Access patterns of ADHD students utilizing campus disability services supports

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ACCESS PATTERNS OF ADHD STUDENTS

UTILIZING CAMPUS DISABILITY SERVICES SUPPORTS

by

Meribeth L. Jackson

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

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Major: Educational Administration

Under the Supervision of Jeanne L. Surface, Ed.D.

Omaha, Nebraska

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Abstract

ACCESS PATTERNS OF ADHD STUDENTS
UTILIZING CAMPUS DISABILITY SERVICES SUPPORTS

Meribeth L. Jackson, M.S., Ed.D.
University of Nebraska, 2013
Advisor: Dr. Jeanne Surface

Source of initial access to disability services, accommodations received as supports on campus, and the rate of continuous enrollment data was measured and compared for students diagnosed with ADHD prior to age eighteen and those diagnosed with ADHD after age eighteen. These two groups were compared to analyze the assumption that students who were already immersed in a special services environment would be more capable of accessing services in the postsecondary setting more readily than those who had been newly diagnosed just prior to or after entering postsecondary education.

Students with a diagnosis prior to age eighteen (n = 34) and those with a diagnosis after age eighteen (n = 29) comprised a naturally formed group of university students attending the university from August of 2011 through May of 2012. As reflected in the subject results, the source of referral to the disability service providers by those diagnosed prior to age eighteen was not significantly different from those students diagnosed after age eighteen. As reflected in the accommodations requested and approved, those diagnosed prior to age eighteen did not show significant differences in requests from those diagnosed after age eighteen. As reflected in the rate of continuous enrollment from freshman through senior year, the students diagnosed prior to age eighteen were not significantly different from those students who were diagnosed after age eighteen. The
study’s results should encourage further research in both secondary and postsecondary institutions. Secondary settings can use the results of this study to examine their current level of transition services for students with disabilities to ascertain if the services they provide lead toward successful transition to postsecondary education. Postsecondary institutions can use the results of this study to examine how to increase accessibility to those students on campus with disabilities, enhance services and accommodations that allow students with disabilities to be successful, and develop linkages with secondary schools to make them aware of appropriate supports at the postsecondary level and how the faculty can use appropriate goals at the secondary level to prepare their students with disabilities for postsecondary education, if that is their intended transitional path.
Acknowledgements

As I complete this project that closes my educational career as a student at UNO, I can choose to look at this as a culmination of a journey or the beginning of a new one. The process of writing this coincided with many major transitions that occurred simultaneously in my life. The monumental struggle of completely changing my life, while at the same time writing a dissertation, is something I would not ever dream to duplicate again. I embrace the idea that the completion of this marks a new beginning for me. There are many people I wish to thank for their support along the way. Without their support, navigating this whole process would have been unimaginable.

I want to thank the University of Nebraska at Omaha for giving me the opportunity to serve as the Director of Disability Services for over a year and a half. My experience as a special education teacher gave me a strong base for learning this new position. The faculty and staff at UNO have been highly supportive in encouraging me to build a unique program at the university for students with disabilities. The opportunity to create an innovative service delivery program here has been a true growth experience which I hope to continue.

I appreciate my parents for providing a wealth of experiences throughout my life that have taught me to acknowledge those things that are important for me to continue my personal growth and let go of those questions that cannot be answered. Education was always important in my family and my parents were always there to praise my accomplishments. In pursuing this degree I have learned that the accomplishment sometimes is the process to get to the end goal, not necessarily the end goal itself.
I would like to show my appreciation to my committee members, Drs. Surface, Keiser, and Smith. Not only did they guide me in the writing process, but they were also willing to help guide, encourage, and give their perspectives on taking a new position at the university. They were always there to help me walk through the process with writing and research, showing me how things made sense to them, even when it didn’t make sense to me. I would like to especially thank my advisor, Dr. Jeanne Surface, for spending hours talking to me about life events and the writing process. She understood the emotional interplay with this process and how difficult this was for me at times. I was always encouraged to move forward even when I felt it was going nowhere.

My friends provided a great support to me throughout this process. I appreciate how our debates about student and faculty topics at the university directed my thinking regarding the study. Even though they didn’t fully understand the process or even what I was writing about, they were always supportive of me and the fact that I could make it to the end of this project. They listened as I struggled through parts of this, and pushed me to get it out when I hid from it.

And for Doug, my friend and partner in this process, from beginning to end, I want to share my most sincere appreciation. Having someone to share this process with made it much easier to manage. He supported me in every way – reading my work, giving his critique, exploring new ideas with me, or just urging me to get it out when I was avoiding it. When in those rough spots he would always remind me to look at the big picture and truly understand that everything would be fine in the end.
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Conclusions

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Chapter 1

Introduction

“I shouldn’t need help doing this. I got through high school just fine. Well…I struggled, had tutors, my parents helped me, too. I know I qualify for accommodations, but I really don’t want them. I don’t want everyone else to think I’m getting special treatment or that I’m stupid.”

Carrie was no stranger to struggling in school. But disabled? That was not a label she would ever embrace. As she enrolled in college she knew it would be challenging, but thought she would be able to handle it on her own. She knew her diagnoses of ADHD, depression and anxiety disorder would always be present for her, but hadn’t anticipated the added challenges college would present.

When she stepped back to think about it, the changes in moving from high school to college were drastic. She was now working twenty hours per week to help pay for college, the course demands had definitely increased and the support she was accustomed to in high school was gone. Coping with one of those would be a challenge on its own, but all the changes were hard to accept and tackle on her own. Support is provided in college too, but it looks so different. Carrie had to disclose her disability herself and ask for the services she needed. Something that was not taught to her in high school and something she had definitely never done.

It took quite a dose of courage for Carrie to discuss her troubles to the Disability Services office of her university. Just talking about it helped her feel better. She still felt unsure. She would have to be the one to explain how her difficulties affected her in
school and ask for appropriate accommodations, not just now, but throughout her college career.

Carrie agreed to take the accommodations that were discussed. She felt she had no choice – she had failed two exams already and had an important paper coming up that she felt unprepared for. Accepting the accommodations could be the difference between success for the semester and failing all her courses. Although this was only school to some students, it represented much more to Carrie. To earn her degree would prove that she could deal with her disability, that it had not beaten her. She could get the support that was necessary and warranted under these conditions and feel that she had accomplished something on her own.

**Students with Disabilities and Postsecondary Education**

Students like Carrie, with various disabilities, are entering two-year and four-year postsecondary institutions at the highest rates ever (Newman et al., 2011). While disability services offices are mandated by the Americans with Disabilities Act (Americans with Disabilities Act [ADA], 1990) to provide accommodations to students with disabilities, universities must continually strive to meet the ever-changing demands placed upon them by a growing population of students with disabilities. According to the National Postsecondary Student Aid Study of 2008, 10.8% of the total population of postsecondary students currently at universities, numbering 17,317,000, are students with disabilities (U.S. Government Accountability Office [GAO], 2009). Many of these students are often not receiving the supports needed to help them become successful in post-secondary education because they may deny the existence of their disability or fail to access the special needs services available to them even once they are verified for
accommodations. According to the National Longitudinal Transition Study – 2 [NLTS2] (2011), 52% of the students that received secondary special education services believed they did not have a disability by the time they enrolled in postsecondary education, 7% knew they had a disability but did not disclose it and 40% of students with disabilities identified themselves to the disability services office and received supports.

As students with disabilities enter postsecondary education, barriers to receiving supports can be personal as well as institutional. Personal factors may include too much socializing, lack of motivation (Greenbaum & Graham, 1995), fear of disclosure, lacking knowledge of their disability, and fear of being stigmatized (Collins & Mowbray, 2005). Institutional factors can be negative interaction with faculty, staff, and students, a culture not accepting and welcoming of disability diversity (Greenbaum & Graham, 1995), and few or no easily accessible campus support services (Collins & Mowbray, 2005). Institutions may begin to examine their culture of acceptance of disabilities from the inside out and initiate necessary changes. By accepting and beginning to break through these barriers, students with disabilities have the equalized opportunity to attain a college degree.

Students with and without disabilities understand that a college degree is an important component for success in attaining employment after high school. According to forecasts by the Georgetown University Center on Education and the Workforce (2006), by 2018, at least some postsecondary education will be required for 63% of all jobs. With the poverty rate at 25% for persons with disabilities, compared to 12.5% for persons without disabilities (Brault, 2010), pursuing postsecondary education is a first and imperative step in closing that gap.
Challenges to Accessing Services

High school graduation for students with disabilities has risen to about 31% since 1975 (US Department of Education, 1998). More students with disabilities are attending college due to laws mandating access in high school and postsecondary education, increased funding of special education programs by state and federal government, an improved understanding of the academic needs of students with disabilities (Wolf & Shin, 1999), and families’ increased knowledge of rights and responsibilities of school districts required under IDEA (Yell, Rogers, & Rogers, 1998). As some students with disabilities enter postsecondary education they fail to understand, report or accommodate their disability. Parents, teachers, and administrators in secondary schools have often driven the documentation to determine services in that setting.

In the 2004 reauthorization of IDEA, secondary students are encouraged to participate in their IEP meetings (Madaus & Shaw, 2006). They are often unaware of what is included in the document, what their diagnosis is, and what accommodations they are receiving. Knowledge of accommodations is vital to reporting and receiving services at the postsecondary level. Without this knowledge, accessing services at the postsecondary level, with the need for self-disclosure, becomes very difficult (Webb, Patterson, Syverud & Seabrook-Blackmore, 2008).

Most students who have received special education services in high school are unaware of IDEA, the law which guides their service delivery. Students themselves do not pay much attention to their rights in the secondary setting. Families and other advocates are monitoring that for them. As the receiver and guide of their own services in postsecondary education, students need to understand their rights as a student with a
disability. As students transition from secondary school to postsecondary education, ADA guides the law and defines their rights in the new setting (Madaus & Shaw, 2006). While not integral to receiving services, general knowledge of the ADA is critical in fully understanding their rights. When postsecondary institutions mandate accommodations and they are not implemented, it can become a matter for legal resolution. A general understanding of ADA is important when assessing if their rights have been violated and address their concerns to the proper department at the postsecondary level. Just as the student with disabilities must be their own advocate in accessing services, their ability to self-advocate is also essential in evaluating whether their civil rights have been violated in receiving services.

Accessing services can be particularly difficult for those students with hidden disabilities. Hidden disabilities are not readily visible to the observer, as visible physical disabilities are. Those students with hidden disabilities lack the necessary academic and social skills that relate to success in the postsecondary level, both in classroom behaviors and functional living skills (Wolf & Shin, 1999). Often times those who have been diagnosed with one mental health disability will be diagnosed with a second or third diagnosis, which can complicate assessing their needs for success in the classroom. Students with ADHD can be 20 to 50% more likely to also receive an anxiety diagnosis (Biederman et al., 1993). When anxiety and ADHD coexist, it is difficult to know where one condition ends and the other begins. When addressing all facets of the comorbid conditions, students can receive services that give them the opportunity to complete a college degree successfully.
Retention, persistence and degree completion are major concerns for post-secondary institutions, the individual student and society. Half of all students with disabilities drop out before completion of their degree and 66% of the students with learning disabilities or hidden disabilities drop out (U. S. Department of Education, 1999). Many of these students will drop out before the end of their first year of college, having consequences to the student themselves and society at large. Because students are likely to drop out, the Federal government incentivizes the goal of higher education and gave over $1.5 billion in financial aid to students who would not return to college to continue their degrees after the first year (American Institutes for Research [AIR], 2010).

