter II contains a review of research that helps to explain the phenomenon of

ADHD. Identification of ADHD and neurological reasons for the disorder has been

studied extensively. What is lacking is research on critical factors inhibiting male

secondary school students' success in higher education.

The nature of ADHD, especially the ratio of young men to young women with the

disorder, is discussed first. Next is a description of differences in career aspirations

between men and women. Research on academic achievement of men with ADHD is

considered next, followed by emotional and social risks for students with ADHD.

Treatments intended to control ADHD and effective strategies for working with male

students who have ADHD are described, and techniques to help these students are noted.

The Nature of ADHD (Men vs. Women)

ADHD has been one of the most commonly diagnosed and profoundly researched

childhood disorders. Numerous students with attention deficit disorders have been

recognized under disability categories and are receiving special education services.

Students with ADHD are primarily young men. Researchers have found varying

ratios of the condition in young men and women, ranging from 3 to 4:1 (Graham, 1991),

5 to 9:1 (Ross & Ross, 1982), and 2 to 10:1, with an average of 6:1 (Barkley, 1989). The

consistent finding was that young men with ADHD outnumber young women. Cantwell

(1981) noted that antisocial personality disorder was diagnosed more often and at an

earlier age for boys than girls, and it has been found to follow previous diagnoses of

ADHD. Also, in studies involving adoption of children, some investigators have linked ADHD genetically to male relatives. In turn, antisocial disorder in girls was more likely to be related to a diagnosis of hysteria (Cantwell, 1981).

The majority of students with ADHD have been recognized as having behavioral disorders (Barkley, Fischer, Edelbrock, & Smallish, 1990), followed by learning disabilities (Reid, Maag, Vasa, & Wright, 1994). Dykman and Ackerman (1993) recognized behavioral subtypes of attention deficit disorders and noted that those with ADHD might have been at risk for oppositional and conduct disorders. Eligibility for special education services in the emotional disturbance (ED) category might have also transpired as emotional difficulties; complexities in psycho social functioning in late adolescence might have been a significant feature of hyperactive children (Slomkowski, Klein, & Mannuzza, 1995). Proof of concurrent emotional troubles has been less dependable for girls than boys with ADHD, but has become considerable as they approach puberty. Those with ADHD may have been prone to anxiety and depression. Assimilation problems for students with ADHD have been likely to persist into adulthood as a consequence of weakened self-esteem (Slomkowski et al., 1995).

Despite possible inclusion under a disability classification, the majority of students with ADHD have spent most or all of their school time in the general education classroom (Reid et al., 1994). As such, with an estimate of 1% to 6% of the student population having ADHD, a secondary school general education teacher with a 25-year career and an average of 125 students per year could have expected to teach from 31 to 188 students with ADHD, or from one to eight students per year. Those one to eight

students per year can have a dramatic effect on the classroom environment, especially if the teacher has little or no training with these often difficult students.

Differences in Career Aspirations Between Men and Women

Studies of differences in career aspirations between gifted men and women have been relatively few. The studies that do exist have suggested that strong adherence to gender-role stereotypes in career aspirations among gifted girls may be diminishing. Leung, Conoley, and Scheel (1994) suggested that the "social and cultural changes occurring during the past two decades have gradually and successfully resulted in some changes in women's attitudes about careers" (p. 302). For example, a 1988 study conducted by Kerr and Colangelo indicated that business had replaced education as gifted girls' top choice of college majors. In Addition, Reis, Callahan, and Goldsmith (1996) found the top four career choices of gifted early adolescent boys and girls to be identical (i.e., doctor, scientist, lawyer, and business owner), although boys and girls ranked them differently (Raffaele Mendez & Crawford, 2002).

It appears from the literature that the increasing similarity in career aspirations of gifted boys and girls has been attributable to girls becoming more interested in male-dominated occupations, rather than the reverse. For example, Leung et al. (1994), who retrospectively examined the career aspirations of gifted high school juniors and seniors, found that, although the boys in their study were more likely to have considered only traditionally masculine occupations, girls had considered both traditionally female- and male-dominated career options. The researchers found no differences between gifted boys and girls in the prestige level of their career aspirations. Similarly, Dunnell and Bakken (1991) found that gifted young women in the 9th through 12th grade were

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significantly more likely than gifted young men of the same age to choose occupations that were nontraditional for their gender. Consistent with this finding, several researchers have noted that there is greater pressure for men than for women to adhere to traditional gender-role, stereotyped behavior. This appears to have been related to the fact that those masculine behaviors, preferences, and interests were socially valued. Certainly, with regard to careers, those that have the highest earning potential and prestige have been male dominated. Thus, it makes sense that talented young women would have been more attracted to male-dominated careers than their male counterparts would have been to female-dominated careers (Raffaele Mendez & Crawford, 2002).

On the whole, research results have indicated that gifted early adolescent boys persist to desire careers that have higher educational requisites and prestige than their female counterparts. This appears to have happened because boys limited their ambitions to careers that were male dominated, whereas girls expressed interest in a wider range of careers, both male- and female-dominated. It has been established that girls who distinguish themselves as possessing higher levels of instrumental (or stereotypically masculine) personality qualities and have had higher achievement motivation were more likely to consider male-dominated occupations within their pool of future career options than those who saw themselves as low on these traits. These correlation findings emphasized the fact that there are particular traits that educators can foster in girls (e.g., assertiveness, confidence, mastery orientation) that are linked to the development of nontraditional work-related interests.

Findings for boys led to diverse conclusions. Although it might have seemed a positive thing that boys were fascinated by occupations that require high levels of

education and have high prestige, questions arise as to whether some young men might be missing out on rewarding professional opportunities because they had ruled them out on the basis of traditional gender stereotypes. Findings indicate that young men who see themselves as having had more communicative traits (e.g., kindness, understanding) were less likely than young men with fewer communicative traits to have ruled out occupations merely because they are nontraditional for their gender. The ability to detect problems linked to the limited development of communicative traits among young men has just begun to emerge, but clearly this is an area that merits further investigation.

Relationships between achievement motivation and career aspirations also have been found to differ by gender. Research indicates that girls who perceived themselves as harder working and more internally motivated were more likely to aspire to careers that are male dominated, require more education, and/or have higher prestige. In contrast, boys' career aspirations appear largely unrelated to their self-perceived achievement motivation. This finding may reflect a tendency for most gifted boys to aspire to prestigious, male-dominated occupations requiring high levels of education, regardless of how strong they perceive their achievement motivation to be. In contrast, girls who aspired to the most prestigious careers appeared to be those who perceive themselves as having high achievement motivation. It may be that girls are not expected to have high career aspirations, and the hardest working girls are most likely to aspire to careers that are nontraditional for women (Raffaele Mendez & Crawford, 2002).

Academic Achievement of Boys With ADHD

ADHD in boys has normally been linked with academic underachievement. Failing grades, grade retention, dropping out, and other school-related problems have

often been characteristic of this population. Students with ADHD have been more likely than the average student to underachieve and drop out of school (Burt, 1994).

ADHD involves complex cognitive and behavioral problems, which include impatience, distraction, excitability, overactivity, impetuosity, fidgetiness, destructiveness, and rowdiness. The intricacy of ADHD has been revealed in its various diagnoses: as a psychiatric disorder, as a distracted conduct disorder, and as a nonpathological personality style. At one time, the belief was that most students eventually outgrow the core symptoms of ADHD; however, this belief has been disproven. Longitudinal research has attested to the probability that adjustment problems will continue into adulthood. That tribulations in social, family, legal, psychological, substance abuse, and affiliation areas persist through life have been well documented (Burt, 1994).

The problems of children with ADHD change as they become older and progress into advanced grades. Entry into junior high school amplifies their social and academic problems for several reasons. Middle school and junior high school is less structured than elementary school, and during adolescence, hormonal activity is extremely elevated. Interpersonal relationships often take precedence over academic achievement, and peer pressure plays a significant roll (Shapiro & Rich, 1999).

When in middle school and junior high school, children with ADHD must monitor themselves to be sure they get to the correct classes at the correct times. Furthermore, they have several different teachers. Because these teachers know the students less intimately than their elementary school teachers did in self-contained classrooms, they are less likely to learn the possible strengths of these students as a result

of less personal interactions. Third, middle school and junior high students begin to get homework that requires planning and application in order to be completed successfully. They must approach their homework systematically. In subjects requiring reading and outlining, these students might struggle more due to the sequential nature of these subjects. For all of these reasons, if ADHD persists, students' academic problems typically increase when they enter junior high school. As Shapiro and Rich (1999) noted, "These complex academic problems, combined with the unique psychological problems some children with ADHD develop in adolescence, as well as the typical psychological problems that non ADHD adolescents often experience, can make the early teens a difficult period for children with ADHD" (p. 19).

Lack of academic success may breed low self-esteem and lack of enthusiasm for school. Even if youngsters with ADHD outgrew their destructiveness and inattentiveness, they might have been so far behind and so discouraged with school that they only wanted to leave school. Although ADHD youngsters might now be "normal" physiologically and although their temperamental problems might have diminished or disappeared, they are so emotionally scarred by the school experience that they have developed a marked distaste for school and might even drop out (Shapiro & Rich, 1999).

Emotional and Social Risks for Students With ADHD

Students who have ADHD are at risk for emotional turmoil because they are incapable of building or retaining satisfactory interpersonal relationships with peers and teachers. Students who subject teachers to their impatience, disorganization, impulsivity, and distractibility might also be annoying to peers. Some of their peers might not want to work with them or even sit near them. Students with ADHD usually are excessively

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reactive; they characteristically express their emotions quickly using elevated emotions that do not fit the situation. This behavior can be exasperating to both peers and teachers. Students with ADHD also might demonstrate improper types of behavior or feelings under normal classroom conditions. Researchers have documented consistently high rates of occurrence between attention deficit disorders and disturbing behavioral disorders marked by violent behavior, oppositional insolent behavior, and conduct problems.

In like manner, Barkley (1989) found that 80% of parents of hyperactive children provided ratings suggesting that their children were having serious problems playing with peers, compared with 70% of nonhyperactive controls. Similarly, Whalen, Henker, Collins, Finck, and Dotemoto (1979) found that hyperactive youngsters displayed greater negative verbalizations and physical aggression than did their nonhyperactive peers.

In general, students with ADHD appeared to be less established and more redundant in social situations than their nonhyperactive peers. These students were incapable of coping with the aggravation of peer rejection, so a ferocious cycle typically ensues. Students with ADHD frequently react to rejection with inappropriate behavior, which leads to more social rejection and precipitated more improper behavior. The decisive issue is that students with ADHD cannot easily adapt their behavior to meet situational demands. A range of social skills is desired, and students with ADHD have a weakness in this area. These students typically lack supportive working skills and social skills to resolve conflicts.

Conversely, students who can stabilize their own feelings are capable of adapting to social situations. But students with ADHD often illustrate difficulty in maintaining

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emotional equilibrium, which is associated with poor behavioral modulation. Even though educators understand that students with ADHD have societal problems such as relationship building, these complexities often are disregarded when evaluating some diagnoses of ADHD (Goldstein & Goldstein, 1990). Peer-interface problems are as useful in distinguishing children with ADHD from normal children as are short attention span, impulsivity, and hyperactivity (Goldstein & Goldstein, 1990).

Finally, students with ADHD evidence a variety of behaviors and emotions, some of which might meet the federal criteria for special education. In light of the intricacy of these behaviors, some professionals have persisted that there are three subtypes of attention disorders. Shaywitz and Shaywitz (1988) proposed the following: (a) attention deficit disorder without hyperactivity (ADD), (b) attention deficit disorder with hyperactivity (ADHD), and (c) attention deficit disorders with any comorbid diagnosis, with emphasis on aggressive disorders (ADDPlus). Subtype (b) is most relevant to disruptive behavior disorders, and subtype (c) is most pertinent to issues of emotional and behavioral disorders or combined externalizing and internalizing disorders.

Although research findings have supported inclusion of ADHD in a debate surrounding emotional and behavioral disorders, further research supporting subtyping ADD also was conducted by Marshall, Hynd, Handwerk, and Hall (1997). Marshall et al. found that math achievement scores of students with ADD were considerably lower than those of students with ADHD, corroborating previous researchers' suggestions that ADD might represent a diverse subtype of ADHD and that inattention interferes with the capability to master abstract symbol systems, particularly basic arithmetic skills.

Students with attention deficits tend not to think before they act. Their outward behavior was provoked before their mental functions were engaged. Consequently, they found it difficult to weigh the consequences of their actions before they acted and did not rationally consider the consequences of their past behavior (Goldstein & Goldstein, 1990). They were expected to go on to another behavior as their thought processes struggled to keep up. They might have been able to clarify the rules and consequences, but they were incapable of controlling themselves because they acted before considering the consequences. These students were not deliberately oppositional; their behavior was simply at odds with their thoughts.