According to another AIR report, *The High Cost of Low Graduation Rates: How Much Does Dropping Out of College Really Cost?* (2011), students who entered college and did not graduate in six years cost the nation $3.8 billion in lost income, $566 million in lost federal income tax, and $164 million in state income taxes. To curb this tide in drop outs, students with disabilities must face the typical challenges of a college student along with the challenges of their individual disabilities.

A multi-tiered challenge that students with disabilities deal with over their lifetimes is the reality of stigma in our society. That stigma also follows students with disabilities to our college campuses. The stigma of disability can be significant for those students with hidden disabilities (Feldman & Crandall, 2007). The effects of stigma can extend to education, the workplace, and daily living within the community. Stigma can come in the form of public stigma which is the “prejudice and discrimination that emerges when the general population endorses specific stereotypes” (Corrigan et al., 2010). It also comes in the form of self-stigma when the affected individual believes and
internalizes the stereotypes of disability to themselves and suffers the effects of diminished self-esteem and self-actualization (Corrigan et al., 2010; Watson & Larson, 2006).

College students deal with the stigma on a variety of levels. They deal with the public stigma from faculty and staff they come in contact with on campus. Many times, the negative reaction from the campus personnel is anticipated but never materializes. This comes from a culture where individuals with disabilities are assumed to possess certain qualities, whether proven or not (Trammel, 2009). The student with disabilities often responds to this assumed response before they have an opportunity to check its validity. This leads to diminished opportunities in education and work, which keep the disabled community in a state of diminished employment and poverty (Markowitz, 1998).

As students enter postsecondary education, they bring their concept of public and self-stigma with them. If their perception is that faculty and administration have a limited view of what students with disabilities can accomplish, they will be less likely to report their disability to campus service offices (Mobray & Megivern, 1999). When these students do not report their disability they do not receive the academic and social supports that are necessary for them to be successful on campus. Considering the larger construct of disability culture on our nation’s campuses, when these students do not self-identify and hide themselves, they deny the campus the opportunity of further exposure to students with disabilities, which can prove to be an opportunity to further expand the definition of diversity for faculty, staff, and students (Barnard, Stevens, Siwatu, & Lan, 2008). With more opportunities to interact with students with disabilities, campus
personnel experience the chance to understand what students with disabilities can accomplish and begin to erase the false conceptions that are ingrained in the campus culture. It is only through these interactions that the culture of stigma of disability will begin to dissipate and these students will be seen as capable individuals in the campus community and, in a larger context, society as a whole.

Problem Statement

As services for students with disabilities continue to expand in the secondary setting, many more students and their families begin to look at postsecondary education as a viable option for their future. Continuation of delivery of services consistent with their current level of secondary services is necessary for the student to become successful at the next level of education. Students come to college with varying levels of preparation to fully access the services they are entitled to receive. To begin to understand the perspective of the disabled student and how they access services, research needs to be conducted as to their current knowledge of services available to them and how to proceed in accessing the accommodations available to them.

Purpose of the study

The purpose of this post-test only, comparative efficacy study was to determine university students diagnosed with Attention Deficit Hyperactivity Disorder prior to age eighteen compared to university students diagnosed with Attention Deficit Hyperactivity Disorder after age eighteen, utilization of university disability services supporting initial access, academic accommodations, and continuous enrollment.
Research Questions

Research question one analyzed access to disability services requested by (a) self, (b) family, or (c) faculty for university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years.

**Research Question #1.** Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to Disability Services requested by (a) self, (b) family, or (c) faculty?

Research question two analyzed the approved academic accommodations of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time for university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years.

**Research Question #2.** Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to academic accommodations of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time?

Research question three analyzed continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of six semesters, and (d) all fourth
year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of eight semesters.

**Research Question #3.** Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of six semesters, and (d) all fourth year students with a diagnosis of ADHD recorded with the Disabilities Service office and continuous enrollment of eight semesters?

**Importance of the Study**

This study contributes to research, practice, and policy. The study is of significant interest to secondary teachers, school district administrators, education service unit administrators, university administrators, university faculty, disability service providers, and all educational professionals who work with students with disabilities who have the desire and ability to attend postsecondary education. Moreover, because these college-bound students are interested in accessing disability services at the college level, transition self-advocacy awareness should be encouraged in high school as they learn how to assert for, receive, and benefit from classroom accommodations.
Assumptions of the Study

This study has several strong features. Accommodations for students attending postsecondary education are mandated by the Americans with Disabilities Act. While the ADA itself does not give specific guidance for implementing classroom accommodations, it does give general guidance that the accommodations should “level the playing field” so disabled college students have the same access to the college curriculum that a non-disabled student does. All students included in the study are diagnosed with ADHD according to a physician using criteria detailed in the DSM-IV. Each student that registers with the Disabilities Service Office meets with the services director. This staff member uses their judgment to gauge if accommodations requested are consistent with the needs of the student based on their diagnosis. Meeting with the same staff member provides consistency of choice in accommodations provided to the students. Students registering with the Disability Services Office are provided the same forms and informational emails to be able to fully access services. Through self-disclosure, the students have the opportunity to receive any services necessary to have full access to the educational environment. In accessing services in the classroom, notification to faculty serving students is sent via email ten days or more prior to the beginning of each semester. This gives ample time for faculty to receive clarification on providing an accommodation or request more information from the Disability Services Office prior to the beginning of the semester.

Delimitations of the Study

This study’s results and findings were delimited to students who were enrolled in the University of Nebraska Omaha, during the 2011-2012 school year with academic
standing as a freshman, sophomore, junior, or senior. No data on graduate students was
utilized in this study. All students were registered with the Disabilities Services office
during their attendance at the university and received accommodations based on a
diagnosis of ADHD from a physician prior to age eighteen or received an adult diagnosis
after age eighteen.

Limitations of the Study

This study was limited to the students who registered with the campus Disability
Services office and reported ADHD as their primary diagnosis. Study participants
consisted of university students with a diagnosis of ADHD prior to age 18 (n = 34) and
university students with a diagnosis of ADHD after age 18 (n = 29). The study was
limited to a comparison of how each group utilized university disability services
supporting initial access, academic accommodations, and continuous enrollment.

Students may request accommodations and not use them because they may not recognize
when they need additional help or an accommodation. Faculty, while aware of their legal
mandate to provide these accommodations, maintain varied levels of knowledge about
providing these services. Training on serving students with disabilities, while available
to faculty and staff, is not required. These factors may limit the utility and
generalizability of the study results and findings.

Definition of Terms

Accessibility. Accessibility refers to the ability of students with disabilities to
access the educational environment in the same way that students without disabilities
would. Accessibility refers to managing the physical environment with door sensors,
which open doors automatically, or tables with the correct height to allow access to those
students in wheelchairs. Accessibility may also refer to instructional accommodations such as extended testing time or extended time to hand in assignments for students with learning disabilities or processing disorders.

**Accommodations.** Accommodations refer to alterations in the educational setting that gives a student with disabilities equal access to the academic environment whether that is physical access to the classroom or alterations that allow easier processing of information presented in the classroom. It is important to note that accommodations are not intended to alter the curriculum or fundamental structure of the course requirements.

**Alternative format of textbooks.** Alternative format of textbooks can be offered to students who are blind, dyslexic, or have processing difficulties. Alternative format textbooks usually come in an electronic format so they can be read with a Portable Document Format reader. Other alternative textbook formats include books on tape or large print textbooks, which meet the needs of students with some disabilities.

**Americans with Disabilities Act of 1990.** The Americans with Disabilities Act of 1990 (ADA) refers to federal legislation that protects individuals with disabilities from discrimination in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications (ADA, 1990). To qualify for protections under ADA, the individual must fit into one of three definitions of disability in the ADA (see Disability definition). Students in K-12 education receive their services under the mandate of IDEA. As those students move on to postsecondary education, their accommodations and services are delivered under ADA.
**Autism Spectrum Disorder and Autism.** Autism Spectrum Disorder (ASD) and Autism refers to the diagnosis that is categorized by “severe and sustained impairment in social interaction and the development of restricted, repetitive patterns of behavior, interests, and activities. The disturbance must cause clinically significant impairment in social, occupational, or other important areas of functioning”. In Autism, these limitations may also be accompanied by significant delays in language acquisition or cognitive development during the first three years of life. The criteria are also not met with Pervasive Developmental Disorder or Schizophrenia. Impairment in social interaction is pervasive. The use of non-verbal skills is impaired, as is the ability to regulate social interaction and communication. (American Psychiatric Association [APA], 2000). This impairment will look different through the ages of the individual, but causes marked problems in school, work and personal relationships. Accommodations may prove hard to provide for these students since they may not be able to assess their needs and report the accommodations necessary for them. Support for this type of need is very individualized, difficult to monitor, and assess its success.

**Assistive technology.** Assistive technology refers to assistive devices that help people with disabilities manage their environment with more independence. Forms of assistive technology may include curb cutting in the sidewalk, sound operated crosswalks, automatic door openers, speech recognition software, and personal word processors.

**Attention Deficit Hyperactivity Disorder.** Attention-Deficit/Hyperactivity Disorder (ADHD) refers to the diagnosis of a “persistent pattern of inattentiveness and/or hyperactivity-impulsivity that is more frequently displayed and more severe than is
typically observed in individuals at a comparable level of development”, the symptoms that cause the impairment must have been present before the age of 7, they must be present in two settings (at home, school, or work), these symptoms must interfere with social, academic or work functioning, and these symptoms cannot be accounted for by another mental disorder (APA, 2000). These individuals will have trouble attending to tasks, their work may be sloppy or incomplete, or they may show no interest in the task. They may switch quickly from task to task and not complete any task fully. Coursework can suffer because of the lack of attention. As these individuals get older and attend postsecondary education it may be difficult to attend to a lecture or focus on an exam. When coursework becomes more difficult students with ADHD need to self-monitor to ensure that their accommodations match their needs in the classroom.

**Autism.** Autism refers to a “developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences (34 CFR § 300.8(c)(1)(i)).

**Bipolar disorder.** Bipolar disorder refers to a “brain disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks”. It is usually diagnosed in an individual’s late teens to early 20s. “People with bipolar disorder experience unusually intense emotional states that occur in distinct periods. Extreme changes in energy, activity, sleep, and behavior go along with these changes in mood. A person may be having an episode of bipolar disorder if he or she has a number of manic
or depressive symptoms for most of the day, nearly every day, for at least one or two weeks. Sometimes symptoms are so severe that the person cannot function normally at work, school, or home” (National Institute of Mental Health [NIMH], 2008).

**Co-morbidity.** Co-morbidity refers to the existence of more than one disabling diagnosis for a person with disabilities. When justifying remedies for an individual co-morbidity becomes an issue when deciding which disability to accommodate. For example, when a student requests services and comes with a diagnosis of a Dyslexia and Attention Deficit Hyperactivity Disorder it may be difficult to differentiate where the effects of one diagnosis begin and end or how they interplay with each other. Accommodations are decided on the effect those diagnoses have on the individual within their academic setting.

**Compliance.** Compliance is the adherence to policy or law in day-to-day conduct or operations. The mandates of the American’s with Disabilities Act and Section 504 of the Rehabilitation Act of 1974 allow students with disabilities to have reasonable accommodations at the university that creates an equitable environment for them to succeed. University personnel are complying with the laws when they provide allowable accommodations to students with disabilities.

**DSM-IV-TR.** The DSM-IV-TR is the most current edition of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision, with the last revision, taking place in 2000. The DSM-IV-TR is published by the American Psychiatric Association and is used for diagnosis of mental disorders for adults and children (APA, 2000). All students in the research study were required to have a DSM-IV-TR diagnosis in order to qualify for accommodations.
**Depression.** Depression refers to a “common mental disorder that presents with depressed mood, loss of interest pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities”. Depression is among the most common causes of disability worldwide with fewer than 25% of those affected receiving the necessary care (World Health Organization, 2012).

**Diagnosis.** Diagnosis refers to an informed medical judgment based on examination of an individual, usually given by a medical doctor or psychologist. Each diagnosis follows specific criteria for that finding.

**Disability.** According to the Americans with Disabilities Amendments Act of 2008, when considering an individual to be disabled they must “(1) have a physical or mental impairment that substantially limits one or more of the major life activities, (2) have a record of the impairment or (3) be regarded as having such an impairment” (42 U.S.C. §12102(2)). Part one of the definition of disability covers those with a disability who must meet the criteria of (a) having a physical or mental disability, (b) that the existence of it substantially limits, and (c) at least one major life activity. Parts two and three of the definition look at those individuals who are not necessarily restricted in their daily life activities, but through a history of discriminatory culture are felt to believe that they are limited when, in fact, they may not be (ADA, 2008).

**Documentation.** Documentation refers to the diagnosis or testing information required by universities as proof of a disability before providing accommodations to a
student with a disability. Thorough documentation should include a clear diagnosis, basis for the diagnosis, and how that disability affects the individual in daily life activities.

**Due process.** Due process refers to the set of procedures that are applied when someone feels their rights have been violated in respect to the Individuals with Disabilities Education Act, Section 504 of the Rehabilitation Act or the Americans with Disabilities Act. Due process procedures for IDEA and Section 504 involve an impartial hearing for parents who disagree with the decisions of the school district being provided by the local education agency. Violations of ADA do not provide for their own due process procedures. Rights violations under ADA are addressed through Title VIII of the Civil Rights Act of 1964 (Disability Rights, Education, and Defense Fund, n.d.)

**Executive functioning.** Executive functioning refers to the set of mental processes that makes sense of a task from beginning to completion. Skills necessary for proper executive functioning include organization, planning, prioritization, evaluation going forward, self-monitoring, and the ability to adapt to changes. Difficulties with these tasks can affect success at work, school, and home. The disabilities that are affected significantly by lack of executive functioning are ADHD, Learning Disabilities, Autism, and Asperger’s Syndrome (National Center for Learning Disabilities, 2012). Early attention to ameliorating deficits in executive functioning can lead to academic success. Those students who are still struggling with executive functioning issues in secondary school will likely have continued difficulty as they enter postsecondary education.

**Extended time for testing.** Extended time for testing refers to the accommodation provided for students with learning disabilities and ADHD. These
students have a more difficult time processing information quickly and benefit from the extra time. Depending on the severity of the disability the time extended can be anywhere from 125 to 200%. This accommodation is often accompanied by providing a quiet area to take an exam.

**Family Educational Rights and Privacy Act.** Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) refers to the federal law that protects the student’s private educational records. FERPA protections apply to the parent and student up to age 18. At age 18, those rights transfer to the student themselves. Those institutions that receive federal funds from the U.S. Department of Education are subject to FERPA regulations (FERPA, 1980).

**Flexible assignment due dates.** Flexible assignment due dates refers to the accommodation where instructors extend additional time to students with disabilities when completing their assigned work for class. In deciding flexibility, the student and the instructor have a discussion that examines the demands and expectations for the class and sets a reasonable standard for flexibility.

**Flexible attendance policy.** Flexible attendance policy refers to the accommodation where instructors allow extra absences beyond their normal absence policy for grading. Students with acute anxiety, PTSD, and medical conditions are those who use this accommodation most often. When deciding what an acceptable number of absences are for the class they must be reasonable and not alter the fundamental structure of the class.

**Generalized anxiety disorder.** Generalized anxiety disorder refers to the mental disorder characterized by excessive anxiety or worry occurring for a preponderance of
days for at least six months with the individual finding it difficult to control the worrying. The focus of the worrying cannot be attributed to another Axis I disorder. The distress due to the worrying causes impairment in social, occupational or other areas of functioning. The worrying is also not caused by the effects of a substance or medical condition (APA, 2000).

**Health Insurance Portability and Accountability Act of 1996.** The Health Insurance Portability and Accountability Act of 1996 (HIPAA) refers to the federal protections of personal health information held by covered entities and gives patients an array of rights regarding that information. HIPAA also permits the release of personal health information necessary for patient care and other necessary endeavors (U.S. Department of Health and Human Services, 2003). Conflict with HIPAA and disability services can occur when release of behavioral concerns to educational faculty and staff can also be construed as divulging a health condition or diagnosis without the student’s consent.

**Hidden disability.** Hidden disability refers to psychiatric and mental health disabilities. They are referred to as hidden because they cannot be seen when you look at the individual as you can with a student with physical disabilities. With the disability being hidden it is also unclear that an accommodation is needed in the classroom. To receive services it is important for students with hidden disabilities to initiate the conversation with the disability services office, otherwise their needs cannot be readily met.

**Individual Education Program.** Individual Education Program (IEP) refers to a “written statement for each child with a disability that is developed, reviewed and revised
in a meeting in accordance with 34 CFR 300.320 through 300.324” (IDEA, 2004). The IEP must include the following: a statement of the student’s present progress level, both functionally and academically, a statement of measurable annual goals, allow the student to succeed in general education and still meet the needs of their disability, reflect the progress being made toward the annual goals, a statement of approved accommodations, and guidance for implementation and measurement of alternative assessments, if necessary (IDEA, 2004).

**Individuals with Disabilities Education Act.** The Individuals with Disabilities Education Act refers to the federal law that governs the delivery of special education services to disabled students from birth to age 18 or 21. States and local education agencies that receive funds from the Department of Education are bound to IDEA policies and requirements. The latest revision of IDEA was in August of 2004. The intention of the law is to provide a free and appropriate public education (FAPE) to each disabled student so they can meet educational, work and daily functioning goals by the time they leave high school (IDEA, 2004).

**Learning disorders.** Learning disorders refers to the group of learning difficulties including Reading Disorder, Mathematics Disorder, Disorder of Written Expression, and learning Disorder Not Otherwise Specified. A learning disorder is diagnosed when scoring on standardized test in reading, mathematics or written expression is substantially below what is expected for age, schooling, and level of intelligence. Substantially below is defined as more than 2 standard deviations between achievement and IQ. When performance may be affected by a comorbid condition or
medical condition the smaller discrepancy of between 1 to 2 standard deviations may be used (APA, 2000).

**Multidisciplinary Evaluation Team.** Multidisciplinary Evaluation Team (MDT) statute is provided under Nebraska Rule 51. The MDT is “responsible for analysis, assessment and documentation of a child’s educational and developmental needs and abilities” (Nebraska Department of Education, 2010). With the information collected, the MDT makes verification decisions about qualification for special education services. The MDT is responsible for initial verification and continued re-evaluation of special education students every three years. The reports of the MDT can be used as verification of a disability when a student enters postsecondary education.

**Mental illness.** Mental illness refers to a medical condition that “disrupts a person’s thinking, feeling, mood, ability to relate to others, and daily functioning”. Mental illness can refer to major depression, schizophrenia, bipolar disorder, panic disorder and post-traumatic stress disorder. These are serious illnesses, but they are treatable (National Alliance on Mental Illness [NAMI], 2011). Disabled students with mental illness can be difficult to accommodate on college campuses since they are reluctant to access services of the disability services office because of the stigma attached and due to the changeable nature of their disability. Mental illness fall into the category of “hidden” disabilities that cannot be seen by others and carry a certain measure of doubt when faculty, staff, or employers provide accommodations.

**Modifications.** Modifications are alterations to the academic coursework that give students with disabilities access to the general education curriculum. Modifications are commonly used in the K-12 educational settings, but are not appropriate at the
postsecondary level. Any accommodation that fundamentally alters the content of a course would be deemed unreasonable. Examples of modifications in the K-12 environment would be shortening of assignments, lowering the difficulty level of the reading materials, or the student with special needs focusing on one area of the curriculum while the rest of the class uses the standard curriculum.

**Nebraska Rule 51.** Nebraska Rule 51 refers to the Regulations and Standards for Special Education programs to operate under in the state of Nebraska adopted by the State Department of Education (Nebraska Department of Education, 2010).

**Notetaker.** Notetaker refers to the accommodation of providing a volunteer student notetaker in the classroom. Students with written expression or processing disabilities take advantage of this accommodation.

**Obsessive Compulsive Disorder.** Obsessive-Compulsive Disorder (OCD) refers to the mental disorder defined by recurrent obsessions or compulsions that are severe enough to be time consuming or cause significant distress or impairment. The individual must recognize at some time during the disorder that the obsessions are excessive or unreasonable. If another disorder is present, the obsessions are not restricted to the secondary disorder, and the obsession is not due to any effects of outside substances or medical conditions (APA, 2000).

**Persistence.** Persistence is the desire and action of a student to stay within the system of higher education from their entry into the system until degree completion (Berger & Lyon, 2005).

**Posttraumatic Stress Disorder.** Posttraumatic Stress Disorder (PTSD) refers to the mental disorder characterized by exposure to an extreme stressor involving personal
experience that involves intense fear or helplessness. The individual re-experiences the traumatic event and avoids stimuli associated with the trauma. All symptoms must be present for more than one month and the disturbance needs to cause significant impairment in social, work, or other areas of necessary functioning (APA, 2000).

**Preferential seating.** Preferential seating refers to the accommodation that allows a student special permission to sit in the front of the room. This accommodation is normally used by students with limited hearing or vision capabilities.

**Priority registration.** Priority registration refers to the ability of certain students with disabilities to register for classes before their previously assigned time. This accommodation is usually based on the existence of another accommodation such as accessible textbooks, or a physical or medical disability that requires a wide variety of choice in class locations. For example, if a student has an accommodation such as accessible textbooks, they would also receive a priority registration accommodation to ensure that their textbooks would be available when classes begin the next semester.

**Reduced distraction space.** Reduced distraction space refers to the setting in which a student with disabilities is allowed to take an exam. This can be a placement exam taken before registering for class, a regular exam given during class or a mid-term or final exam. The accommodation of reduced distraction space is normally given to a student with ADHD, anxiety, dyslexia or processing disorder. The reduced distraction space accommodation can be given in the regular classroom, an empty space with few outside distractors that can be monitored by a staff member of the college, or in the dedicated Testing Center of the university. The Testing Center is often the best choice because of their unique setting and flexible staffing. The Testing Center can also provide
for extended testing time along with reduced distraction space, which are two accommodations that often go hand-in-hand.