In addition, these students had trouble with delayed gratification. It was also evident during discussions that long-term goals were difficult for them. Behavior management techniques appealed to teachers of students with ADHD because they eliminated the indefiniteness that these students perceived in waiting for payoffs. A teacher might have concluded that these students required scientific strategies to learn how to achieve long-term goals. Often, behavioral systems were intended to provide numerous payoffs as students' progress toward long-term goals, rather than one reward when the goal was reached. In theory, short-term goal setting and payoffs must work.

However, rewards were not always useful in changing the students' behavior. Often, once the reward and the conveyed structure of the behavioral-change program was removed, students with ADHD regressed and again exhibited the behavior that was supposed to change (Goldstein & Goldstein, 1990).

Students with ADHD frequently did not respond any better to negative consequences than to rewards. One explanation is that they understood better the

removal of aversive stimuli than the presentation of positive ones. For instance, a child might have been denied certain privileges for not doing chores. Thus he has learned that if he does not complete the tasks he will not be allowed to do something he prefers. His approach will likely be oriented toward evading the negative consequence to a certain extent than to earning positive ones. This was not merely a matter of splitting behavioral analysis hairs; children with ADHD might have learned to be provoked by negative reinforcement. However, many students with ADHD did learn under conditions of positive fortification. This was the most powerful and supporting condition, particularly for students who had both behavioral and emotional troubles (Goldstein & Goldstein, 1990).

<div style="text-align:center">Treatments Intended to Control ADHD</div>

ADHD sometimes is accompanied by aggressive behavior. Although ADHD typically is associated with school age boys, it also persists into adulthood. A common drug treatment for the problem involves psychostimulants. Whereas psychostimulants such as amphetamines have put a normal person into a psychotic state by excessively activating normal intentional mechanisms, these drugs seemed to have had a beneficial effect for the relatively inactive intentional mechanisms of patients with ADHD. Long-term use of these drugs; however, might have had deleterious effects on such bodily functions as growth, kidney activities, and appetite. In addition to those effects, psychostimulants might affect cognitive functions, as well. Therefore, nonpharmaceutical treatments such as behavioral therapy have been increasingly used on students diagnosed with ADHD.

A combination of environmental and biological approaches might be most helpful in treating ADHD. Hinshaw, Buhrmester, and Heller (1989) studied boys with ADHD who had been trained to control their anger through cognitive behavior modification. After they were trained, the boys were given Ritalin or a placebo. Those who received the drug evidenced better self-control and less retaliation when taunted by their peers. Alternatively, the drugs might have been used initially to help bring the hyperactivity under control, and the behavioral treatment could have been used to achieve long-term control. Tupin (1988) cited success in controlling adult hyperactivity with the anticonvulsant carbamazepine (Tegretol), which was also used in treating affective disorders.

Moreover, for students with ADHD, a multidimensional perspective should be used in selecting interventions. In particular, a proper multidimensional intervention involves four elements: medical management, psychological support, educational management, and behavior modification, with management being the key. Goldstein and Goldstein (1990) noted that disorders of attention and arousal could not be cured and should have been managed all through childhood. Other researchers have focused on strategies intended to increase definite desired behaviors and to decrease other undesired behaviors. It is believed that with this approach academic productivity will become a byproduct of improved attending behaviors.

Effective Strategies for Working With Male Students With ADHD

Previous research has been focused directly on instruction and learning. This has produced a growing appreciation for the need to focus on instructional interventions for students with ADHD. Acknowledgment of the need to focus on instructional

interventions has been reflected in research. For instance Chu (1987) found that students with ADHD gained most from learning tasks that were presented at variable speeds: activities that are broken into segments that are alternately fast, slow, and reasonable in pacing. Other researchers (Zentall & Gohs, 1984) have found that students with hyperactivity took considerably longer to complete tasks when the initial information they were given was thorough rather than global. Finally, Zentall and Meyer (1987) discovered that students with hyperactivity performed considerably better under active-response conditions than they did during traditional instruction.

When a student with ADHD interrupted classes (e.g., drifting in tardy after the bell rings), talked as the teacher was giving directions, or did his homework while a videotape was being shown, the customary response was to discipline. Discipline typically was administered with a counterforce at least equal to the transgression committed. The teacher might have sent the student to the office for tardiness, requested that he or she be detained after school, or at least marked the student tardy in the record book. The teacher also might have reprimand the student for excessive talking or confiscated personal belongings from the student while a videotape was playing.

Students with ADHD do not typically respond well to such interventions. Instead, they usually find ways to offset disciplinary measures. They might distract the students sitting next to them instead of attending to a videotape. And although they might have missed a lesson by spending time in the office, this is not a terrible outcome for students who do not want to be in the classroom. Psychotherapy or counseling has addressed many of the psychological and social issues and problems that often accompany ADHD. Some of these problems have been related to low self-esteem, anxiety, depression, or

difficulty with interpersonal relationships. Recent research has indicated that approaches that focus on solving specific real-life problems are more effective than open-ended, analytical techniques. For example, a therapist focusing on a person's difficulty in maintaining attention during meetings at work might ask, "What are you thinking about, or what seems to set you off at these meetings?" The goal of therapy, then, is to make the individual conscious of his or her thoughts and feelings in these settings. With self-awareness comes an increased ability to control one's behavior (Shapiro & Rich, 1999).

Mental health counseling and school counseling roles have been expanding to include working not only with youths who have ADHD but also specific aspects of involvement related to their medication treatments (James & Nims, 1996). The medical aspects of treating youths with ADHD has enabled counselors to be better informed about the types of medications available, the possible side effects, and the advantages and disadvantages of their use. In addition, mental health and school counselors can partner to provide information to nurses, parents, physicians, and the students themselves to design developmental interventions for youths with ADHD.

For this reason, counselors need to know about medications and their side effects and about situations in which drugs are either the sole intervention or are used in conjunction with psychosocial interventions. In many schools today, school counselors consider it their job to be knowledgeable about medications and their possible side effects. In fact, parents believe school counselors are competent in this role when counselors demonstrate knowledge in this area. If youths are to comply with their medication schedule, there often must be a person in the school who administers and monitors its effects as the youths' proceeds through their school day. When mental

health and school counselors partner with school nurses, teachers, and parents to help youths manage their ADHD through the use of medication and psychosocial interventions, youngsters are able to improve their academic performance.

School counselors would like to team with other counseling professionals, including mental health counselors and marriage and family counselors, to deliver more powerful intervention and prevention efforts in their schools. In fact, schools' comprehensive guidance programs encourage a team approach for delivering their services to all students, often involving at least a limited partnership with school staff, community counselors, and community members in order to serve effectively every child's academic, career, and personal and social needs. Consistent with this goal, school counselors may be expected to work with mental health counselors, family physicians, or school nursing personnel to monitor the safe use of drugs for youths with ADHD. This critical aspect of both intervention and prevention is necessary if youths are to comply safely and effectively with their medical treatment protocol. Schools may monitor medication use and suggest that parents seek medical advice from their doctors. School counselors often are in the center of the communication hub related to treatment, care, and follow-up of youths' progress and management of ADHD symptoms. Families decide whether or not to medicate a child based on perceived or actual severity of ADHD symptoms and their relation to problems at home, school, or with peers (Dulcan et al., 1997). For this reason, school personnel are intricately connected to the data-gathering process associated with determining whether ADHD symptoms exist, severity of symptoms, and potential prevention or intervention efforts. Often, medication is the

outcome of this complex process of detecting, treating, and monitoring ADHD symptoms (Hall & Gushee, 2002).

Techniques to Help

Behavioral management is one technique for helping individuals identify and apply strategies to improve their day-to-day living. For example, a person might have been encouraged to reflect on his or her strengths and weaknesses in order to pinpoint negative behaviors such as going to meetings unprepared or disorganized. Strategies such as using notes or an outline would be suggested and gradually put into use (Shapiro & Rich, 1999). Support groups have provided a different type of experience. In these groups, adults with ADHD have met others with similar problems and shared experiences and management strategies. Vocational counseling is another type of support and has been useful in guiding adults toward appropriate job choices and opportunities (Shapiro & Rich, 1999).

For a well-functioning executive, self-regulation and the use of task-appropriate strategies have been essential for learning and functioning in all settings. Strategies serve as mediators. They have improved organization and efficiency, thereby making tasks easier. They have also helped people who have ADHD sustain attention and gain the control they need to modify their behavioral symptoms. The following are examples of strategies:

- Anticipate timelines
- Initiate a reasonable work schedule
- Use a daily planner
- Set up nondistracting environments for work

• Learn to take breaks and use varied techniques to interrupt the hyperactive

symptoms

• Become more aware of impulsive behavior and situations that trigger such

behavior

• Make a concerted effort to listen to others at meetings or in social settings

• Take time to think and listen before responding (Shapiro & Rich, 1999).

Engagement also can be improved by self-management. McDougall and Brady

(1998) asserted that self-management increases academic efficiency and commitment

throughout independent practice. Their research particularly showed the efficacy of

fading the cue to self-monitor once math fluency reached high levels. The insinuation

was that preliminary academic improvements made through the use of self-graphing can

be improved and retained at high levels when students continue to self-graph without

prompting. Self-management might involve having the student chart the length of time

he or she is capable of staying engaged. This can be fundamental in a performance

contract. The use of a timer can also be helpful when a student aims to work for

increasingly longer periods.

Three other strategies for assisting engagement deserve mention: Engagement

can be supported by having students paraphrase what people tell them to make certain

they understand. Also, calling on students randomly necessitates that they pay attention

because they cannot predict when they must respond. Last, when reading, students can

be taught to skim the material first so that engagement with the material can occur before

actual focused reading takes place.

A multidimensional approach must also take into account strategies related to predominant needs for acceptance and approval, exterior control, and appropriate engagement. First, students with ADHD benefit from behavior management strategies such as positive reinforcement when they stay on task and do not interrupt or show disregard for peers. Approval is also expressed by giving students with ADHD leadership roles that bring forth peer respect and acceptance. This is supported by preparing the peer group to collaborate and help the student by providing feedback about both strengths and weaknesses. Another recognition strategy is to seek ways to interact with the students in a positive, personal way following essential reprimands. This is a complex undertaking when students have been very irritating; however, the instructor needs to reestablish contact after administering punishment. External control strategies comprise ensuring that students discern the rules, producing a behavior charting system to increase consciousness of their own behavior, standing near them throughout critical activities, providing them with short-term objectives and an improvement chart to show the students that they are meeting those objectives, and structuring supportive activities in which students monitor one another, thereby incorporating positive peer pressure.

Proper engagement, the most understandable need for students with ADHD, can be addressed in numerous ways. Within a multidimensional approach, three other strategies have been found to be effective: modeling and self-verbalization, relaxation training, and increased stimulation. Modeling self-verbalization entails the following steps: The adult performs a task while speaking aloud; the student then does the task while the adult gives instructions; the student does the task while whispering and then only while moving his lips; finally, the student does the task while self-instructing only

by thinking about the instructions. Modeling enters in when the adult models the questions that must be asked at each step of the self-verbalization procedure. Positive reinforcement can be used to strengthen attention, reducing the amount of reinforcement as soon as the desired behavior is evident. Although the correct behavior is not evident, the adult can again model it while speaking aloud. With adolescents, the preliminary steps of this approach are best carried out in a quiet, private setting.

Relaxation training and arduous exercise reduce tension, have improved cognitive performance, and reduced impulsivity in students with ADHD. Exercises that usually are used in physical education classes might have been incorporated in the classroom and used before or after instructional activities. In-seat relaxation exercises such as shoulder and neck shrugs, arm stretching, and cross-torso twists have also been effective, as have been isometric exercises.

Zentall and Meyer (1987) theorized that environmental spur decreases (rather than increases) hyperactivity owing to students' derisory stimulus filters, which caused a flood of unfocused responses. According to this way of thinking, students with ADHD have raised their activity, verbalizations, and bodily movements to seek the most favorable stimulation. This theory has been supported by the fact that both sensory-deprived and hyperactive individuals evidenced poor concentration, muddled thoughts, and poor visual and motor skills. Stimulant drugs (e.g., Ritalin) have productively "calmed" youth with hyperactivity symptoms rather than making them more active by sustaining an adequate arousal level. A balance must be struck, however, to prevent the students from becoming excessively stimulated by an activity, mainly in physical exercises and games, and diminish the emphasis on competition, which tends to motivate the student. Specific

classroom strategies, planned to provide motivation, have included the following: presenting tasks in the most striking, appealing, and motivating manner possible, structuring these tasks so that students will not have to become excessively stimulated, providing color and pattern in the form of bright pictures and posters; using pictures, diagrams, an overhead projector, and a chalkboard to provide additional information, and using small groups as there is higher stimulation in small-group settings, with less waiting for attention.