**Retention.** Retention is the ability of an institution to keep a student enrolled from admission through graduation (Berger & Lyon, 2005).

**Schizophrenia.** Schizophrenia refers to a diagnosis that includes “two or more of the following, each present for a significant portion of time during a 1-month period (1) delusions, (2) hallucinations, (3) disorganized speech, (4) grossly disorganized or catatonic behavior, or (5) negative symptoms”. One or more major areas of functioning must be affected for a significant portion of time. Signs must be “persistent for at least 6 months”. The disturbance cannot be attributed to a substance or other medical condition (APA, 2000).

**Section 504 of the Rehabilitation Act of 1973.** Section 504 of the Rehabilitation Act of 1974 (Section 504) refers to the federal law that prohibits discrimination of any individual based on a disability from organizations, employers or institutions that receive federal funds. A 504 Plan delineates how the modifications to the environment are to be carried out so that individual has all access rights as someone without a disability (Section 504, 1974). The 504 Plan, much like a student’s IEP, is used as guidance by the postsecondary institution when deciding appropriate accommodations in the classroom.

**Self-advocacy.** Self-advocacy refers to the ability of a student to understand their own disability, access services for that disability, involve themselves in a dialogue about accommodations with faculty and staff, and evaluate their accommodations and environment continuously to ensure that their accommodations are appropriate as they move through their individual degree program. Self-advocacy is vital for students with
disabilities in postsecondary setting because the institution is not obligated to find students with disabilities as K-12 schools are under IDEA. If students do not access the office themselves services are not delivered until they have self-identified.

**Social skills.** Social skills refers to the vast set of adaptive behaviors that allow individuals to understand their environment, react to that environment according to social rules, and interpret their behavior and that of those they are interacting with to create a reciprocal relationship according to those accepted social rules. Examples of basic social skills include listening, following directions, sharing, asking for permission, apologizing, accepting consequences, problem solving, and dealing with peer pressure (National Association of School Psychologists [NASP], 2002). When students with disabilities apply for admission to postsecondary institutions, their academic skills are often adequate for admission, but support is needed in social skills interpretation. Many postsecondary institutions struggle with how to appropriately provide these supports.

**Spread.** Spread refers to the treatment of individuals with physical disabilities as different in other ways such as character, personality, motivation and ability (Wright, 1983). This leads to the perception that simply because someone is blind that they are less capable of thinking and performing simply because of their physical disability. This conception can also apply to those with psychological disabilities. For example, an individual with an anxiety diagnosis may have difficulty completing a test with the other students, but this factor does not relate to their ability to think and perform on the test.

**Student support.** Student support refers to services students with disabilities receive in K-12 settings and those services available in postsecondary education. Student support in the K-12 setting is often paraprofessional support in daily classes, longer time
to take test, the use of a special education classroom for help with reading, testing, and organizing and modification of classroom materials to meet the needs of a particular student. Student support in the postsecondary setting can be very different. Common student supports in postsecondary education are extended time on testing, reduced distraction space and tutoring services on campus. Student supports should grow with the student. As a high school student reaches graduation, supports should be altered based on the transition goal of the student. If a student hopes to further their education through postsecondary endeavors, high school supports should begin to mirror those accommodations that will be available in postsecondary education.

**Transition services.** Transition services refer to those services delivered in secondary education that prepare students for life, career, or living plans after they graduate from high school. Transition services are mandated under IDEA to be implemented by the year a special education student turns 16. Goals that will aid in a student’s transition from high school to postsecondary plans are to be discussed and monitored just as academic goals are. Prescribed transition goals should lead to success in the postsecondary setting, whether that is work, postsecondary education or supported employment. The law recognizes that interagency relationships of those settings students may be moving to would help students understand the expectations of postsecondary settings and better prepare them for that transition.

**Tutoring services.** Tutoring services refers to additional assistance offered on university campuses to all students, even those with disabilities. While tutoring services are not required for students with disabilities under ADA, many disability service offices see the necessity of extra support for core classes at the college level.
**Universal Design.** Universal design refers to the broad idea of designing all environmental aspects to provide equal access to people with and without disabilities. Other terms for universal design can be Design for All, Inclusive Design, and Barrier-Free Design. (Universal Design Education, 2012). Universal design refers to facilities, curriculum, presentation, and material.

**Video captioning.** Video captioning refers to the accommodation that provides written captioning to the words spoken on video presentations. Video captioning is provided for students with hearing disabilities. Faculty and disability services offices need to work closely together to provide this service. It is important that enough time is given to caption the material that will be presented in class so it is ready for all students to access with equal ease.

**Visible disability.** A visible disability refers to those disabling conditions that can be seen with the naked eye. Examples of those disabilities include students that use wheelchairs, use a walker or cane (either for assistance walking or for use by a student with a visual impairment), and hearing impaired students that may use sign language. It is suspected that students with visible disabilities have an easier time receiving accommodations than those students with hidden disabilities.

**Significance of the Study**

The study contributes to research, practice, and policy. The study is of significant interest to students with disabilities entering college who want to understand how access to disability services can substantially affect their success in postsecondary education. The study is also of significant interest to parents of students with disabilities as they desire to understand how best to prepare their child to advocate for themselves at the
postsecondary level, both in initiating access to services with the disability services office and faculty in the classroom while continuing to receive accommodations throughout their college career. Finally, the study is significant to secondary educators and school district officials as they assist students with disabilities to develop their transition plans. In developing these plans, this study illustrates the importance of building self-advocacy and evaluation tools to receive the best services and be able to communicate their changing needs as they move through college coursework. Although the significance of this study applies to all students with disabilities, this study focuses on the experiences of students with ADHD diagnosed prior to age eighteen and after age eighteen.

**Contribution to research.** A review of professional literature suggests that more research is needed in respect to how social, cultural, and access barriers block students with disabilities from seeking services on college campuses. However, further research is needed to determine the effectiveness of common accommodations for academic achievements, and implementation and success of social based supports on those students with psychological disabilities. The results of this study may contribute to the theoretical perspective of how accommodations are chosen, implemented and adapted, and how accommodations impact academic achievement for students with disabilities. While this study focused on those diagnosed with ADHD, further research could be extrapolated and applied to other hidden disabilities.

**Contribution to practice.** Under the Americans with Disabilities Act, postsecondary educational institutions are required to provide an office on campus that address academic accommodations and their implementation. This study may guide campus disability services office who seek to increase accessibility for students with
disabilities, reduce the stigma of reporting a disability, and once a student receives services, increase the likelihood of academic achievement throughout their post-secondary experience—eventually leading to graduation and future employment.

**Contribution to policy.** University policy may be impacted by this study. Documentation guidelines may be reviewed to ascertain if all disabled students eligible to receive accommodations have ease in accessing these services. Follow-up assessment accountability data on the effectiveness of accommodation delivery and student achievement from students and instructional staff may be collected to improve accommodation choice and selection for individual students. As students graduate and seek employment, data collection can inform the university if accommodations have been effective or more services addressing post-graduation employment outcomes are necessary.

**Organization of the study.** The literature review relevant to this research study is presented in Chapter 2. This chapter reviews the professional literature related to disability services offered at postsecondary institutions, common barriers to receiving services, self-advocacy skills, transition preparation for disabled students and employment indicators and outcomes for disabled college graduates. Chapter 3 describes the research design, methodology, independent variables, dependent variables, and procedures that will be used to gather and analyze the data of the study. This includes a detailed synthesis of the participants, a comprehensive list of the dependent variables, the dependent measures, and the data analysis used to statistically determine if the null hypothesis is rejected for each research question.
Chapter 2 presents the challenges of transitioning from secondary to postsecondary education and the unique differences in each setting when receiving accommodation support from the office of Disability Services according to the research literature on these topics. Chapter 3 describes the research design, methodology, and procedures used to gather and analyze the data of the study. Chapter 4 reports the research results and Chapter 5 provides conclusions and discusses research findings.
Chapter 2

Review of Literature

The ideas of the common school and compulsory education were the basis of the creation of the American school system. Through compulsory education policies all citizens would attend school and become the backbone of a truly democratic society. Massachusetts was the first to mandate compulsory attendance for all students in 1852. By 1918, compulsory attendance was the law in all states (Ysseldyke & Algozzine, 1984). Compulsory attendance for all was the law in theory, but did not necessarily apply to all students. Students with disabilities were one of the marginalized groups that were excluded from school systems across the nation.

In many cases the courts upheld the rights of districts to exclude students with disabilities. *Watson v. City of Cambridge* (1893) stated that a child “weak of mind” could not benefit from an education. *Beattie v. Board of Education* (1919) said that a student could be excluded if they had reached the fifth grade. *Department of Public Welfare v. Haas* (1958) did not require the state to educate the “feeble minded” or “mentally deficient” since they could not reap the benefits of education.

With the advent of Civil Rights Act of 1964 and the *Brown v. Board of Education* (1954) decision, more states began to look critically upon the rights of those students with disabilities also. By the 1960s and 1970s, most states had passed laws requiring the education of disabled students. The states were uneven in their policies and implementation of education for disabled student because funding of these new services was not guaranteed (Yell et al., 1998).
The federal government put a focus on educating students with disabilities with the passage of the Education for all Handicapped Children of 1975 (EHA, PL 94-142). This law was reauthorized and later became the Individuals with Disabilities Education Act (1990) and was amended to become the Individual with Disabilities Education Improvement Act (1997) (Turnbull, 2005). This legislation provided that institutions that receive federal funds provide equal access to education for children with physical or mental disabilities. It also provided for evaluation, development of an educational plan and provided for parent feedback to be included in that plan. The concepts of free and appropriate public education (FAPE) and least restrictive environment (LRE) were federally mandated under the reauthorization (U. S. Office of Special Education Programs, 2007).

The 2004 reauthorization of IDEA reached further and defined parameters for including transition services in plans for disabled students. In a move toward greater self-determination for the student and preparation for higher education, the students are invited to attend their own IEP meeting (Johnson, Stodden, Emanuel, Luecking, & Mack, 2002; Shaw, 2006). The IEP guidelines under this reauthorization focus on strengths and preferences, determines measurable goals for transition and delineates the services necessary to reach those postsecondary goals (Turnbull, 2005).

As a student completes secondary education and continues to post-secondary education, their level of service is addressed by various federal laws that were enacted to protect the rights of the disabled population. From birth through graduation from high school, the guiding law is the Individuals with Disabilities Education Act (IDEA) (1990). The main philosophy of IDEA includes assessing and serving the needs of all affected
students from ages 3 through 21, providing a free, appropriate, public education, educating the student in the least restrictive environment, identification of students needing services and implementing an Individual Education Plan for each student with a disability (Hallahan & Kaufmann, 2006). The key to IDEA is that the child receives an education comparable to that of any student attending public school.

As the student begins to look beyond secondary education, by age 16 under IDEA, the Individual Education Plan (IEP) must include a transition plan and goals to assist the student in moving ahead to postsecondary options. The Transition Services portion of IDEA 2004 states:

Beginning not later than the first IEP to be in effect when the child turns 16, or younger if determined appropriate by the IEP Team, and updated annually, thereafter, the IEP must include:

(1) Appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and where appropriate, independent living skills; and

(2) The transition services (including courses of study) needed to assist the child in reaching those goals. (34 C.F.R. § 300.320 (b) (IDEA, 2004).

The goal of the transition plan is to build skills that will prepare the student to be as successful as possible in their anticipated postsecondary opportunity. If the student chooses to move on to postsecondary education, their experiences are guided by the
Americans with Disabilities Act (1990) and Section 504 of the Rehabilitation Act of 1974 (Section 504). These pieces of legislation provide different levels of service than IDEA. IDEA was designed to provide some measure of success designed by educators, while in college the success is dependent on the student (Hadley, 2006). ADA and Section 504 provide protection from discrimination based on having a disability. However, in postsecondary education the ADA simply provides access to opportunity for students with disabilities and levels the playing field for them (Wilhelm, 2003). The accommodations that a student receives should provide them with the same opportunities that any non-disabled student receives.

There are many vital differences between ADA and IDEA for disabled students. The post-secondary institution is not required to identify the students with disabilities on their campuses, students are required to self-identify (Hadley, 2006). Students are expected to come to the institution with documentation of their disability to qualify for services under ADA (ADA, 1990). Students continue to self-advocate directly with faculty about how accommodations will look in the classroom. If the student or faculty suspects they have a disability, it is the responsibility of the student to have themselves assessed by an outside psychologist or physician to provide that proof of their disability to the school. The students must advocate for themselves in procuring these services from the school (Carney et al., 2004; Torkelson Lynch & Gussell, 1996). Once accommodations are agreed upon, the student advocates for themselves with their instructor to discuss how the accommodations will look in each class setting. The student must continually assess their own progress and be proactive in recognizing problems before they may occur. Faculty are not expected to be specialists in diagnosing learning
differences in the classroom. As they witness students having difficulty they often will refer the student to the disability services office on campus or communicate with that office themselves to see what assistance they can offer (Gobbo & Shmulsky, 2007). Reevaluation of the class expectations and current accommodations is the responsibility of the student and can be supported with the help of faculty and the office on campus serving students with disabilities.

**Transition from High School**

The goal of K-12 education is to educate all students to a standard of competency so they can move forward with the requisite skills necessary for the next stage of life and be successful (Turnbull, 2005; Yell et al., 1998). That end result can be moving to postsecondary education, working independently, job training and independent living, all depending on the abilities of the disabled student (IDEA, 2004). In the reauthorization of IDEA in 2004, transition planning was one of the major areas of change. Many decisions are critical to the successful transition of students, and even though the reauthorization moved the age of required transition planning from 14 to 16, IEP teams decide whether earlier planning is advantageous to the student. Many times students will not be ready for postsecondary education even after their four years of high school. (Hitchings, Retish, & Horvath, 2005). Optimally, transition planning should begin in middle school and continue through high school with attention to the student’s abilities, their interests, opportunities available and their plan of study to reach their goals (Madaus & Shaw, 2006).

Specific language in the IDEA, guide the formation and assessment of transition goals on the Individual Education Plan (IEP) of special education students in secondary
school. By the age of 16, the IEP must include a statement of transition services and interagency responsibilities (Johnson et al., 2002). Transition areas to be addressed are postsecondary skills, work, and daily living (IDEA, 1997). While the IDEA Reauthorization of 1997 moved the minimum age of transition planning from 14 to 16, consensus among staff and faculty members is that the skills necessary for adult living take longer than two years to develop and should begin earlier in the process rather than later (Webb et al., 2008).

Immersing special education students in the general education curriculum is a good way to measure their future ability to handle postsecondary classwork (Webb et al., 2008). When a rigorous course of study is to be adopted in high school as a goal for postsecondary education preparation, that plan must begin long before that student reaches 16 years of age (Johnson et al., 2002). Optimally, those discussions and plans will begin before middle school.

When students are considering moving toward postsecondary education, one of the most vital transition skills is self-advocacy (Torkelson Lynch & Gussel, 1996; Hadley, 2006). Optimally, development of this skill would begin in secondary school with knowledge of their disability, how it affects their daily life - especially school, and how to communicate the need for appropriate accommodations (Brinckerhoff, 1996). In a push for special education providers to developing the skill of self-advocacy, the IDEA Reauthorization of 2004 encourages the student to attend their IEP meetings while in upper elementary and middle school and move to facilitate those meetings and make decisions about what services will be provided to them and the way in which they will be
provided (Shaw, 2006). The student is a vital voice in replacing ineffective accommodations with ones which he feels will work for him.

To develop the level of self-advocacy necessary for success, the student needs to be more than a causal participant in all services they receive, including testing and reevaluation. They need to be knowledgeable about their testing during the reevaluation process and need to understand what those testing documents say about them (Madaus & Shaw, 2006). That student needs to be knowledgeable when they go to the disabilities services office on a college campus. The information they have about their testing and what it says about their disability affects how the disability services office serves them. When the student understands how their disability affects them they can be a part of the team at the college level that assists faculty and staff in providing the best opportunity for success (National Joint Committee on Learning Disabilities [NJCLD], 2007).

Further skills necessary for success at the postsecondary level include study skills, time management skills (Mull, Sitlington, & Alper, 2001), and self-advocacy skills (Foley, 2006). Access to services at the postsecondary level requires self-identifying, presenting documentation, and requesting accommodations in a manner that convey some understanding of the individual student’s disability and its effect on their classroom performance (Skinner, 1998). Supported experiences in high school are necessary to develop these skills. According to Harris & Robertson (2001), individuals who have developed these skills have a greater likelihood of graduating from college, and greater success in adult living afterwards.

There seems to be a practical disconnect between services offered in secondary education and those perceived to be available in postsecondary education. There is
limited communication between the two educational settings (NJCLD, 2007). Often, when developing transition plans, secondary faculty and staff do not access the offices of postsecondary campuses before making transition goals for the affected students (Madaus & Shaw, 2006). More often than not, IEPs developed in secondary schools are done in isolation and with supposition about what services will be available for those students when they attend postsecondary education. With extremely limited relationships between secondary and postsecondary special education teams, the transition goals on the student’s IEP may not address challenges the student will face in transitioning to the new setting (Johnson et al., 2002). Without the consultation with the disabilities services office at these institutions, goals are made that may not be fitting with what a post-secondary campus needs to transition the student successfully (Webb, et al., 2008). With guidance from the campus disability services office, students can be assured that their goals will match what expectations and opportunities are available at the college level (Madaus & Shaw, 2006). Coordination between the two educational settings can provide the best chance for success as the disabled student moves forward. High school students need experiences in actively choosing their accommodations, evaluating their effectiveness, and requesting differing or altered accommodations based on their own self-monitoring to achieve success in the postsecondary environment (Webb et al., 2008).

**Barriers to Receiving Services in the Post-Secondary Setting**

When transitioning from high school to college, 78% of students without disabilities enter some type of postsecondary education, while this is true for only 37% of students with disabilities (Blackorby & Wagner, 1996). All students are faced with challenges when trying to stay in school and attain their degree, but the path to success is
particularly difficult for those with disabilities (Salzer, Wick, & Rogers, 2008). The financial strain of paying for college and meeting living expenses, managing a job while attending classes and studying, and handling the academic and social demands of school are just a few challenges that must be tackled. Students with disabilities also failed to enroll for classes because of the stress of school, problems with medications, and weather conditions (Adler, 1999). They also face identity issues, the desire to avoid negative social reaction, insufficient knowledge and misinformation about available services and suffer from negative experiences with professors as barriers to their successful integration into the postsecondary community (Marshak, Van Wieren, Ferrell, Swiss, & Dugan, 2010). Students with medical and psychological disabilities face the likelihood that, through hospitalization or medical treatment, they may need to be absent from school for long, extended periods of time. This may mean weeks, semesters or years off of school due to disabling conditions. These situations place an extra burden on the student with disabilities (Mowbray, Bybee, & Collins, 2001; Unger, 1992; Weiner & Wiener, 1997).

Many studies have addressed the issues of faculty knowledge of accommodation requirements, their obligation and willingness to provide accommodations, the quality of accommodations provided to students with disabilities, and perceptions of students and faculty member on college campuses (Carney et al., 2007). Very few studies have explored the reasons why students with disabilities may not be accessing services they are entitled to under ADA (Marshak et al., 2010). The ability to access accommodations combines a multilayered mixture of self-acceptance, the skills to self-disclose, and the current culture of disability acceptance on campus (Torkelson Lynch & Gussell, 1996). Many students with disabilities are lacking one or more of these skills at any one time,
which leads to challenges when reporting their disability and accessing the services to which they are entitled. Both the studies by Torkelson Lynch & Gussel (2006) and Hartmann-Hall & Haaga (2002), found that the perceptions about the culture of disability acceptance on campus played a vital role in the decision to self-disclose their disability to anyone at the postsecondary institution. The message of the campus culture is sent directly thorough interactions with the faculty in the classroom. These studies further illustrate that a negative experience with one faculty member often leads the student to assume that all faculty and staff on campus feel the same negativity toward students with disabilities, leading toward the decision to not disclose their disability further.

Another barrier is the assumption that if one is physically or mentally disabled the disability extends to all other areas of their character (Wright, 1983). Faculty may feel that if they need support in one area, they need it in all areas. This assumption by faculty, referred to as “spread”, sends the message that they believe that the student with a disability does not have the requisite abilities, behavior, or motivation to participate in the classroom or postsecondary studies (Torkelson Lynch & Gussell, 1996). Once these messages are received by a student with disabilities, it is difficult to regain their trust in campus administration to be able to self-disclose and eventually report their disability to the proper office to receive the support they need to be successful in their pursuit of a college degree (Murray, Lombardi, Wren, & Keys, 2009).

**Hidden Disabilities**

Most recent estimates maintain that at least 33,000 students with mental illness are enrolled in college and university campuses nationwide (Souma, Rickerson, & Burgstahler, 2001). Eighty-six percent of those students with mental disabilities will
drop out of college before completion of their degree (Kessler, Foster, Saunders, & Stang, 1995), compared to 54% for the general student population (Harvard Graduate School of Education, 2011). According to Marybeth Kravets (2006), more than 9% of college freshman report having a disability, with half of these being hidden disabilities. All school settings have seen an increase in the enrollments of students with psychiatric disabilities and struggle to meet their unique needs in the postsecondary setting.