One strategy that has engaged student's minds is to permit students to pace themselves. Self-regulated work, without waiting periods, has enabled students to control the amount of motivation. As the mental procedure has guided behavior, self-regulated thinking has been more likely to result in self-regulated, modulated behavior. Instructors should structure several, short, work periods rather than one long one to better enable students to focus. Students with ADHD have responded better to diversity; monotony tends to reduce their attention.

Other strategies that are helpful include alternating the types of work and using a multisensory approach. Teachers can speak in varied tones, pitch, volume, and inflection to underscore points and to add interest as well as mix rates of presentation. Using creative settings for tests, films, and games can engage students. For instance, alter the classroom physical arrangement of the classroom or move the class to another location; mix the rate of presentation.

In addition, the strategy of self-monitoring, as a means of providing motivation, merits discussion. Carr and Punzo (1993) found that adolescent students made gains in academic accuracy, output, and on-task behavior after recording their own daily

academic scores on charts at the end of each class period. The students appeared to be aware of their improvement through this nonintrusive method. The intervention was easy to learn and use, so the students did not need to be prompted to self-monitor.

Furthermore, social strategies are significant for students with ADHD. Yet such strategies for students with ADHD frequently neglected the requirement to improve peer relationships (Anhalt, McNeil, & Bahl, 1998). Rather, numerous strategies to enhance social functioning have been clinic-based and focused on teaching social skills separately from the natural peer groups. Therefore, knowledge about appropriate and inept behaviors might have increased, but the learned skills have not been constantly performed in the school setting.

One school-based strategy to enhance social functioning is a whole-classroom reinforcement system. This technique has prevented peers from feeling that it was unjust to reward one or a few students for conforming to rules all students must follow. Group meetings have also provided a significant social opportunity for students with ADHD. Structured group debate about feelings and behavior, which has been used with students as young as 8 to 14, has been applied in the classroom or counseling settings. This method has endorsed positive learning and renunciation of ineffective attitudes and behaviors using common practices. Throughout these meetings, students can expect to assume diverse roles such as talker, listener, and observer. The counselor or teacher might have begun by saying that he or she wanted to learn more about students their age. The talker had 2 minutes to say what he or she liked and disliked about school; the listener asked questions and attempted to repeat what was said (an active-listening strategy that promoted engagement); and the observer watched and later made

suggestions to the listener, then joined the discussion. Later, the adult expanded, summed up, clarified, and restated feelings. A subsequent session might have focused on talk about behavior; students might have been asked to tell about what they did to arouse feelings in others. Throughout, the talker–listener–observer format has been used so that each student can obtain feedback.

Once the classroom is prepared there are strategies that can be used by students and instructors to help ensure success. Permit students to pace themselves. Self-regulated work, without waiting periods, has enabled students to control the amount of motivation. This strategy has engaged students' minds. As the mental procedure has guided behavior, self-regulated thinking has been more likely to result in self-regulated, modulated behavior. Instructors should structure several, short, work periods rather than one long one. Students with ADHD have responded better to diversity; monotony reduced their attention. Other strategies that have proven successful include alternate types of work and use a multi sensory approach, speaking in varied tones, pitch, volume, and inflection to underscore points and to add interest. Students with ADHD also respond well to mixed rates of presentation, and the use of creative settings for tests, films, and games.

Classroom observations following the use of this process have indicated that students became more concerned and attentive and said they enjoyed the sessions. Finally, it has been suggested that interventions for students with ADHD have taken place in the natural classroom setting, as research has suggested a lack of generalizability with clinic-based interventions. It has also been recommended that behaviors were targeted that facilitate academic progress, that identified behaviors obtained quick and

frequent responses, and that interventions persisted as long as maintenance of targeted behaviors was desired.

CHAPTER III

METHODOLOGY

In this study, I examined the paths of male students with ADHD who used their high school's College and Career Center throughout their secondary career. This was done in order to determine the critical factors that influenced their decision making. As part of this exploration I gathered each student's demographic information; his early, adolescent, and secondary experiences; critical factors he identified as important in achieving career success; and whether a high school college and career development office assisted in his career decision making.

Research Questions

I posed four research questions to guide the collection of data for the study:

1. What variables explain the range of career decisions among secondary students with ADHD?

2. What encouragement or discouragement from friends, family, and educators did successful high school alumni with ADHD experience?

3. What critical incidents made the transition to postsecondary education successful and brought the high school alumni to their current positions?

4. In what ways did the students' secondary institutions influence their career decision-making process?

Criteria for Sampling

In this study, I examined the lives and careers of 9 men with ADHD who recently graduated from Owosso High School and had entered postsecondary education or gained employment in their chosen professions. The range of time since graduation was 1 to 5 years. The focus was on the subjects' impressions of their success, as well as the qualities and characteristics they thought were necessary for success and their use of support services from their high school. I identified male students with ADHD who have progressed beyond an associate's degree and/or attained a stable (more than 2 years) job with an income above the average for the region in which they are working. The academic standard is 2 years of successfully completed postsecondary or higher education. Identifying these particular men allowed me to narrow the scope of interventions that contributed to their success.

I conducted in-depth interviews to flesh out the stories of these 9 individuals. The personal and professional stories of the participants provided a microscopic look at the process by which they progressed from secondary education to postsecondary education or a career by recreating their experiences in a coherent narrative. A primary consideration in this research was not merely to develop a chronology of events that led to each individual's success, but more important, to explore the ways in which they interpreted and assigned meaning to these events as well as the ways that these meanings connected to tell a larger collective story.

One of the primary reasons for conducting an interview was to amass data in a question-and-answer format that required structure and specific questions. Therefore, the interview process should have "interlaced the structured format required to elicit data,

with more spontaneous expressions of human warmth" (Janus, 1999, p. 98).

Conversational give-and-take allowed the student an opportunity for self-expression, in which he was encouraged to stretch mentally. Observations the researcher made during the interview could also indicate which cognitive, social, and emotional functions should have been explored further. According to Janus (1999), some professionals believe that ADHD clients provide incorrect information about themselves. The reasons for their inaccuracies could be as disparate as inefficient cognitive processing, defensiveness, poorly developed judgment, lack of self-awareness, or poor social insight (p. 99).

Sampling Process

A qualitative approach was used in this study to explore the phenomenon of male students' success when dealing with ADHD. Conducting in-depth interviews allowed me to discover critical factors that either led to success or failure as participants made the transition from secondary education into either higher education or employment. I created a list of possible candidates and then chose 9 men at random for participation. The list of candidates was derived from the last 5 years of graduates from the Owosso school system. The students were first separated by gender, and then the male students were screened one-by-one using CA-60 documents to locate male students with documented ADHD. Once there was a pool of candidates for the study, I contacted them personally and asked them to participate in the study.

The study sample within the Owosso school system comprised all those who were men and identified as having ADHD during their K–12 years. Each individual who agreed to participate in the study signed a letter of consent (see Appendix A). Participants were assured that their anonymity would be protected and their identities

would not be revealed during any phase of the research or in the dissertation. Names were changed throughout the dissertation when referring to both people and places (and the project itself), in a further attempt to conceal the names of the participants.

Data Collection

Role of the Researcher

Bogdan and Biklen (2003) maintained that "phenomenologists believe that multiple ways of interpreting experiences are available to each of us through interacting with others" (p. 23). The researcher's task was to recognize each participant's view of reality, and to do so, it was necessary to develop rapport. Consequently, in carrying out this study, it was advantageous for me to be familiar with not only the Owosso Public Schools community, which had been each participant's K–12 "home away from home" but also each participant's background. Therefore, I conducted the interviews myself because I was most familiar with the school community and my staff status allowed me access to student records. However, after consent from Western Michigan University's Human Subjects Institutional Review Board (HSIRB; see Appendix B), I gained the participants' consent and assent throughout the process.

Procedures

This study has enlightened the researcher on how male students with ADHD fulfilled their academic requirements and achieved career maturity. Qualitative research methods were especially appropriate for an investigation of this nature because they provide a rich portrait of the complexities of participants' lives. Qualitative research, according to Thomas (2003), provides researchers with tools for developing a deeper

understanding of social phenomena. Because qualitative research is conducted in natural settings, without hypotheses, the emergence of information guides the discovery of additional information (Creswell, 1997). In a qualitative study, data sources, interview questions, and a complete research plan can not be fully specified in advance. In addition, a flexible research design was recommended that allowed the researcher to investigate a phenomenon in depth. This research will also uncover and explore divergent information, make connections among data, and remain open to many possible ways of knowing this phenomenon (Creswell, 1997). In this study, three data-collection methods were used: interviews, observation, and document analysis. Although all students in the study were informed of interview questions, I remained open to emerging developments and understandings throughout this research.

Interviews

Students selected through criterion sampling, who were willing to engage in this study, were contacted by telephone to schedule an interview. Before each interview, I sent each participant a letter detailing the agreed upon time and location of the interview, the estimated length of the interview, a list of preliminary interview questions, a background information sheet, and a copy of the consent form to review and sign. In addition, I reviewed with participants the purpose of the study, a proposed outline of the interview session, and my commitment to preserving anonymity and confidentiality of interview responses.

The interviews took place in the participants' homes to provide a level of comfort for the participants. I was the only other person present during the interview process.

The interviews lasted approximately 1 hour, and because of the intricacies of ADHD, breaks were allowed during the interview to enable participants to remain focused.

Before beginning the interview at a participant's house at the appointed time, I responded to any questions about the letter of consent. This included the participant's ability to withdraw voluntarily from the study at any point. I asked all study participants the same core questions (see Appendix C), and I also asked follow-up probing questions to clarify or elicit further responses. The process for interviewing the students was cleared through Western Michigan University's HSIRB to gain a check and balance for appropriate nature of the questions. All interviews were audiotaped, and study participants were able to review all their tapes and other notes as appropriate.

Documents

To develop deeper insight into the life of each participant, I invited them to share personal materials such as transcripts, résumés, and other related artifacts. In addition, I reviewed institutional documents that referred to students with disabilities. I also asked participants about their familiarity with the various policies and documents listed above and their willingness to take advantage of these policies. Finally, I asked each participant to complete a background information sheet, which provided me with details about their education, ethnicity, and professional experience.

Data Treatment and Analysis

The first step in the data analysis was for the researcher to get a sense of the meaning. The researcher accomplished this by listening to the interviews many times as well as contacting the participants to clarify certain answers. This involved listening to

the interviews twice, transcribing the interviews, and reading through the transcripts to become immersed in the data. Storing and backing up the data was crucial.

Creswell (1997) and McMillan and Schumacher (2000) outlined several verification procedures to enhance trustworthiness: prolonged engagement in the field, triangulation, peer review or debriefing, negative case analysis, clarifying researcher bias, member checks, rich narrative description, and external audits. Creswell suggested that qualitative researchers engage in at least two of these procedures in a given study. To ensure trustworthiness of data in this study, I employed three verification procedures: member checks, peer review, and thick, rich descriptions. Member checks involved having participants review the material to ensure accuracy. I shared the results of the study with the participants to ensure that I captured their meaning. A rich description in the narrative also allowed readers to make their own decisions about the meaning of the research. To accomplish the peer review, I asked another superintendent with a doctorate degree to read all of the transcript summaries and help determine whether I accurately captured the meaning.

Each audiotaped interview was transcribed verbatim, and a phenomenological analysis was employed, as modified from Creswell (1997). All participants' interviews were read "in order to acquire a feeling for them" (p. 280). Significant statements, such as phrases and sentences that pertained directly to the investigated phenomenon, were extracted from each description. Meanings were formulated by detailing the sense of each significant statement. Clusters of themes were organized from the aggregate formulated meanings. An exhaustive description of the phenomenon resulted from integrating the above-mentioned results.

I listened to the audiotapes and took copious notes, with the intention of gaining a better understanding of the phenomenon. I asked participants about particular details they might not have mentioned in their overall description, or I might have asked them to clarify certain points. My feedback was essential to ensure the study's credibility. I sorted all transcribed data and stored it on computer files in my home office, where they will be retained for 3 years. Key to qualitative data analysis is the task of phenomenological data reduction (Creswell, 1997). In this process, the researcher "brackets" out the outside world and views the data in their pure form. One approach to reducing the data is to develop initial codes or categories based on the data presented. This is called horizonalization of the data (Creswell, 1997). Researchers often place notes or codes in the margins of transcribed data. They then begin the process of describing and classifying the data in an effort to describe the meaning of the experience for the participants; this is called a textural description of the data. Using their own experience, researchers then place an imaginative variation on the textural descriptions and further group the divergent perspectives into structural descriptions, which is "how" the participants experience the phenomenon. Researchers then combine all of the above to disseminate the "essence" of the experience or a composite description.