Hidden disabilities can contain the diagnoses of depression, bipolar affective disorder, anxiety, schizophrenia, specific learning disabilities (reading, mathematics, verbal expression, written expression), cognitive disabilities, ADHD, and Autism (Mobray et al., 2006; Rickerson, Souma, & Burgstahler, 2004). Psychiatric disorders are referred to as “hidden” because it is not apparent simply by looking at the student, as it is with a student experiencing blindness or physical impairments (Rickerson, et al., 2004). The only individuals on campus that know that a disability has been diagnosed for a particular student are the disability services office, the student and the faculty that serve that student. Since self-disclosure is how students with disabilities access services on campus, it is difficult to capture a realistic number of students with psychiatric disabilities attending postsecondary institutions (Sharpe, Bruininks, Blacklock, Benson, & Johnson, 2004). The incidence rate of general population to have a psychiatric diagnosed condition is 20% (National Institute of Mental Health, 2002). This rate is expected to be reflected in the amount of students with psychiatric disabilities attending postsecondary education due to better treatments, increase in the affordability and availability of medications, and updated diagnostic criteria and practices (Souma et al., 2001; Weiner & Wiener, 1996).
Many of the students with hidden disabilities fail to report their needs to the disabilities service office (Collins & Mowbray, 2008). There are a variety of factors behind this. They may be exerting some independence for the first time, want a fresh start, or want to escape the stigma and stereotyping that comes with a disability. Some may not believe they truly have a disability (Marshak et al., 2010). Students who have been diagnosed within the special education system for their entire school career may look at their entrance to postsecondary education as their chance to break free from their diagnostic labels, especially if their diagnosis is particularly stigmatizing.

As problems arise from their lack of reporting and failure to access accommodations, students with disabilities may cope with academic and social difficulties with the use of drugs and alcohol, only compounding the problems (Gobbo & Shmulsky, 2007). New problems to tackle may become academic failure, suspension or expulsion from college, difficulties that stem from addiction, and legal and criminal issues that may arise. Students with psychiatric disabilities often have difficulty managing social interactions and non-academic help-seeking behaviors necessary to success on campus (Megivern, Pellerito, & Mowbray, 2003). The ability to seek help in all situations becomes an important and oftentimes lacking skill (Foley, 2006). To provide the correct level of services for students with mental disabilities, communication needs to continually occur between the student with disabilities and staff at the university. That can be through the disability services office to set up accommodations, faculty when having difficulty in a class, or through the resident assistant in dealing with a conflict in dorm living.
This serves as another example of the significant needs of the students with hidden disabilities (Hunt, Eisenberg, & Kilbourne, 2010; Rickerson et al., 2004; Salzer et al., 2008). Classic academic accommodations do not serve the most immediate needs of these students (Sharpe et al., 2004). “Reasonable accommodations” required under ADA (ADA, 1990) for students with psychiatric disabilities may require a new way of thinking.

As the population of specific psychological disabilities increases, so does the need to provide new and varied supports to these students (Smith, 2007). The students with hidden disabilities often need additional supports that are not considered common academic accommodations. The Association on Higher Education and Disability (Association on Higher Education and Disability [AHEAD]) proposes accommodations for students with psychiatric disabilities that include orientation to campus, assistance with registration and financial aid, extended times on exams, an alternative testing site, time management and study skills, peer support, and preferential seating (Association of Higher Education and Disability [AHEAD], 1991). Under ADA, the postsecondary institution is required to provide “reasonable” accommodations at no cost to the student (ADA, 1990). Accommodations that have been effective with students with psychiatric disabilities are extra time for testing, private space for testing, priority registration, audio recording of lectures, notetakers, modified deadlines, reduced course load, preferential classroom seating, and early availability of the syllabus and/or textbooks (Sharpe et al., 2004). These accommodations are commonly used by students with disabilities and do not differ from accommodations that would be provided for any student. When provided these non-intrusive accommodations, students with psychiatric disabilities do not need to
worry that a particular accommodation would point them out to the class (Sharpe et al., 2004). Those accommodations that are more support-based can be handled on a one-to-one basis with faculty or disabilities services staff and minimize the feeling that others will find out about their disability.

**Attention Deficit Hyperactivity Disorder (ADHD)**

In a recent study by Getahun et al., (2013), the incidence of ADHD has increased 24% from 2001 through 2010. As students with disabilities enter postsecondary education in ever increasing numbers, students with ADHD are quickly becoming one of the most commonly served disabilities (Nadeau, 1995; Wolf & Shin, 1999). The actual number of students with ADHD on college campuses is hard to pinpoint (Wolf & Shin, 1999, Parker & Benedict, 2002; Richard, 1995). Students with ADHD oftentimes do not report their disability because they do not want to appear special, needy, or different (Meaux, Green, & Broussard, 2009). When categorized, students with ADHD are combined in a sublisting of “Other Health Impairment” which can include LD, ADHD and psychiatric disabilities which can also lead to trouble in ascertaining exact numbers (Wolf & Shin, 1999).

Estimated data states that 1 to 3% of the postsecondary student population has an ADHD diagnosis (Richard, 1995). As services and supports at the secondary level become more effective, more students will be entering college campuses. As Parker’s (1998) study found, there was a 52% increase in the number of students who reported having an ADHD diagnosis and attending postsecondary institution from 1996 to 1998. Reasons for this increase can include the graduation of more students served under IDEA, more referrals of students with ADHD to school psychologists and physicians, the
improved diagnostic procedures and the increased knowledge and awareness of the symptoms of ADHD by postsecondary service providers (Parker & Byron, 1998). As these services continue to be provided to students, college campuses can expect the numbers of students with ADHD to continue to grow rapidly.

ADHD is defined as a “deficit in executive functioning skills arising from the individual’s impaired ability to inhibit responses to internal and external stimuli” (Barkley, 1997). ADHD was previously understood to be strictly a childhood disability which was eventually outgrown in adulthood (Meaux et al., 2009). Thirty to seventy percent of the individuals were diagnosed with ADHD in childhood reported having at least one symptom as an adult (APA, 2000). The rate of adult ADHD in the general population is 4 to 6% (Kessler et al., 2006). There is no test to diagnose ADHD. Clinicians rely on a self-report of symptoms experienced in childhood to make a diagnosis of the disorder. Under DSM-IV criteria, the patient must have childhood onset of ADHD symptoms, a current presence of significant symptoms and impairment from those stated symptoms (APA, 2000). ADHD can appear to affect individuals cognitively and behaviorally. These affects can change significantly with the development of the individual from childhood through adulthood (Teeter & Semrud-Clikeman, 1997). As these changes occur, it is important for the students themselves to self-evaluate and let service providers know how their disability is affecting them.

With the presence of ADHD there is an increased probability of having comorbidity of other psychiatric diagnoses. There is an increased incidence of mood, anxiety, learning, substance abuse, and behavioral disorders (Kessler et al., 2006; Wilens, Biederman, & Spencer, 1996). Students with ADHD who enroll in postsecondary
education are at increased risk for anxiety because of situations inherent to college life. Twenty-seven percent of the children with ADHD tend to have more than one anxiety disorder (Wolf & Shin, 1999). Challenges with academics, diminished social skills and inadequate adaptation to college life and relationships increase the likelihood of anxiety in ADHD college students (Heiligenstein, Guenther, Levy, Savino, & Fulwiler, 1999). This overlapping of symptoms makes treating and providing the appropriate services for the student difficult. When supporting a student with coexisting challenges, the solution is a multi-tiered approach that addresses the whole body of disability that the student faces (Prevatt, Dehili, Taylor, & Marshall, 2012). As students with ADHD move through their postsecondary education it is important for them to self-evaluate and understand what supports and tools they use that work for them to learn productively.

Students with ADHD who report to the disability services office of their campus will receive supports that address their needs in the classroom. Typical accommodations for ADHD include extended time and quiet room for testing, being provided with written instruction, priority seating, priority registration, and accessible textbooks (Scott, Gregg, & Davis, 1998). Students with ADHD have significant challenges with executive functioning (Wolf & Shin, 1999), which is necessary to evaluate how well they are doing in a class or what accommodations they need to be successful. These students had previously received assistance from service providers or family members in high school when making these judgments (Meaux et al., 2009). When making the transition from secondary to postsecondary the student with ADHD may need to see who can offer that assistance on the college campus. Often the staff that will help with that will be in the disability services department.
As postsecondary institutions serve students with ADHD, they anticipate graduation with a college degree. Many of these students will not reach college graduation. Almost two-thirds of students with hidden disabilities, including ADHD will drop out, compared to one-third of the students without disabilities (Wolf, 1999). Many will drop out, not necessarily because of the academic skills they lack, but because of the many non-academic skills that were never mastered. Students with ADHD have considerable difficulty with time management, initiation of a task, self-advocacy, social skills, and building relationships (Parker & Benedict, 2002). In meeting the needs of these students, college support staff strive to meet the needs of these students behaviorally, as well as academically. Providing ADHD coaching in the form of tutoring, study skills instruction, organizational and time management assistance may be necessary life skill accommodations to create a successful environment for these students (Prevatt et al., 2012).

**Challenges of Adult Diagnoses**

According to the Child Find mandate included in IDEA, the federal government has required schools to find and evaluate children, ages 3-21, living in their district that would benefit from special education services from the schools (IDEA, 2004). Many of the students receiving services have been diagnosed as children, are accustomed to the service delivery system under IDEA, and have received accommodations for many years. Another group of students who merit consideration in the conversation of postsecondary accommodations are those who did not qualify in the K-12 system, but merit diagnosis under current adult diagnosis models (Gregg, Coleman, Davis, Lindstrom, & Hartwig,
These students often struggled in secondary school, but have “gotten by” and managed to graduate.

Under IDEA, receiving services in the K-12 setting, requires that special education students be labeled as “disabled” to receive services. Section 504 and ADA, under which postsecondary institutions provide services, do not have that requirement. These federal mandates operate under the social model of disability, exclusion and blocked access, rather than the medical model handed down through hundreds of years of serving students with disabilities (Triano, 2000). As these students enter postsecondary education, they come upon more difficult course demands and reading material, and see that their disability is significantly affecting them. If completion of a college degree is important to them, seeking accommodations will become necessary (Gregg et al., 2006).

To receive accommodations, understanding of documentation requirements becomes another aspect that the student with a disability must face (Madaus & Shaw, 2006). Students verified under IDEA have a built-in documentation of their disability when they present their Individual Education Plan to the disability services office of the university (NJCLD, 2007). Just as there is a disconnect between the requirements of IDEA, ADA and Section 504, which are the laws postsecondary institutions are required to follow, documentation requirements under each of these laws differ significantly. Documentation that receives services in one setting will not necessarily provide services in another (NJCLD, 2007). Those who have not had services before, or those students that are newly diagnosed as adults, will have a more difficult time verifying their eligibility. To receive services, the universal criterion for disability is that the condition “substantially limits” at least one major life activity, which would include learning
(Gregg & Scott, 2000). Even with the broadening of the definition of disability and the requirements for documentation of a disability within the most recent ADA amendments (ADAAA, 2008), postsecondary institutions are still relying on documentation from physicians, psychologists and other licensed diagnosticians.

Under evolving ADA guidelines, documentation requirements can differ significantly among postsecondary institutions. In a study conducted by Gormley, Hughes, Block, and Lendmann (2005), the policies of 104 postsecondary institutions were examined. This study found that 50% of the institutions required testing to have occurred within the last three to five years. Thirty-nine percent wanted an evaluation by professionals with scores from standardized tests. Less than half accepted IEPs or 504 plans or used historical information on past accommodations use. Fifty percent required information on the functional impact of the disability. The Gormley et al. study (2005) examined the policies of the institutions, but did not ask specific questions to the service providers. Although these are the policies that exist, different service providers may weight differing components of testing and documentation based on their professional judgment and expertise (Kochhar-Bryant & Izzo, 2006). The judgment criteria of staff are very difficult to quantify when guiding students on providing the correct documentation to procure services.