When coding data, researchers need to be concerned with judging data by two criteria: external homogeneity (the degree to which data do not belong together) and internal homogeneity (the degree to which data belong together in a certain category). Creswell (1997) presented a data-analysis spiral, in which the researcher moved in analytical circles rather than in a linear manner, constantly reading, rereading, coding, combining meanings, and finally describing the phenomenological account based on the

participants' experiences. This is the process by which I analyzed the data (see Appendix D).

Whereas quantitative analyses entail statistical procedures to determine statistical significance of the data, qualitative analyses rely on verification procedures to ensure credibility and goodness of the data (Arminio & Hultgren, 2002; Creswell, 1997; Lincoln & Guba, 1985; Patton, 2002). Qualitative researchers are concerned with whether they have interpreted the data as accurately as possible. Arminio and Hultgren (2002) suggested that the word "rigor" is an empirical term and should be replaced by the term "goodness" in qualitative research. They stated, "Meeting the criteria of goodness requires meaning making of a phenomenon for the purpose of practical action" (p. 450). They suggested six ways to ensure goodness in a qualitative study: (a) that the study be based on a specific theoretical foundation, such as phenomenology; (b) that the methodology outline a specific plan of action; (c) that data-collection techniques be clearly identified; (d) that the researcher reflect and define his or her voice and experience with regard to the study; (e) that the interpretation process result in some new insight; and (f) that the research provide clear recommendations for professional practice. This study incorporated all six of these elements to ensure goodness of the study.

Arminio and Hultgren (2002) also suggested that, in qualitative research, measures of "reliability and validity" be replaced by the idea of "trustworthiness" (p. 68). Trustworthiness is evidence that the work was credible and representative of the population studied. As Lincoln and Guba (1985) noted, "The basic issue in relation to trustworthiness is simple: How can an inquirer persuade his or her audience…that the findings of an inquiry are worth paying attention to, worth taking account of?" (p. 290).

Interviews were conducted with male students with ADHD who recently

graduated from a secondary school, Owosso High School. Preliminary investigation

indicated that Owosso Public Schools would provide an appropriate setting for this study

because the faculty and staff, who are familiar with students with disabilities through

their daily professional responsibilities, developed a roster of eligible study participants.

From this list, I selected at least 9 students to take part in this study. Criterion sampling

was used to ensure that all participants had experienced the same phenomenon (e.g., each

had been identified as "learning disabled" as defined in this study). In-depth interviews,

approximately 1 hour in length, were conducted with 9 students, focusing on how they

experienced the transition from academia to professional life or higher education..

Summary

Analyzing the data in a qualitative study is an inductive process (Creswell, 1997;

Lincoln & Guba, 1985; Patton, 2002). "Qualitative analysis transforms data into

findings. No formula exists for that transformation" (Patton, 2002, p. 432). Unlike

quantitative analysis, there are no prescribed formulas for qualitative analysis; however,

good practice enhances the credibility of qualitative research. Qualitative inquiry has the

ability to produce massive amounts of data. Thus, an important task in qualitative

analysis is to reduce the data by developing codes or categories to discover common

meanings, sift through trivia, and find significant patterns (Creswell, 1997; McMillan &

Schumacher, 2000; Patton, 2002).

It is important to note that qualitative research methodology and data analysis are

different from, but not less rigorous than, quantitative analysis. The choice to use

qualitative research should be based on considerations of the audience, the problem, and

the personal experience of the researcher (Creswell, 1997). Clearly identifying the role of the researcher as part of the study enhances credibility of the study. Furthermore, it is important for the researcher to be keenly aware of his or her own biases and predispositions at the start of the study (Arminio & Hultgren, 2002; Creswell, 1997; Lincoln & Guba, 1985; Patton, 2002). Sampling procedures are purposeful and participants should be carefully selected to achieve some diversity. Data analyses should be inductive and allow for emergent themes; verification procedures should enhance the credibility, trustworthiness, and goodness of the data. This study was designed with these concepts in mind to ensure a rigorous qualitative study of male students with ADHD.

ADHD is a disability that has gained notoriety in recent years. Therefore, many studies have been conducted on what causes the disorder, how to treat it, and even some behavioral intervention strategies that have allowed students to help self-regulate their own behavior. Unfortunately, this has not created a quick or sure cure for many students with this disorder. Male students with ADHD seem to have had a much more difficult time gaining postsecondary education and career success. This study was specifically designed to reveal strategies that 9 young men used during their secondary and postsecondary lives to become successful. The ultimate goal of this study was to create a comprehensive plan for secondary male students and the organizations they study at or work within to embrace their unique abilities.

CHAPTER IV

RESEARCH RESULTS

Introduction

In this chapter you will find a description of the research participants, an in-depth analysis of the interviews, and the research findings produced from 9 interviews with male students age 19 to 23 with a diagnosis of ADHD. Included here are the emergent themes that evolved as a result of the interviews. The interpretations of these themes were a result of inductive data analysis and data reduction. This involves the immersion in the specifics of the data and coding procedures that take into account external homogeneity, the degree to which the data do not belong together, and internal homogeneity, the degree to which the data do belong together (Creswell, 1997).

The purpose of this phenomenological study was to draw out variables that influenced the range of career decisions, describe the career decision-making process for male students with ADHD, encouragement or discouragement from stakeholders, and the critical factors that aided them in their transitional efforts. The methodology used was open-ended individual interviews based on an interview protocol. The interviews lasted approximately 1 hour, with follow-up phone calls during the transcription phase for clarification. Participants in the study were all recent male graduates from Owosso High School who had been diagnosed with ADHD. Trustworthiness of the data was accomplished through thick, rich descriptions; member check; and peer review (Creswell, 1997).

All of the participants explained in great detail their school experience and the moments and people who helped them choose their present career or placement in higher education. All of their stories were incredibly detailed with regard to significant events that took place several years ago that continue to shape who they are today.

Participants

More than 1,200 names of students from the Owosso school system were originally screened from the student database to create the original list. The researcher then filtered through the list and eliminated all female students, thereby reducing the number of possible participants by one half. The nearly 600 remaining names were cross-referenced against CA-60s, student files, screening for students with disabilities and finally those who were diagnosed with ADHD. All students were men ranging in age from 19 to 23 years, and their names were altered to protect their identity. The critical factors referenced in the data and interviews included parental support and admittance of the disability, teachers who were perceived to care for the student as an individual, remediation or support systems in place academically and socially, hands-on learning experiences, early diagnosis of ADHD (preferably no later than third grade), and certified counselor interactions. All of these themes became evident and contributed to the success or failure when they were lacking, of our test group. The following section contains descriptions of the participants and the findings arranged in the sequence of research questions.

Overview of the Men Studied

Albert is a single, 20-year-old Hispanic man who at the time of the interview is working as a factory laborer. He recently moved in with his girlfriend and they are

expecting their first child while he tries to open his own lawn maintenance company. Presently Albert does not attend any higher education institution, but he is considering enrolling in Lansing Community College in the near future.

Brian is a single 21-year-old Hispanic man who is currently working part time for the Owosso school system in the custodial department. He has recently moved in with his girlfriend of many years and they have one 8-month old daughter. Brian also picks up odd jobs to try to pay the rent. Brian indicated that in the near future he would like to return to college to pursue a career as a teacher. Brian has had one semester of junior college since graduating from high school.

Brett is a single, 22-year-old Caucasian man who is currently living in Pittsburg working at a diner/coffee shop. Following high school he began college at Lansing Community College studying psychology, but he did not complete the degree. Brett has aspirations of going back to school someday and trying to finish a degree in psychology. However, presently he is not enrolled.

Blake is a single, 19-year-old Caucasian man who is presently in his sophomore year at Central Michigan University studying nursing. Blake attends school full time and works part time in the dining halls on campus. Blake lives on campus and is planning on moving out of the state of Michigan upon graduation.

Calvin is a 22-year-old Caucasian man who is presently working as a certified truck driver for a local company in Owosso. Calvin is married, has three children, and they live in Owosso. Calvin never attended college following high school, but he wishes that someday he could enter into a program that would help him to open his own trucking business. Calvin's wife works part time at a local business to help supplement their

income. He has one daughter who is 5 years old, and two boys who are 3 and 1, respectively.

Don is a single, 22-year-old Caucasian man who just graduated from Michigan State University with a bachelor's degree in business administration. Don thought when he entered college that he would become a doctor or lawyer, but entrepreneurialism seemed to spark his interest and that is why he switched to business. Don lives in Troy, Michigan and works for a mortgage-selling organization. He wishes to own his own mortgage business someday because he wants to be his own boss. Don has not sought advanced degrees since his graduation from college.

Jim is a single, 20-year-old Caucasian man working in the automotive industry. Jim lives at home with his parents and has tried to attend Lansing Community College on three different occasions, never completing a semester. Jim has a steady job at an auto parts store but envisions attending Baker College in the future for a degree in diesel mechanics.

Karl is a married, 23-year-old Caucasian man working in the Owosso school system in the technology department. Karl and his wife own a home in Owosso; his wife works as a secretary at a local business. Karl has attended ITT technical institute in Flint consistently since high school graduation, and plans to graduate in 2008. Karl's future goals include working with computers, possibly in a cyber patrol career. Karl does not see himself attaining any more degrees after graduating from ITT.

Matt is a single, 20-year-old Caucasian man presently attending Baker college and working for a local technology firm. Matt has no children and plans on graduating with a degree in technology in the spring of 2009. Matt is a co-owner of an automotive

detailing business. Matt's future ambition is to graduate from college and either work with cars or computers or both.

<div align="center">Findings</div>

The initial round of data analysis revealed several emergent themes from the open-ended interviews. After further rounds of data reduction, the data related to the following four research questions:

1. What variables explain the range of career decisions among secondary students with ADHD?

2. What encouragement or discouragement from friends, family, and educators did successful high school alumni with ADHD experience?

3. What critical incidents made the transition to postsecondary education successful and brought the high school alumni to their current positions?

4. In what ways did the students' secondary institutions influence their career decision-making process?

The data from the interviews was coded and is presented below in charts, graphs, and summative conclusions.

Findings for Research Question 1

What Variables Explain the Range of Career Decisions Among Secondary Students With ADHD?

Table 1 indicates which of the four support systems influenced the men's career decisions. In some situations, more than one related support was referenced and is indicated below.

Table 1

Variables Influencing Career Decisions

Participant	Family related	School related	Peer related	Staff related
Albert		X		X
Brian	X	X		X
Brett	X	X		X
Blake		X		X
Calvin		X		X
Don	X	X	X	X
Jim	X	X		X
Karl		X		X
Matt		X		

In examining Table 1 it would appear that the students involved in this study placed more merit with the staff and school, and the programs in the school, when coming to a conclusion on what variables influenced their range of career decision making. One surprising theme throughout the interviews with these students is that in eight out of nine cases, the students' peers played little or no role in their career decision making. Family-related influence seemed to depend on the specific questions asked throughout the interviews and on whether the relationship was positive in the home. With this information, schools systems and the staff within them can begin to see how important the relationships they build with their students and the offerings within the school system can be for the success of these students. Listed below is student data referenced that supports this information.

Family-related support influencing career decision making. The quotations in Table 2 were pulled from the coded data relating to perceived support from family members. In each example, family, specifically a mother or father, was a very significant factor for these participants when choosing their careers.

Table 2

Family Influence on Career Decisions

Participant	Supporting evidence
Brian	"I wanted to be a teacher, elementary. In high school I did cadet teaching and I loved it. I loved kids. My parents were always there for me they were very supportive."
Brett	"There was much discussion with the family and I had been going to a counselor because I had been acting up so much. Finally, they figured that this is what the problem was, we should check into it. I think it was teachers and my parents and then the doctor was brought in on the whole thing there."
Don	"My mom is probably the best counselor that I could ever think of. My girlfriend can't talk to her mom, but she talks to my mom."
Jim	"My father. He has been a real big inspiration for me going into the automotive field. He has taught me everything about cars and everything like that. We bought a hot rod back in 1990 and we've been working on them ever since. He has showed me the ups and downs and building an engine, putting an engine in a vehicle, working on it and things like that."

As indicated in Table 2, family-related influence played a large role in the decision-making process for careers for these four students. Too many times in education the role of the parent and the educator are separated. One important conclusion that can be drawn from this particular part of the study is that when a school system and the home can work as partners, the chance for successful completion of high school and entrance into post-secondary education or a meaningful career is achieved. What seems to be more of a norm in society today is an adversarial relationship between the school and family that benefits no one. Communication between the home and the school, specifically the teachers, is a must.

School and staff support influencing career decision making. The quotations in Table 3 were pulled from the coded data found in responses to interview questions relating to perceived support from school and staff members. In each example, the

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school and staff member, specifically a particular teacher, administrator, or

class/program, was a very significant factor for participants while choosing their career.

Table 3

School and Staff Support on Career Decisions

Participant	Supporting evidence
Albert	"I was really behind in credits, I was struggling. In my ninth grade year I was in regular classes and then I started my new class, it had more one on one and that is what really helped me."
Brian	"I was bouncing around all kinds of ideas, I wanted to be an elementary teacher, in high school I did cadet teaching and I loved it."
Brett	"Well, the age itself is the first thing you need to take into consideration. How difficult it is at that age with your hormones flying around and the aggression of high school and the fact that you can't really do anything that is going to help them that are not going to embarrass them. That was the biggest thing. I didn't want to seek help because it was like admitting I have a problem."
Blake	"Probably in the middle of tenth grade in October because that is when I started volunteering at the hospital and that is when I realized I wanted to go into hospital administration, because I liked volunteering."
Calvin	"Everybody, my principal at high school big time, without their help I wouldn't have graduated."
Don	"If I ever needed to talk to somebody, I would talk to one of the teachers that I had a relationship with. I would say that they were better for other people, but they were pretty not involved at that time. I don't know how it is now."
Jim	"Probably when I started going to my second school system, because of the fact that it is a smaller school than what I'm use to. A lot of teachers were apt to help me a lot more. I think that because of the fact that a lot of the teachers in my first school system didn't come up say do you need help with something? It didn't really occur to me, it just felt like all right these teachers don't really care if I get an education, why should I learn?"
Karl	"It was Mrs. K and it was also Mrs. V. They placed me in the classes they thought I needed to be in. They did a really great job, Mrs. K for the most part. There were a few transitions that they had to make, but not many at all."

Table 3—continued

Matt	"Working at the administration building I would see everybody like the Superintendent and all that. I kept me out of trouble too, because I knew if I got into trouble I am going to have to deal with these people and I see them every day and that is not going to be good."

For all four research questions, school and staff-related influence are so closely

linked that they will be referenced together. (If any of the participants did not mention a

particular member of this group it will be identified in the anecdotal information

following each table.) For all four research questions, the role of the school and staff

members was significant either for positive or negative reasons. A bit of a surprise was

that in all situations this category was referenced more than family support. The

surprising part of this was the fact that many students mentioned that one particular

teacher that they had for one year or in some cases one semester completely influenced

what they wanted to do in terms of a career. This will be extremely helpful information

in relation to professional development and professional conversations with staff because

of the clear patterns relating to the influence of the school and staff.

Peer-related support influencing career decision making. Only one informant,

out of a total of nine, mentioned that close friends played a significant role in career

decision making, as noted from the coded data. Don, the single, 22-year-old Caucasian

man, stated, "I would get rid of most of my energy by playing the drums and sports after

school and chasing after girls."

Don was the most academically skilled member of the study spending the large

majority of his education in advanced coursework. Most of the other students in Don's

instructional day did not face the challenges that he faced, and therefore he felt a great

deal of pressure to conform to the class culture of his advanced peers. Don used a "class clown" mentality to help himself self-regulate his behavior and release some of his impulsive energy. Although this did make Don popular among his peers, he did find trouble with his administration throughout his academic career. It was a bit surprising during the coding of the data to find a very small role that peers had with these particular students. Peer pressure can be a very significant influence. However, it only surfaced once throughout the interviews with these particular students.

Summative Results for Research Question 1

Competition for employment continues to heighten each year. As the economy struggles, the qualifications for good applicants continues to increase. Many times jobs that were once held by high school graduates are now being filled by 2- and 4-year degreed individuals. That is why it is so crucial to look at the variables that influence the range of career decision making among secondary male students with ADHD.

The sample students are those who struggle academically and with staying focused on their future. Being able to pinpoint that which can aide these types of students in their efforts to choose a relevant career is a gift that is immeasurable for the students and the school system. The key is to act on the findings once they are identified. Too often in education, data is collected analyzed and then left to die on a shelf in a back room. This practice needs to end. It is time to dig into the very data that will solve many of the problems educators complain about on a daily basis.

As indicated by the findings for Research Question 1, school and staff relations are the most significant influence; almost all students mentioned school and staff when discussing their career decision making. However, it is clear that parents also play a

significant role in that process. In some cases, though, the data suggest that this indicator is related to whether the parent has a successful career or at least perceived success. In situations in which the parents of the individuals studied were out of work, that level of influence was not mentioned.

As previously mentioned, peer influence played a role for only one participant in this study. That student was by far the most academically skilled, thus leaving him more time for social interactions and participation in extracurricular activities. These interactions seemed to fill a need for him in relation to social acceptance and excess energy.

Findings for Research Question 2

What Encouragement or Discouragement From Friends, Family, and Educators Did Successful High School Alumni With ADHD Experience?

Table 4 indicates what encouragement or discouragement from friends, family, and educators the successful alumni with ADHD experienced. In some situations more than one related category was referenced and is indicated below.

Table 4
Encouragement or Discouragement Experienced

Participant	Family related	School related	Peer related	Staff related
Albert		X		X
Brian	X	X		X
Brett	X	X		X
Blake				X
Calvin		X		X
Don	X		X	X
Jim	X	X		X
Karl		X		X
Matt		X		X

The importance of this data cannot be overstated when looking at the success and direction of these students. Every single participant in the study placed a great deal of significance on this section of the data. Whether it was related to family, peers, or the school system, the participants spoke a great deal on the person or people that helped them become who they are today. Relationships, especially for these young men, proved to be the keystone for success and choosing a path following high school.

Family encouragement relating to successful completion of their high school career. Table 5 shows direct quotations that were pulled from the coded data relating to perceived encouragement from family members. In each example, family encouragement was a significant factor for these students finishing their high school career.

Table 5
Family Influence on High School Completion

Participant	Supporting evidence
Brian	"They always said they would support anything I chose to do, and my dad knew I liked building and he thought I would do good in architectural design."
Brett	"My family pushing me to graduate. The fact that my brother didn't graduate by half a credit really pushed me to and then I wanted to show my little brother that it could be done."
Don	"The fact is I don't remember it. My mom pretty much acted as my counselor at that point. She was telling me that I needed to take tests to see what I was interested in. She would facilitate those tests for me."
Jim	"Well, my mother, she knows how to calm me down when I get frustrated. So when something comes along and I get frustrated, she sets me down and explains to me, look you have gotten this much invested into it if you would just go that extra mile to get it all finished then you can have it finished and have it done."

One disturbing outcome of the data was that in all of the findings for each research question family support and encouragement was mentioned by less than 50% of the participants. This goes back to the earlier statement that a partnership between school

and home is crucial to the success of all students, but especially those with disabilities. One avenue that needs to be explored following this study is to work with the parents of students with ADHD to see if they have the social or academic skills they need to help their child. Too many times school systems assume that the same message is being presented at home and then school systems are surprised to find out that this is not the case. A preemptive program outlining the critical factors from this study to parents from the school could go a long way to creating that bridge that both parents and educators could walk together.

School and staff encouragement relating to successful completion of their high school career. Table 6 shows direct quotations that were pulled from the coded data relating to perceived encouragement from school and staff members. In each instance, school and staff encouragement was a very significant factor for these students with regard to completing their high school career.

Table 6
School and Staff Member Influence on High School Completion

Participant	Supporting evidence
Albert	"It was Mr. W and the one on one help I received from him that allowed me to graduate."
Brian	"Mrs. H, she was my fifth grade teacher. I really liked her. She was very nice and helpful and so was my sixth grade teacher Mr. H."
Brett	"I believe it was a combination. I believe the teacher may have suggested it or something to that effect and we went and saw a doctor and the doctor diagnosed me."
Blake	"Once I got to middle school and Mrs. B helped me get unstressed by tutoring me, calling me at home and helping me with my grades in seventh and eighth grade. Her husband Mr. B also helped me through high school assisting me through that. Freshman year was really hard for me and making friends, but then I made a core group of friends through high school. I got help at the high school level through Mr. B by giving extra time on tests and quiet places to study."

Table 6—continued

Calvin	"Principals for the most part were the biggest help, they were always a little bit lenient with me and that helped."
Don	"Yeah, it was about a relationship that I had built up throughout the years. You have certain people, especially at the end of my career, I knew who I could trust and I knew who I couldn't trust and you found out who your friends are fast. At that point you know who they are and they are happy to help."
Jim	"I felt like the teachers cared and I felt like the teacher wanted me to get an education."
Karl	"They kept you on track when you got regular grade reports and what you were missing and they caught you up."
Matt	"Throughout high school, probably what made me successful was working for the school. It made me know everybody. All the teachers knew me, so that was one plus. Working with all my old teachers, like Mr. C and Mrs. R was another one. She would always say hey, if you need any help with high school, I can still help you."

School systems much like many other organizations comprise a range of skilled faculty members. Some faculty members can present, for example, calculus in a way that is understandable to their advanced placement students, whereas other faculty can motivate their students to become great artists. However, the encouragement that was discussed by the participants in this study was more about how much the faculty member cared rather than how much they knew. After reviewing the data in this study, it almost makes more sense for these students to be placed in classes that feed their emotional needs. They also talked about classes that were unpleasant, and in every situation it was due to a poor fit with the instructor. Possibly a personality test by both instructor and student could help properly place these students in classes where there is greater opportunity for academic and social success.

Peer encouragement relating to successful completion of their high school career.
For just one participant, peer encouragement was a significant factor with regard to finishing his high school career. As noted in the coded data, Don remarked, "Coaches and teammates, they were also a good people to talk to about things. Friend's parents would always help me out too."

The quotations below were pulled from the coded data relating to perceived encouragement from peer members. Peer encouragement was a significant factor for one student finishing his high school career.

Once again it was interesting to find that only one student in the study mentioned peer encouragement having any significance in their successful completion of high school. One reason for this could be that Don never struggled with his academics, thus he had more time to interact with his peers in extracurricular activities. Following this study, this area of interaction should be examined further to see if the results are significant or if the questions could have been asked differently.

Summative Results for Research Question 2

Research Question 2 focused specifically on encouragement as perceived by the participants in the study. Much like in Research Question 1, school and staff were the most referenced category in recognition of encouragement for these students. It is important to note that programs were also identified as arenas of support especially at the secondary level. These programs, when linked with highly qualified teachers and support staff, made a significant difference in students' successful completion of their high school career.

One disturbing result from the data was that when looking at emotional and academic family support, it was a complete hit or miss scenario. The participants in this study shared their perceptions that their families either took a very supportive nurturing role throughout the participant's education or they were not involved at all. Some participants reported that their parents had a negative experience of their own in relation to their K–12 experience and did not have the necessary social or academic skills to lend the support their children needed. In most communities there are trainings, such as "Love and Logic" (www.loveandlogic.com), that are free and could benefit the parents and students in working toward their goals. Once again this relates to the partnership that parents and school systems have to develop and maintain in order for these students to reach their full potential.

Because school and staff encouragement and support weighed so strongly throughout this study, it is imperative to utilize this data with professional development. With each participant who responded in this study, all mentioned one particular teacher or subject/program that they felt was a significant help in their successful completion of high school. A recommendation from this study would be to further survey students with disabilities and those without to see what programs are making significant contributions to their success or failure. The programs would then need to be dissected in an effort to critically analyze the curriculum, the instructor, as well as the intangibles within a classroom such as class size, gender equity, physical space and comfort, and materials available. Only when stakeholders have all of this data can researchers truly point to what specifically is causing ADHD students to be successful academically or in a career. It is encouraging to see that all of the participants in this study referenced instructors and

programs as the most positive encouragement they received. This type of influence could be a building block for school systems if they conduct surveys to find their high-achieving staff, as referenced in the study, and the programs that created success linking those instructors to these struggling students.

Peer-related support was again minimal in relation to perceived encouragement by the students in this study. On further examination of the data, a theory of poor communication and personal skills began to surface as a possible reason for the lack of influence by peers. Many times throughout this study the participants spoke of arguments, disagreements, or even physical confrontations with their peers. This lack of ability to problem solve and interact positively with their peers could explain why this category received little mention. Some suggestions for further study would be to implement peer assistance listening groups as well as specific training for these identified students with a social worker. These peer support groups could help give the necessary skills to these students with ADHD so that they have positive productive relationships with their peers.

Findings for Research Question 3

What Critical Incidents Made the Transition to Postsecondary Education Successful and Brought the Alumni to their Current Positions?

Table 7 shows what critical incidents made the transition to postsecondary education successful for alumni and/or brought the alumni to their current positions. In some situations more than one related incident was referenced and is indicated in the table.

Table 7

Influence in the Transition to Postsecondary Education/Current Position

Participant	Family related	School related	Peer related	Staff related
Albert		X		X
Brian	X	X		X
Brett	X		X	X
Blake		X	X	X
Calvin		X	X	X
Don	X	X	X	X
Jim	X	X		X
Karl		X	X	X
Matt		X	X	X

As the level of responsibility continues to increase on school systems placing students in programs for post-K–12, it was interesting to find that these results were generally spread through all categories. Even with educational development plans implemented at the eighth grade level and constant communication between counselor and student, there was still a strong aspect of relationship influence that guided most of the students into fields of interest. Once again it seemed that early intervention and outside influence—whether it is family, peer, or staff—shaped the path taken. In this section curriculum and offerings start to also play a role in developing an interest in postsecondary choices. Many of the students who participated in "a-for-credit-work-experience" program, or co-op, seemed to find an interest in something they felt they could make into a career. Many of the students are still working in the fields they explored during the work experience programs from high school.