Students who are hoping to receive accommodations based on their disability, whether diagnosed before postsecondary entry or after, encounter a maze of documentation policies and the confusion that accompanies them (Madaus & Shaw, 2006). This is what the student encounters before they tackle their most consistent and familiar adversary – school. These students come to school feeling that they should be
able to succeed without help. This feeling, along with the arduous process of proving a disability and disclosing it to the university will lead many of those students to struggle and oftentimes fail or drop out, rather than seeking and accepting the help they need (Carney et al., 2007).

Veterans Returning to School

These feelings are also mirrored in the veteran population. As veterans return from Iraq and Afghanistan, the Post 9/11 GI Bill provides generous benefits to further their education (Department of Veteran Affairs, 2008). The number of veterans receiving this benefit has increased from 34,393 in 2009 to 555,329 in 2011 (Albrecht, 2011). Estimates state that with increased downsizing, over 2 million veterans returning from Iraq and Afghanistan will enroll in postsecondary education (American Council on Education, 2008). From this group, it is estimated that 20% are returning with PTSD symptoms or depression and 19% are returning after suffering a head injury (Madaus, Miller, & Vance, 2009). The challenges veterans face on campus are significant functionally, academically, and socially.

In addition to facing the challenges of other adult students with documentation and feelings of failure, they return to college campuses and are faced with students that have no knowledge of the wider world that the veteran has been so involved in (Madaus et al., 2009). They find themselves trying to fit in with students just leaving high school and miss the camaraderie that the military provided. With this in mind, postsecondary institutions are being deliberate in creating a specialized and welcoming environment for returning veterans (Madaus et al., 2009). Veterans place great emphasis on teamwork, camaraderie, and trust. Universities can focus on these values when creating programs
for veterans. Successful veteran services programs provide peer counseling, a safe place to meet formally (Church, 2009), establishing a social network system (Sachs, 2008), use of Universal Design throughout campus (Branker, 2009), and a centralized location for information for veterans. By meeting the unique needs of veterans and creating a welcoming environment for them, success at the postsecondary level can be within their reach.

In providing support on campus to all students, instructors need training in dealing with all types of disabilities in the classroom. Instructors need to know where they can seek the help they need on campus, whether that be from counseling, health services, disability services, or academic advising (Gobbo & Shmulsky, 2007). Faculty are trained and hired as content area specialists and do not have the background knowledge of all disabilities that may appear in their classrooms. Not all faculty understand their legal and ethical responsibilities to accommodate students with disabilities who enter their classroom. Staff in the disability services offices act as a central hub of information for faculty who serve students with disabilities (U.S. Government Accountability Office [GAO], 2009). Disability services staff offer expertise in different disabilities, guidance on federal and case law related to disabilities, and manage the day to day decisions on campus about implementing services to students (Scott & Gregg, 2000). Support for faculty can also involve guidance on specific educational materials and accommodating them, what a “reasonable accommodation” consists of, what constitutes a substantial alteration of course curriculum, and guidance when students believe their rights have been violated (Hadley, 2006; Zhang et al., 2010). An overarching training session can be cumbersome to plan and conduct with the
multitude of situations that may occur when dealing with students with disabilities. Small group trainings and consultation with the disability services office on campus when dealing with specific situations may be the best “training” faculty can be provided (Houck, Asselin, Troutman, & Arrington, 1992; GAO, 2009).

Employment Transition

As more disabled students enter post-secondary education, efforts in providing appropriate services and accommodations are continuously being made to ensure more disabled students graduate with a completed college degree (Wessel, Jones, Markle, & Westfall, 2009). Even though disabled students are receiving accommodations that are necessary for success, their graduation rate is much less than their non-disabled peers. According to Berkner, Curraro-Alamin, McCormick, & Bobbit (1996), students with disabilities had a lower persistence and graduation rate than students without disabilities. Forty-one percent of students with disabilities had graduated compared with 51% of students without disabilities. Although a side-by-side comparison of these numbers may not give a true picture of what students with disabilities are facing. Students with disabilities are more likely to delay entry into post-secondary education, complete high school with a General Equivalency Diploma or alternative high school credit, and to have dependents other than a spouse (U. S. Department of Education, 1999). These are factors that affect students with disabilities even before they are admitted to college campuses, attend classes and seek services necessary to their success in attaining a college degree.

With today’s weakened economy, the question of investing in a college degree is debated regularly in households across the country. During the 2007-2008 school year about 67% of all undergraduate students received some form of financial aid (US
Department of Education, 2009). Many students with disabilities depend on financial aid to attend school. Students who earn a Bachelor’s degree earn $2.3 million over their lifetime, 31% more than a student who earns an Associate’s degree and 74% more than a student that has a high school diploma. Lifetime earnings are affected by gender, ethnicity, degree attained, and occupation held (Carnevale, Rose, & Cheah, 2011). Even when possessing a degree, the employment picture is bleak for persons with disabilities. According to the American Community Survey Brief – Disability Among the Working Age Population: 2008-2009 (2010), the employment rate is 33.9% for persons with disabilities, 75.4% for persons without disabilities for all educational backgrounds. For those who have attained a Bachelor’s degree the employment rate is 53.4% for persons with disabilities and 82.9% for persons without disabilities. While having a degree is clearly more advantageous for persons with disabilities, their employability rate is obviously affected.

Those students that do persist and attain a degree may not find employment at all, and those that do find jobs may not be employed full-time or in the field of their degree. According to the Bureau of Labor Statistics (2011), in 2010 the employment-population ratio for those with disabilities was 18.6%. The ratio for those without disabilities was 63.5%. While the ADA was adopted with the intention of assisting persons with disabilities in attaining gainful employment, there are many other factors at play (ADA, 1990). Some of those factors that are considered by persons with disabilities before they set out looking for a job are the corporate culture of disability acceptance, the lack of social skills with many different types of disabilities, and the question those with disabilities ask themselves after hiring – “Should I disclose my disability to an employer
The decisions persons with disabilities must make when searching for and attaining employment are vastly different than those of persons without disabilities (National Collaborative on Workforce and Disability [NCWD], 2009).

The price of unemployment for those with disabilities has far-reaching effects. The student and society at large are affected when the student cannot be employed even after being awarded a degree. The Alliance for Excellent Education (2011) states that “improving educational outcomes creates a wave of economic benefits that include boosting individual earnings, home and auto sales, job and economic growth, spending and investment, and tax revenue to the state”. When individuals cannot find work, there is a direct impact on the federal budget by overextending normal unemployment benefits, increasing spending on government assistance programs and reducing taxable wages (PEW Economic Policy Group, 2010). Students with disabilities may get work, but of a lower wage and position than they could potentially obtain with their given degree, having a lesser societal impact, but still having consequences for the individual with disabilities as well as the larger community. Students with disabilities have a much higher chance of living in poverty than their non-disabled peers. From 2009 to 2010 the number of persons with disabilities, aged 18 to 64, who are living in poverty jumped from 25 % to 27.9 % (Walt, Proctor, & Smith, 2011).

The unemployment figures and poverty statistics have a variety of core issues that cannot be addressed by higher education alone. But providing career and job services as part of postsecondary support for students with disabilities can provide another tool for the students’ success (Enright, Conyers, & Szymanski, 1996; GAO, 2009). Many of these students are connected with community providers including Vocational
Rehabilitation. Seeking ways to provide these services in conjunction with outside local providers may help stem the tide of unemployment and poverty for this population.
Chapter 3

Methodology

The purpose of this study was to determine university students diagnosed with Attention Deficit Hyperactivity Disorder prior to age eighteen compared to university students diagnosed with Attention Deficit Hyperactivity Disorder after age eighteen, utilization of university disability services supporting initial access, academic accommodations, and continuous enrollment.

Participants

**Number of participants.** The maximum accrual ($N = 63$) for this study included a naturally formed group of university students ($n = 34$) who met the diagnostic criteria for Attention-Deficit/Hyperactivity Disorder (ADHD; DSM-IV-TR, 2000) and were diagnosed between the ages of birth to age 18 years and a naturally formed group of university students ($n = 29$) who met the diagnostic criteria for ADHD and were diagnosed after age 18 years.

**Gender of participants.** Of the total number of selected participants who met the criteria for childhood diagnosis of ADHD, diagnosed prior to age eighteen ($n = 34$) 12 (35%) were female and 22 (65%) were male. Of the total number of selected subjects who met the criteria for adult diagnosis of ADHD, diagnosed after age eighteen ($n = 29$) 14 (48%) were female and 15 (43%) were male.

**Age range of participants.** The age range for all study participants was from 18 years to 54 years. All participants had been enrolled in the university within the last twelve-month period.
Racial and ethnic origins of participants. Of the total number of selected subjects who met the criteria for childhood diagnosis of ADHD \((n = 34)\) 1 (3%) was bi-racial and 33 (97%) were Caucasian. Of the total number of selected subjects who met the criteria for adult diagnosis of ADHD \((n = 29)\) 4 (11%) were African-American, 1 (3%) was Arab, 2 (6%) were Asian, 1 (3%) was Hispanic, 2 (6%) were bi-racial, and 25 (71%) were Caucasian.

Inclusion criteria of participants. Students who enrolled in the university within the last twelve-month period and had a diagnosis of ADHD recorded with the Disability Services Office were included in the study.

Method of participant identification. All first year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of two semesters, all second year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of four semesters, all third year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of six semesters, and all fourth year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of eight semesters were identified for participation.

Description of Procedures

Research design. The posttest only comparative efficacy study design is displayed in the following notation.

Group 1 \(X_1 Y_1 O_1\)

Group 2 \(X_1 Y_2 O_1\)
**Group 1 = study participants #1.** A naturally formed group of university students diagnosed with ADHD between the ages of birth to age 18 years \((n = 34)\).

**Group 2 = study participants #2.** A naturally formed group of university students diagnosed with ADHD after age 18 years \((n = 29)\).

**\(X_1 = \text{study constant.}\)** All study participants were utilizing Disability Services supports based on their DSM-IV-TR disability verification.

**\(Y_1 = \text{study independent variable diagnosis date, condition #1.}\)** University students diagnosed with ADHD between the ages of birth to age 18 years

**\(Y_2 = \text{study independent variable diagnosis date, condition #2.}\)** University students diagnosed with ADHD after age 18 years.

**\(O_1 = \text{study posttest dependent measures.}\)** (1) Access as measured by Initial request to utilize Disability Services from (a) self, (b) family, or (c) faculty. (2) Academic accommodations as measured by student need for utilization of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time. (3) Continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of six semesters, and (d) all fourth year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of eight semesters.
Implementation of Disabilities Services. The independent variables for this study were University students diagnosed with ADHD prior to age 18 years and University students diagnosed with ADHD after age 18 years. Enrolled University students are required to submit documentation of ADHD to the Disability Services Office of the University according to the guidelines of the Americans with Disabilities Act (ADA) in order to be eligible to receive supports. Upon meeting with Disability Services staff, appropriate accommodations must be requested by the student and approved by the Disability Services Office according to the needs of the student and how the disability affects their functioning in the classroom. Written notifications of approved accommodations are sent from the Disability Services Office to faculty and staff who are required to implement the approved accommodations in accordance with ADA guidelines. Faculty and staff may request guidance about implementation policy and practice of the approved accommodations from the Disability Services Office.