Family-related critical incidents that made the transition to postsecondary education successful and/or brought the alumni to their current positions. Data relating

to the family-related critical incidents that made the transition to postsecondary education successful and/or brought the alumni to their current positions are shown in Table 8. Each of the examples indicates that family was a critical factor for affecting the transition to postsecondary education and/or choosing current positions.

Table 8

Family Influence and Postsecondary Education Decisions

Participant	Supporting evidence
Brian	"Family and friends. I worked for my dad for seven years and after that with buddies mowing lawns and my brother's buddy and doing concrete work and I ended up going up to Traverse City and working, roofing. Nobody got me into that. I did that for quite a while and it started breaking my back. I like doing this work, it is hands on and it is not as excruciating."
Brett	"I never received any discouragement. Anyone that I ever talked to was older so it was very important to graduate high school. I wanted to make it a point to at least graduate and get my diploma."
Don	"When you have parents that expect high things from you, you have high expectations for yourself."
Jim	"My father kind of helped me a little bit. He knew my new boss, even before I got in there. He was a frequent customer who went in there due to the fact that we worked on vehicles all the time. Without that connection I don't know if I would have gotten the job."

Much of the data in this section mirrors the findings from Research Question 2 relating to encouragement. It is important to note that no singular class or moment was the epiphany, but rather long sustained trusting relationships with the identified groups from the study. Also important to note is that four members of the study mentioned repeatedly that they had parents or siblings that had graduated from at least high school. In all other situations the students in the study were first generation high school graduates in the family.

School- and staff-related critical incidents that made the transition to

postsecondary education successful and/or brought the alumni to their current positions.

Table 9 shows data relating to the school- and staff-related critical incidents that made the

transition to postsecondary education successful and/or brought the alumni to their

current positions.

Table 9
School and Staff Influence on Current Position

Participant	Supporting evidence
Albert	"I wanted to go to the Army and I went to go take a test through the Army and I couldn't pass it." That is when I decided that I was going to work in a factory like my father and brother."
Brian	"I didn't have the pressure, because I worked co-op so I only had three hours and it made it easier because I didn't have full load. I really enjoyed working during the school day."
Brett	"For the most part I would say that the principals and counselors for the most part helped me with the problems I had in high school."
Blake	"In my junior year of high school I met Mrs. L who was my English teacher at my high school. She helped me get back all my grades and homework and then helped me stay on track and think positive my junior and senior year getting me ready for college."
Calvin	"I didn't know what to do in high school, college wise. I didn't know what I was going to do. It just kind of popped up and I went and got my CDL and I'm still doing it to this day."
Don	"Yeah, I had a lot of good teachers. Mrs. H was my TASK teacher. She had high expectations for you. She wasn't going to let you stall around. She was very demanding. That was probably my most rigorous work load in sixth grade."
Jim	"Well, in school I did go to the after school program that was created when I was in school. I'm not sure if it is going on now. That helped me a lot more because it seemed like the teachers wanted to help. They wanted you to have an education so you could go out in the world and survive and it helped me a lot more because those teachers who helped me would explain everything and push me in the right direction."
Karl	"I got in the WIA program because of special needs. That is when I started working for the school system. I did a work crew with the first year and the second year is when I started here through that program. I decided at that point that this is what I wanted to do with my life."

Table 9—continued

Matt	"When I got to high school I was probably doing the best I had ever done. I got more help a lot of it one on one more direct with the teacher, more or less, than just getting the test and failing it. I was old enough to realize that I needed to get extra help, so that is what I would do. This helped me with my decisions following high school."

In the most significant finding of this entire study, 100% of the participants listed school and staff as critical factors influencing their postsecondary decisions. In every single situation, a program, class, or instructor was the guiding factor to the success of the student. This study provides assistance for school systems in relation to exit or postsecondary interviews. Many school systems conduct postsecondary surveys, but the question becomes how deeply is that information examined or it is placed on a shelf and forgotten? This information should be a critical part of the school improvement process for any school system not only to address the needs of students with disabilities but also for every student entrusted to their care.

Peer-related critical incidents that made the transition to postsecondary education successful and/or brought the alumni to their current positions. Table 10 offers data relating to the peer-related critical incidents that made the transition to postsecondary education successful and/or brought the alumni to their current positions.

Table 10
Peer Influence on Current Position

Participant	Supporting evidence
Blake	"It was having people to call in the middle of the night when I was feeling down, that is what really kept me motivated."
Brett	"I knew a lot of people who were older than me or my age who had dropped out and been through the GED and I saw what they were doing with their lives and I didn't want to do that."

Table 10—continued

Don	"I found out that I had it in third or fourth grade. I would say from that point on people had a better understanding but were not necessarily more forgiving."
Karl	"Middle school was the one that I enjoyed the most. High school was really good too. I had a lot of really good supportive friends."
Calvin	"Friends were very important to me throughout high school; I went many times just to hang out with them."
Matt	"My buddy owns his business and I am pretty much partners with him. That is with automotive. That is another thing I am really strong in. It has always been computers and cars. Cars are what every teenage boy likes. I just haven't grown out of it yet. I probably never will."

In an interesting turn of events, peer relationships became significant when relating to the choice of moving onto postsecondary institutions or choosing a career. In analyzing the data, it appears that the participants had very specific examples when citing peer support. With other questions, the men's responses were more general in nature. These specific responses upon further review with follow-up questions dealt with the term "critical" in the question. Participants in the study felt that they could present at least one instance where a peer had influence over their decisions. Another follow-up study to this research could explore further these specific examples as opposed to the broad responses from the other research questions.

Summative Results for Research Question 3

One of the most important findings the researcher wanted to draw from this Research Question 3 was what critical incidents made the students who participated choose to go onto college or directly into a career. As referenced earlier, the qualifications for all jobs presently continue to increase and a high school diploma only

qualifies an individual for a small percentage of jobs. It should be the goal of all educational institutions to give students all of the tools necessary to obtain advanced degrees as well as choose a career in which they have an interest.

As with the other research questions, school and staff influence was again the most prominent in Research Question 3. Similar support systems to the ones mentioned in Research Question 1 and Research Question 2 were again mentioned in Research Question 3. However, the specificity of programming mentioned in the school and staff section merits further exploration through future research. These classrooms/programs seemed to be a lifeline for the men involved in this study. Several participants spoke about the programs that took them out of the traditional class setting and put them in a hands-on working environment. This action seemed to lend itself nicely to their desire to physically move and learn at the same time. More exploration should be done in relation to success rates directly tied to attendance in these programs and possible "grades" received for their efforts. This expanded research could go a long way in providing a success track for this particular type of student.

The other significant change in relation to findings from Research Question 3 is that peer-related support increased dramatically from the previous questions. Upon further exploration of this change, it was found that many of the participants talked about support specifically related to their current profession or a desire to expand their education. A few participants referenced gaining employment from peers or not wanting to let them down as a critical factor for their decisions. One theory could be that as the students reflected on their graduation, feelings of nostalgia could have played a role in their giving significance to the peer-related group when it had not been referenced in

earlier categories. This theory could be worth additional research following the completion of this study.

Findings for Research Question 4

In What Ways Did the Students' Secondary Institutions Influence Their Career Decision-Making Process?

Table 11 indicates the ways in which their secondary institutions influenced participants' career decision-making process. In some situations more than one support was referenced and is indicated below.

Table 11
Secondary Institution Influence on Decision-Making Process

Participant	College and career center	School related	Curriculum related	Staff related
Albert		X	X	X
Brian		X	X	X
Brett	X	X		X
Blake		X	X	X
Calvin	X	X		X
Don		X	X	X
Jim		X		X
Karl	X	X	X	X
Matt		X	X	X

One of the most important roles of any academic institution is to graduate students who have the skills academically and socially to thrive in the world. One key element of this study was to test the effectiveness of several programs, through survey findings, currently used in the school system these students attended, to truly evaluate whether such programs are helping students, especially for the group chosen for this

study. Listed below are data that critique and congratulate programs that the school system offered to the participants in this study. Many of the positive outcomes were realized by general population students that were on pace with credits and had flexibility in their schedules to take classes of interest. This will become a much greater challenge as the newly adopted Michigan Merit Curriculum is implemented. As noted with the participants in this study, it is clear that any one factor on its own helps but does not ensure success. Only when the students with ADHD had more than one positive factor, whether it was curricular or relational, was their rate of success measurable.

Ways in which a college and career center influenced the decision-making process. Table 12 shows data relating to the ways in which a college and career center influenced participants' decision-making process.

Table 12
College and Career Center Influence on Decision-Making Process

Participant	Supporting evidence
Brett	"Yes, I did that. That is who told me I should do things other than psychology according to my personality test. Apparently, I was supposed to be a good bailiff."
Calvin	"Quite a bit actually, looking at different trades and stuff, seeing what they are all about. I was probably there half a dozen times or so, more than that."
Karl	"They helped me out with getting into programs. They told me there was a free college where they will pay your tuition for special ed. I believe it is in the Grand Rapids area. They checked into it and got information for me for that. I didn't want to drive and didn't really want to move, so that didn't work for me. They checked into a couple of different colleges like Baker and got me into the programs there."

For three of the students in the study, the college and career center helped them navigate their way through the decision-making process of pursuing a postsecondary experience or moving directly into a career. One interesting point is there seems to be no

reason to why these particular students chose to walk through the doors of the college and career center. Once in the room they seemed to take advantage of the many offerings such as career cruising and college entrance assistance of this added program. One discouraging revelation is that more than $100,000 is spent annually in this program, yet it is not a part of every students' high school career. Further studies should be performed in relation to a mandatory meeting with the College and Career Center coordinator. Only then will enough data be available to determine whether a career center is having a significant impact on the student population.

Ways in which school and staff influenced the decision-making process. Table 13 shows data relating to the ways in which school and staff influenced participants' decision-making process.

Table 13
School and Staff Influence on Decision-Making Process

Participant	Supporting evidence
Brian	"Mr. M, he tried to have me go into some kind of political field, because when I was in high school he sent me down to Albion College for debate. No other teacher would have me do something like that, so he obviously had some belief in me."
Brett	"I did want to go on into psychology in high school and it took a few classes at LCC and like everything else, I couldn't stay focused."
Blake	"Mr. B, who worked for the district and then Mrs. L, who was the volunteer coordinator. I helped her mom and her family when her father died, that got me motivated and then she helped me just like she was another mom to me. Mrs. E. also helped me, because I was in her class when a lot of kids would pick on me and stuff and that was the first transition that got me prepared for college because she told me how much open minded they were there and then she introduced me to Mrs. L, which got me my support system."
Calvin	"Yeah, a couple of times. She got me the numbers for operating engineer's school."

Table 13—continued

Don	"Yes, I wouldn't be where I am today if I wouldn't have started in my sophomore summer telemarketing for a mortgage company. The school set up that work program and it was great."
Jim	"I believe I still had the same career goals. I believe that my school just kind of made them more apt for me to go after them, because of the fact that the teachers were able to have the one on one consultation."
Karl	"Like I said, Mrs. V really pushed a lot. She was good, she was really good."
Matt	"They had mock interviews. That was one thing that got you prepared. Even though I already had a job and I didn't really have to go through an interview to get it, once I got out of high school I did. If I hadn't done the mock interview then I would have been lost when I actually went to a job. A lot of people didn't take it seriously and I know I kind of laughed it off and it was embarrassing and what not, you have to get dressed up and stuff, but when you are actually in the real world and you are going to a job interview you got dressed up instead of going there in holey jeans and a t-shirt."

Once again all students mentioned the influence from school and staff in relating to their career. No other category throughout the study had the same significance of influence on students with ADHD studied as did school and staff. This factor should be considered when investigating school improvement and professional development. Too often educators get caught up in subject matter and could use more training in recognizing struggling students and developing intervention strategies to help all students succeed.

Ways in which curriculum influenced the decision-making process. Table 14 shows data relating to the ways in which the curriculum influenced participants' decision-making process.

Table 14
Curriculum Influence on Decision-Making Process

Participant	Supporting evidence
Brian	"When I was in mechanical drawing class, I figured that is what I wanted to do. I knew I wanted to do something along the construction field because I really enjoyed that."

Table 14—continued

Blake	"Mrs. B. helped me learn different ways to study and she also took the time to help me after class for about an hour until my mom would get out of work. Then mom would come and pick me up, so it would give me the extra hour to help me do stuff, plus she gave me work keys over that summer and eighth grade summer to help me do different things. The work keys I could do it on my own time and when I wanted to."
Don	"I took rigorous classes through high school. A lot of AP classes, a lot of honor classes and I did good. I never had a problem with that the curriculum that our high school had really prepared me for college."
Karl	"I had a study hall class that they offered for special education and you were able to get extra help in there and that helped me out a lot."
Matt	"In high school they let you know that student services are available, but a lot of people don't go. They need to get people more excited about that kind of stuff, because if I actually went there I might've looked into college a lot more. I waited until the last minute for college. I know I regret that. Let's say if I was looking at it for about two years I would have had a lot more ideas, I would have been way more prepared and I might actually be going to college and doing something that will benefit me in the long term."

Curriculum has always been an integral part of any successful school system. However, for the students involved in this study curriculum and programming was essential in their success. Many of the students talked extensively about the class that saved them from dropping out or the program that interested them so much that it made high school graduation a worthwhile goal. What this information solidifies is that only with a flexible curriculum can you meet the needs of all students. The forbidding part of this information is that in a time when curriculum is being mandated by legislatures, the very programs that are keeping these students engaged and on track will have to be eliminated to make way for test preparatory classes that have little relevance to most students, particularly the ones in this study.

Summative Results for Research Question 4

    Initial research of this topic showed a gap in analysis of influence secondary institutions and more specifically college and career centers had on career decision making for male students with ADHD. The final research question of this study specifically studies this gap and separates the data into four categories: (a) college and career center, (b) school related, (c) curriculum related, and (d) staff related. As mentioned earlier, for ease of data coding and cross-over referencing, school and staff are combined into a single category.

    As mentioned throughout the findings, school and staff were overwhelmingly chosen as the greatest influence over the career decision making of these students. All of the men involved in this study either mentioned a program or person affiliated with their secondary experience that helped solidify their decision making for a future career. Some influenced the career decision by role modeling, whereas others were a source of influence due to mentoring. The data is clear that school system and the programs and people within the school systems can and did make a significant difference in the lives of the students in the study.

    An initial theory of the researcher was that the college and career center would play a significant role in the career decision-making process for the students studied. What became abundantly apparent is that the College and Career Center in its present form had little or no effect on the majority of the students in this study. Only one student saw any significant results when working with the career center at his school. Further research is needed to identify whether high school students feel this way or whether the results of the study relate only to this particular group of young men. Another question

that needs to be investigated is how easy it was to access and use the College and Career Center by the students studied. Yet another question would be whether the significance could be increased with further exposure and a more intentional approach by the center's director.

What is clear from the curricular data is that support for these young men could be broken down into three Ps; programming, people, and professional development. In cases where the students from this study have enough curricular support in each of the three categories, they went onto success or at least perceived success, whereas those who did not get all three Ps regularly had a lower perceived sense of success. The key for future faculty who teach and counsel for this type of student is to identify, intervene, and make sure that all three Ps are addressed on a planned and regular basis.

Summary

Evidence shows that the critical factors that led to a sense of success for the participants in this study were school and staff influence, programs of interest, and involved and supportive parents. In all cases when these factors were present with two or more other critical factors, the students' success rate as shown in current career status, educational accomplishment, financial independence, and perception of self all rose dramatically. This conclusion would allow for systems to be multidimensional in their approach and to be set up in a way that would facilitate and strengthen the processes of these critical factors for success in male students with ADHD.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Introduction

The original intent of this study was to reveal helpful information that will guide

high school practitioners, especially in college and career centers, in serving students

with Attention Deficit Hyperactivity Disorder (ADHD) as well as determine the critical

factors that aides these students' choice of a career or higher education. This

phenomenological study included the participants' demographic information; their early,

adolescent, and high school experiences; critical high school and parental factors they

identified as important in achieving their career success; and the important mentors in

their lives. What the study evolved to was a road map to success for students who often

find a great deal of difficulty with managing their K–12 experience. As the interviews

were completed and the data was coded, there were significant indicators of success that

were varied among all participants.

Discussion

In previous studies much of the research on ADHD (Cantwell, 1981) was based

on medication and early detection. The line between cure and disease has become

unclear because there is no objective test for ADHD. In fact, despite countless attempts,

no one has ever demonstrated that the disorder exists. Prescriptions have sky rocketed as

a means of settling down these and other behaviorally difficult students. Many doctors,

parents, and educators are increasingly alarmed about this trend. For starters, the

medications for ADHD are chemical cousins of methamphetamine (Cantwell, 1981). Its

pharmacological effects and addiction patterns are similar to the effects of one who is using cocaine. And no study has ever demonstrated that taking medication can cause any lasting behavioral or educational benefits in patients with ADHD. What has gone largely unexamined, however, is the effect that the early ADHD diagnosis and K–12 partnerships with a child's family including mentoring and programming has on children's lives as students. All students in this study were tested and qualified as a student with ADHD at a fairly early age. What this study focused more on was the relationships and programming offered by the Owosso school system that seemed to resonate their feelings of success during and following their high school experience. It also sought out the critical factors in a student's career that readied them for either the work force or higher education.

First Most Critical Factor

The most prevalent critical factor that was repeatedly referenced by all participants was that of academic and social relationships with staff members. In every single interview, participants of the study told stories about a particular staff member (teacher, administrator, counselor, etc.) who initiated a relationship that encouraged them to graduate. Most of the time the students were much more concerned with how much the teacher cared as opposed to how much they knew. Almost every student still maintains some kind of contact with that particular staff member today. In a few of the situations, students began the class on a positive note because of the love for the subject matter. However, in all cases they spoke more about the care a staff member took in helping shape their lives more than the content knowledge they gained during the coursework.

As a result of the findings of this study a new program could be developed at Owosso school system where all students could be assigned a mentor during elementary, middle, and high school. At each level students could have a 1:10 ratio with a particular staff member in order to enhance this mentor/protégé relationship. This program could be piloted over the next several years and follow-up interviews could take place to acquire longitudinal data that can compare perceived success rates for students with ADHD. The hope is that with an intentional approach to significant connections and an increase in communications, problems expressed by the participants of this study can be minimized for other students.

Second Most Critical Factor

A second critical factor that was derived from the data in this study was the significance of curriculum and course offerings. Due to present legislation changes and curriculum mandates, a more specific and intentional approach has become the norm in academic programming. To combat the problem of increased state requirements, school systems could implement different and more flexible master schedules, such as a 7- hour day (seven instructional periods in one day) or trimesters (five classes for three semesters instead of seven classes for two semesters), to help alleviate some of the stress of getting through the curriculum. The relevance of these structural changes allows students more flexibility in scheduling. This flexibility can be used in conjunction with remediation for more challenging coursework or work–study options. Five of the participants in this study indicated that the school-to-work program (co-op) was the motivating factor that kept them on pace for graduation. Many of the participants still work in the same field, some even in the same job, as they worked during high school.

With the prospect of decreased funding and declining enrollment in Michigan, many school systems are opting to eliminate these school-to-work programs because they are expensive and somewhat labor intensive. Based on the findings of this study, school systems should not eliminate this program; instead they could increase participation with school-to-work and dual enrollment to ensure greater levels of success with its at-risk students. The Owosso school system can analyze this data and decide and justify the decision on the basis of long-term financial implications of students who would normally drop out or spend many years trying to catch up.

Credit recovery programs, such as remedial summer school programs, have also made significant improvements in the success of the participants studied. Most of the credit recovery programs have a smaller teacher-to pupil ratio, which was noted quite often during the interviews. As previously mentioned, these programs usually have a significant cost associated with them. However, when comparing that to the cost of either the student dropping out or the ramifications of not making adequate yearly progress due to a high failure rate the, choice becomes simple when budgeting.

Third Most Critical Factor

Family encouragement also emerged as a prevalent theme when looking at critical incidents that influenced the student's decision making with regard to the choice of a career. It was surprising to the researcher that this did not rank higher relative to some of the other categories. However, the reaction was probably based on biases held by the researcher because of personal background growing up in a family of educators.

Many of the students did refer to their family as a great source of inspiration for attaining their high school diploma, as well as continuing toward higher education or a

skilled trade following graduation. Some members of the study cited family as a motivating factor because the participants felt they were being a role model for a younger sibling. Four participants knew high school graduation was a mere stepping stone to more education and relied heavily on the family for guidance into a career or higher learning institution.

One of the biggest surprises of the study was three of the students were the first in their families to graduate from high school. These students had struggled academically more than the others in the study, and they found it more difficult to navigate their high school experience because of the lack of family encouragement and lack of parents' experience with the education system in general. In all of the situations involving these students, negative reinforcement from their families was received due to the parents' own difficult experiences in school. One of the men spoke candidly during his interview about his regret that he did not receive the family encouragement he felt other students received and that he deserved. One student told the heart-wrenching story of his family choosing to stay home and watch their favorite television show as opposed to coming to high school graduation. Although this student downplays the situation, there was pain in his words when describing his disappointment.

Although family did not rank at the top of the list in terms of frequency, it did seem to play a critical role when determining not only the student's future career choices following high school but also their success while attending high school. It appeared that if the family encouragement factor was linked with any of the other critical factors identified, then the students perceived they would succeed. For the students who did not

have family encouragement and support, they relied heavily on many of the other critical factors, especially a connection with a staff member.

Initial Intent of the Study

One of the original approaches to answering the four research questions for this study was to justify the dollars being spent on the College and Career Centers within the Owosso school system. This would have been accomplished by proving the effectiveness that the centers had in relation to helping the students in this study. Owosso school system's College and Career Center cost the district nearly $100,000 a year to operate. However, the College and Career center can acquire millions of dollars in scholarships for the students. The original intent of college and career centers was not to produce scholarship money, a task previously held by guidance counselors, but to help all students find their niche in a career, vocational school, or higher education arena.

The results of this study indicate that the College and Career Center has been successful only for students who have taken the initiative to walk through the door. What seems typical about the students in this study and many more just like them is that most of the time they are not going to take the initiative to seek help. The participants in the study mentioned receiving help from the College and Career Center at Owosso school system and were taken there by a staff member. Once in the center, there was some success with acceptance into higher education, but most of the students found only frustration with the process.

Peer pressure is prevalent in every school system in the world. What was fascinating about this study was the lack of importance the participants placed on the critical factor of peer pressure. The researcher anticipated peer relations to be highly

discussed and pointed to as a critical factor for perceived success or failure. The results from the study indicate that this was not the case. Although peer relations were mentioned throughout the interviews, most of the time peer relations were seen as a positive support as opposed to negativity related to their disability. Any negative interactions were normally handled by the school. Once again, this helps to explain the high ranking of school and staff as a critical factor for success.

Conclusion

The results of this study confirm much of the previous research conducted in relation to the struggles of high school males with ADHD. It should be restated at this point, however, that although the interviews revealed some interesting nuances about male students with ADHD and their critical factors for success, the study used a relatively small sample size of participants in one particular school system in Michigan. Therefore, the researcher cannot necessarily extrapolate these findings to all male students with ADHD and to all school systems in Michigan or beyond. Regardless, this study does reveal some fascinating results, such as the importance of programming, encouragement, and College and Career Centers that can be explored further.

Theory

In theory the fundamental deficit in individuals with ADHD is one of self-control (Barkley, 1989). Problems associated with attention are a secondary characteristic of the disorder. During the course of development, control over a child's behavior gradually shifts from external sources to being increasingly governed by internal rules and standards (Barkley, 1997). Many times parents or schools blame themselves for their inability to help children with ADHD become more in control. However, the true core

deficit of ADHD is self-regulation, which is biological not behavioral. Because of this deficit with self-regulation, children with ADHD fail to develop in an optimal way. Some of the developments that are hampered include working memory, internalization of speech, sense of time, and goal-directed behavior. It would not be out of the ordinary to see these behaviors exhibited in many children whether they have ADHD or not. However, children with ADHD experience many of these characteristic at the same time and to a greater degree compared to their peers. Also children with ADHD have not figured out the self-regulating skills necessary to combat these issues. The impact of this study related to theory would be that critical factors can be identified and early interventions may result in higher achievement and success for these students. The key, as with many ailments, is early detection and treatment of the problem. Treatment does not necessarily mean medication, although in some instances it is appropriate depending on the severity of the situation. Treatment could mean a well-trained staff and collaboration between student, staff, and parents. When these pieces are intentional and in place, students' success rates increase dramatically over time.

Practice

In practice most young adults, especially those who participated in this study, have the ability or skills to be successful academically. Their problem with self-regulation is that it often prevents them from applying their knowledge and skills at necessary times. ADHD is more of a problem of doing what one knows rather than knowing what to do (Barkley, 1997). In this study, all participants talked extensively about knowing exactly what they needed to do to be successful. All showed remorse for bad decisions and placed the blame of failures solely on their own shoulders. Study

participants all knew exactly what it would take to graduate with good grades and progress in their education, but they did not act on this knowledge because of problems with time management and using a long-term goal to guide their behavior.

What has become abundantly clear from this study is that many of the interventions that need to take place to help this population of students' lies in the hands of the instructors and professional development. The treatment by staff members should focus on helping individuals apply the knowledge they already have at the appropriate times, rather than on teaching specific knowledge and skills. This would explain why throughout the interviews all the participants spoke so passionately about the relationships and one-on-one help they received as opposed to a specific subject matter they found interesting. For staff and parents, this will mean paying special attention to using frequent external cues and reminders to apply their accumulated knowledge, because their internal guides for behavior are less effective. In all situations, the idea is to compensate for the child's inability to control his or her behavior due to their self-regulation deficiency by providing as many external prompts and reminders as possible. By playing to the child's strengths by limiting their weaknesses, they will build self-confidence in their abilities as a student and spend less time working against their own success (Barkley, 1989).

Even with the full implementation of external prompts and reminders, their effectiveness continues to be reliant on the motivation of the child. Because children with ADHD are so attuned to immediate consequences it offers a real opportunity to use attractive short-term rewards. Rewards and privileges that are attached to short measurable goals can meet expectations that are more attractive and appealing than those

associated with alternative behaviors the child could engage in. For example, telling a child with ADHD that good behavior for the week will earn them free-time on the weekend will be lost in translation and have little to no effectiveness. Specific rewards need to be coupled with targeted behaviors that can be acted on at any time. These timely interactions will begin to teach positive self-regulation skills that will aide in successful outcomes (Barkley, 1989). This is not to say that the practice should be to reward the student for doing what they are supposed to be doing but rather to increase the child's accountability by using more frequent external cues and feedback to promote productive behavior.

Finally, these practices need to be ongoing and long term. There is no short-term fix for children suffering from ADHD. Many physicians have cited medications as the breakthrough for addressing counter-productive behavior (Barkley, 1989). In this study many of the participants were not medicated and, if they were, did not like the side effects associated with the medication. There have been empirical studies (Barkley, 1989) proposing a combination of mediation and behavioral modification as the most successful treatment method, but the jury is still out. Recent research suggests that computerized training of working memory skills and studies on neurofeedback, a treatment approach that attempts to teach individuals to alter and control basic aspects of brain functioning, as having longer lasting results (Barkley, 1989). However, there has not been enough longitudinal data to rewrite the textbooks quite yet. With specified training and early detection, these students will have better success as will their peers around them.

Policy

Policymaking in relation to ADHD is left primarily in the hands of local districts,

thus creating a menagerie of methods with identification and institutional support. Most

of the policies and procedures, such as testing for special education, address only a

portion of the problem. ADHD is not confined to only the academic portion of the

child's difficulties. The socioemotional challenges can often be a more significant

detractor to the education of the student with ADHD and those around the student.

Traditional remedial education strategies are found to be condescending by these students

and parents who are expressing increasing concern about the neglect of important social

barriers to their child's successful participation in adult life (Barkley, 1989). Many times

the fate of these children who suffer from this disability is left in the hands of teachers

and administrators who have little training in identification or institutional support. More

training and advocacy needs to be implemented to ensure that school systems are meeting

the letter of the law in supporting students with ADHD. Often it is only through a

referral for disciplinary reasons that testing is finally completed and a diagnosis reached,

many times too little too late to keep a student from dropping out of school.

In this study all participants were formally diagnosed with ADHD and did receive

some interventions. For some it was too late and the damage had already been done—

students had been limited in their choices because they had fallen so far behind prior to

intervention that they now were left with very few life choices. For others the

interventions worked as long as the participant had developed a trusting relationship with

the instructor. In all cases interventions could have been more formalized and

accountable. As in many institutions, school systems studied did not have the expertise

in place to develop effective behavioral improvement plans linked with manageable 504 plans. The 504 plan, or nonspecial education intervention plan, would have given the academic accommodations needed while legally holding the teacher accountable to follow it. Although the behavioral improvement plan could have set specific external cues and rewards that were mentioned earlier as effective tools self-regulating behaviors. Either way it would have been more effective than the nonaction that is the norm all across the nation.

Recommendations and Implications for Further Research

Based on the results of this study, school systems can create new board policy that is directly tied to behavioral improvement plans and mandatory testing for students showing signs of ADHD. These students will be referred to the principal when grades or discipline referral merit interventions. Schools will also be required to have staffs that include parents, teachers, administrators, school psychologist, and the student. There will also be a districtwide committee developed to deal directly with interventions relating to students with ADHD. It should be the goal of school systems to show leadership in the state of Michigan and beyond in helping ensure success for students with ADHD. One policy that could be developed is a mandatory support hour linked to the subject most challenging to the student. This would be accomplished through a 7-hour day, or perhaps a zero/eighth hour as a way for students to have additional class periods to help them complete their work at a slower pace. Another recommended policy would be a mandatory 2-week grade screening by all instructional staff; each teacher would intentionally go through all grades every 2 weeks to catch students who are struggling before it is too late to intervene. If staff had the knowledge to pick out struggling

students, then the reporting mechanism would allow for earlier interventions in students' academic career thereby aligning support from the parents and helping the students to stay on track and succeed.

It is impossible to create a study that answers all possible questions relating to ADHD. One area that deserves additional research is the correlation between the time when the students were identified as having ADHD and their success academically. Repeating this study with a larger sample size is recommended, as is expanding this study beyond one particular school system in Michigan. Another area that deserves attention would be the perceived success of students in the Owosso school system from which the sample was drawn, under the new teacher–mentor model. This comparison could help to test whether the data concerning the relationship between staff and student was statistically significant. Yet another area of future research could be the impact of the newly released Michigan Merit Curriculum and the academic effect it may have on these at-risk students. Finally, delving into the subject of students with ADHD who are the first in their family to graduate from high school should be explored. This is a fascinating group that needs further exploration into their skills needed to graduate from high school. Exploring this group would be beneficial so that new techniques or procedures can be implemented in order to benefit the influx of students being diagnosed with this disability and the schools' goal of producing a skilled adult labor force.

A Scholar–Practitioner's Reflections

I have been employed as a school administrator for nearly 10 years, the past 3 years as a superintendent. From this study, I have learned three things about the change process that I can use in my practice as the superintendent of a Class A school district

(4,000 students in grades K–12). The first is that change creates adversity, yet when individuals think they are being treated fairly during the change process, they are more likely to accept the changes presented to them. The second is that, when a change initiative is undertaken, conflict and disagreement are not only inevitable but also fundamental to successful change. The third is that if you can always base your decisions in leadership on "kids first" you can never go wrong.

Further, as a new researcher in the field of education, I have learned that it is important to develop writing skills, interviewing skills, and a critical thought process, as well as being able to conduct accurate evaluations of programs. In the end, my doctoral journey and especially the dissertation process have helped me become a better and more thorough observer, listener, and program evaluator. The writing process in particular has enabled me to gather information from a variety of sources, then synthesize and report it accurately and descriptively. This skill is invaluable for a school superintendent, who must communicate effectively on a regular basis with staff, students, and community members.

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Appendix A

Introductory Letter, Consent Form, and Approval Letter From the University Committee on Research Involving Human Subjects

Introductory Letter, Consent Form, and Approval Letter From the University Committee on Research Involving Human Subjects

Initial Invitation to Participate

Western Michigan University
Department of: _____
Principal Investigator: _____
Student Investigator: _____

You have been invited to participate in a research project entitled **"Career Decision Making for Male Students With Attention Deficit Hyperactivity Disorder: A Model for Critical Factors Aiding in Transitional Efforts."** This research is intended to study how high school college and career services and student academic services at the secondary level coordinate their transitional efforts. This project is the dissertation project of Gregory B. Gray, a Doctoral candidate in the Department of Educational Leadership.

This study is qualitative in nature. You will be asked to attend one private session, 90 to 120 minutes in length, with Gregory Gray. The interview will be conducted either in person or via telephone. The first part of the session will involve providing general information about you, such as age, level of education, and employment status. The second part of the session will involve an interview during which you will be asked questions regarding how you negotiated your secondary program with your disability and how you made your career decisions.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or treatment will be made available to you except as otherwise specified in this consent form. One potential risk of participation in this project is that you may be upset by the content of the interview; however, Gregory Gray is prepared to provide crisis counseling should you become significantly upset, and he is prepared to make a referral if you need further counseling about this topic. You will be responsible for the cost of therapy if you choose to pursue it.

You may benefit from this activity by having the chance to talk about your disability, which research indicates is beneficial for individuals. Others who experience "hidden disabilities" might also benefit from the knowledge that is gained from this research.

All of the information collected from you is confidential. That means that your name will not appear on any papers on which this information is recorded. The forms will all be coded, and Gregory Gray will keep a separate master list with the names of participants and the corresponding code numbers. Once the data are collected and analyzed, the master list will be destroyed. All other forms will be retained for at least 3 years in a locked file in the principal investigator's office.

You may refuse to participate or quit at any time during the study without prejudice or penalty. If you have any questions or concerns about this study, you may contact *Gregory Gray* at 989-729-5667. You may also contact the chair of The Human Subjects Institutional Review Board at 269-387-8293 or the vice president for research at 269-387-8298 if questions or problems arise during the course of the study.

This consent document has been approved for use for 1 year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the Board chair in the upper right corner. Do not participate in this study if the stamped date is more than 1 year old. Your signature below indicates that you have read and/or had explained to you the purpose and requirements of the study and that you agree to participate.

Signature   Date

Consent obtained by: _____   _____

                         Initials of researcher   Date

Appendix B

Human Subjects Institutional Review Board Approval Letter

WESTERN MICHIGAN UNIVERSITY

Date: May 15, 2007

To: Jianping Shen, Principal Investigator
Greg Gray, Student Investigator for dissertation

From: Amy Naugle, Ph.D. (Chair)

Re: HSIRB Project Number: 07-05-02

This letter will serve as confirmation that your research project entitled "Career Decision Making for Male Students with Attention Deficit Hyperactivity Disorder: A Model for Critical Factors Aiding in Transitional Efforts" has been **approved** under the **expedited** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: May 15, 2008

Appendix C

Interview Protocol

Interview Protocol

Creswell (1997) stated in *Qualitative Inquiry and Research Design: Choosing Among Five Traditions* (p. 124) that five questions would be appropriate for an in-depth interview. Although five questions can be appropriate, the researcher chose to use more than five based on the depth of the interviews. Listed below are the questions of this proposed research.

I. Initial Question

    A. As you know, I am interviewing you today because I am very interested in how recent graduates with learning disabilities successfully transition into postsecondary institutions or professional careers. You have recently graduated from Owosso High School, which is an accomplishment. (1). Tell me a little about your life growing up in _____. (2). Are there any memories of your early years in school that stand out in your mind? (3). When did you realize that you had Attention Deficit Disorder?

II. Secondary Choices

    A. I'm curious to learn how you managed secondary education with your disability? What learning strategies did you employ in your studies?

    B. At what point in your high school career did you decide your future aspirations?

    C. Were you undecided about college or a career? Did you change your mind about your future goals at all while in high school?

    D. What programs/services in the College and Career Center assisted you in deciding what to do after graduation?

III. Support Systems

    A. What support systems were key to your success? How did you handle unforeseen problems throughout your academic career?

    B. At what point were your friends, family, and educators aware of your learning/behavioral disability? How did you discuss it with them?

    C. Did you openly discuss your career plans?

    D. How did they encourage/discourage you?

IV. Alumni Associations

    A. Where do you work/attend school now?

    B. Describe your role and responsibilities.

    C. Describe your job search process.

V. College Support (if applicable)

    A. Many postsecondary institutions offer various student academic services for students with learning disabilities. These may include tutoring, extended test time, or alternative schedules. What types of services were available to you? Did you use or consider using them? Why or why not? If these benefits were not available to you, do you wish they had been?

    B. In your job search, did you use a network of contacts garnered through high school or college activities? Family? Friends? Alumni?

    C. Did you utilize any services or programs sponsored by high school college and career services? Other?

    D. Did you participate in a for-credit internship or field experience? If so, was it helpful in your career decision-making process?

E. What made you select your current role?

Appendix D

Coding System

Coding System

Family Related

Academic success of parents and other family members
Family opinion/attitude related to academics
Collaboration with school and student
Family's decision to have student tested
Open-mindedness

School/Staff Related

Academic programming
Extracurricular programming
School climate
Class size
Early identification for disability
Staff training and professional development
Administrator interaction
Work study programming
One to one instructional opportunities
Tutoring programs
Flexibility
Collaboration
Differentiated instruction
Reasonable discipline policy
Positive counselor interactions
College and career center
Balance

Peer Related

Supportive group of friends
Equity
Tolerance
Peer Assistance Listening group
Support network

College and Career Center Related

Knowledgeable coordinator
Time provided to explore

Referral to the center
Clear instructions
Appropriate career pathways
Up-to-date materials