Dependent Measures

The study’s three dependent variables were (1) access, (2) academic accommodations, and (3) continuous enrollment.

Research Questions and Data Analysis

Research Question #1. Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to Disability Services requested by (a) self, (b) family, or (c) faculty?

Research Question #2. Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18
years have congruent or different access to academic accommodations of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time?

**Research Question #3.** Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of six semesters, and (d) all fourth year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of eight semesters?

**Analysis and Data Collection.**

Research questions 1, 2, and 3 were analyzed utilizing a chi-square ($\chi^2$) test of significance. Because multiple statistical tests were conducted, a .01 alpha level was employed to help control for Type 1 errors. Frequencies and percentages will be displayed in tables.

All university student initial access to services, academic accommodations, and continuous enrollment data was retrospective, archival, and routinely collected university information. Permission from the appropriate university research personnel was obtained. Naturally formed groups of 34 students in one arm and 29 students in the other include initial access at services, academic accommodations, and continuous enrollment data. Non-coded numbers were used to display de-identified initial access to services,
academic accommodations, and continuous enrollment data. Aggregated group data, descriptive statistics, and parametric statistical analysis were used and reported with means and standard deviations in tables.

**Performance site.** This research was conducted in the school setting through normal educational and assessment practices. The study procedures did not interfere with the normal educational and assessment practices of the school and did not involve coercion or discomfort of any kind. Data was stored on spreadsheets and computer flash drives for statistical analysis in the office of the primary researcher and the dissertation chair. Data and computer files were kept in locked file cabinets. No individual identifiers were attached to the data.

Institutional Review Board (IRB) for the protection of Human Subjects Approval Category. The exemption categories for this study were provided under 45CFR.101 (b) categories 1 and 4. The research was conducted using routinely collected archival data. A letter of support from the university was provided for IRB review.
Chapter 4

Results

Purpose of the Study

The purpose of this study was to determine university students diagnosed with Attention Deficit Hyperactivity Disorder prior to age eighteen compared to university students diagnosed with Attention Deficit Hyperactivity Disorder after age eighteen, utilization of university disability services supporting initial access, academic accommodations, and continuous enrollment. Research questions 1, 2, and 3 will be analyzed utilizing a chi-square ($\chi^2$) test of significance. Because multiple statistical tests were conducted, a .01 alpha level was employed to help control for Type 1 errors. Frequencies and percentages will be displayed in tables.

All university student initial access to services, academic accommodations, and continuous enrollment data was retrospective, archival, and routinely collected university information. Permission from the appropriate university research personnel was obtained. Naturally formed groups of 34 students in one arm and 29 students in the other include initial access to services, academic accommodations, and continuous enrollment data. Non-coded numbers were used to display de-identified initial access to services, academic accommodations, and continuous enrollment data. Aggregated group data, descriptive statistics, and parametric statistical analysis were used and reported with means and standard deviations in tables.

Research questions 1, 2, and 3 will be analyzed utilizing a chi-square ($\chi^2$) test of significance. Because multiple statistical tests were conducted, a .01 alpha level was
employed to help control for Type 1 errors. Frequencies and percentages will be displayed in tables.

Research Question #1

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to Disability Services requested by (a) self, (b) family, or (c) faculty?

The results of $\chi^2$ displayed in Table 2 were not significantly statistically different ($\chi^2 (1, N = 63) = 0.03$). The null hypothesis of no difference for referral point of students diagnosed with ADHD before age eighteen and after age eighteen was not rejected. There was no significant difference in accessing services considering the source of referral to the Disability Services Office.

Research Question #2

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to academic accommodations of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time?

The results of $\chi^2$ displayed in Table 3 were not significantly statistically different ($\chi^2 (1, N = 148) = 3.23$). The null hypothesis of no difference for congruency of student accommodations for students diagnosed with ADHD before age eighteen and after age eighteen was not rejected. There was no significant difference in accommodation choice when accessing the Disability Services Office. The number of responses differed from the number of participants due to the fact that an individual student could have multiple accommodations administered during a given semester.
Research Question #3

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of six semesters, and (d) all fourth year students with a diagnosis of ADHD recorded with the Disability Services Office and continuous enrollment of eight semesters?

The results of $\chi^2$ displayed in Table 4 were not significantly statistically different ($\chi^2 (1, N = 63) = 4.84$). The null hypothesis of no difference for continuous enrollment of students diagnosed with ADHD before age eighteen and after age eighteen was not rejected. There was no significant difference in students maintaining continuous enrollment in accessing services with the Disability Services Office.

Summary

In summary, the results showed no significant difference in students diagnosed with ADHD before age eighteen compared with students diagnosed with ADHD after age eighteen in utilization of university disability services supporting initial access, academic accommodations, and continuous enrollment.
Table 1
Demographic Data for Disability Students Participant Students
August 2011 through May 2012

<table>
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<th>Student Number</th>
<th>Gender</th>
<th>Date of Birth</th>
<th>Class Standing</th>
<th>Program</th>
<th>Diagnosis Category</th>
</tr>
</thead>
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<td>01/08/93</td>
<td>Freshman</td>
<td>Criminal Justice</td>
<td>Child</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>05/22/90</td>
<td>Freshman</td>
<td>Undeclared</td>
<td>Child</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>11/03/92</td>
<td>Freshman</td>
<td>Undeclared</td>
<td>Child</td>
</tr>
<tr>
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<td>6</td>
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<tr>
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<td>8</td>
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<td>9</td>
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<tr>
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Table 1 (con’t)

Demographic Data for Disability Students Participant Students
August 2011 through May 2012

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<thead>
<tr>
<th>Student Number</th>
<th>Gender</th>
<th>Date of Birth</th>
<th>Class Standing</th>
<th>Program</th>
<th>Diagnosis Category</th>
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<tr>
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</table>
Table 1 (con’t)

Demographic Data for Disability Students Participant Students
August 2011 through May 2012

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<thead>
<tr>
<th>Student Number</th>
<th>Gender</th>
<th>Date of Birth</th>
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<th>Program</th>
<th>Diagnosis Category</th>
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<tr>
<td>Birth to 18</td>
<td>19 (53%)</td>
<td>5 (50%)</td>
<td>9 (53%)</td>
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</tr>
<tr>
<td>After age 18</td>
<td>17 (47%)</td>
<td>5 (50%)</td>
<td>8 (47%)</td>
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<tr>
<td>Total</td>
<td>36 (100%)</td>
<td>10 (100%)</td>
<td>17 (100%)</td>
<td>0.03</td>
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<tr>
<td>Diagnosis Category</td>
<td>Extended exam time</td>
<td>Notetaker</td>
<td>Reduced distraction space for exams</td>
<td>Flexible assignment due dates</td>
<td>( \chi^2 )</td>
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<td>--------------------</td>
<td>-----------</td>
<td>-------------------------------------</td>
<td>------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Birth to 18</td>
<td>33 (49%)</td>
<td>25 (66%)</td>
<td>16 (50%)</td>
<td>5 (45%)</td>
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</tr>
<tr>
<td>After age 18</td>
<td>34 (51%)</td>
<td>13 (34%)</td>
<td>16 (50%)</td>
<td>6 (55%)</td>
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<tr>
<td>Total</td>
<td>67 (100%)</td>
<td>38 (100%)</td>
<td>32 (100%)</td>
<td>11 (100%)</td>
<td>3.23</td>
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Table 4

Access to Disability Services Based on Continuous Enrollment

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<th>Diagnosis Category</th>
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<th>( \chi^2 ) (a)</th>
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<tr>
<td></td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Birth to 18</td>
<td>27 (61%)</td>
<td>5 (28%)</td>
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<tr>
<td>After age 18</td>
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<td>13 (72%)</td>
</tr>
<tr>
<td>Total</td>
<td>44 (100%)</td>
<td>18 (100%)</td>
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</table>

(a) Significant for alpha = .05, not significant for alpha = .01.
Chapter 5

Conclusions and Discussion

The purpose of this study is to determine university students diagnosed with Attention Deficit Hyperactivity Disorder prior to age eighteen compared to university students diagnosed with Attention Deficit Hyperactivity Disorder after age eighteen, utilization of university disability services supporting initial access, academic accommodations, and continuous enrollment.

Conclusions

The following conclusions may be drawn from the study for each of the three research questions.

Research Question #1

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different access to Disability Services requested by (a) self, (b) family, or (c) faculty?

The results of $\chi^2$ displayed in Table 2 were not significantly statistically different ($\chi^2 (1, N = 63) = 0.03$). The null hypothesis of no difference for referral point of students diagnosed with ADHD before age eighteen and after age eighteen was not rejected. There was no significant difference in accessing services considering the source of referral to the Disability Services Office.

Research Question #2

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent
or different access to academic accommodations of (a) preferential seating, (b) note taker, (c) reduced distraction space, and (d) extended exam time?

The results of $\chi^2$ displayed in Table 3 were not significantly statistically different ($\chi^2 (1, N = 148) = 3.23$). The null hypothesis of no difference for congruency of student accommodations for students diagnosed with ADHD before age eighteen and after age eighteen was not rejected. There was no significant difference in accommodation choice when accessing the Disability Services Office. The number of responses differed from the number of participants due to the fact that an individual student could have multiple accommodations administered during a given semester.

**Research Question #3**

Did university students diagnosed with ADHD between birth to age 18 years compared to university students diagnosed with ADHD after age 18 years have congruent or different continuous enrollment as measured by (a) all first year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of two semesters, (b) all second year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of four semesters, (c) all third year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of six semesters, and (d) all fourth year students with a diagnosis of ADHD recorded with the Disabilities Service Office and continuous enrollment of eight semesters?

The results of $\chi^2$ displayed in Table 4 were not significantly statistically different ($\chi^2 (1, N = 63) = 4.84$). The null hypothesis of no difference for continuous enrollment of students diagnosed with ADHD before age eighteen and after age eighteen was not
rejected. There was no significant difference in students maintaining continuous enrollment in accessing services with the Disability Services Office.

Discussion

Even with improved services and evaluation provided in the K-12 educational system, the results are still not improving for students with disabilities and their outcomes from postsecondary education. Students with ADHD are much less likely to pursue a postsecondary education than are their non-disabled peers (Barkley, Murphy, & Fischer, 2008). Estimates of just how many students with ADHD are enrolled in college campuses across the nation are hard to come by because of the lack of the need to disclose a disability by the student when they enroll in universities and community colleges. Judging from those being served by disability services providers across the nation, students with ADHD account for about 25% of the total disabled population being served by student service offices (Wolf & Shin, 1999). Consensus from disability professionals across the nation is that the number of students at postsecondary institutions is vastly underreported. Students and faculty are trying to manage in the classroom without accommodations that these students are entitled to and used to receiving, especially if they had any special services delivered in high school.

In a world where human capital can greatly influence your rate of employment and upward mobility, the completion of a postsecondary education is of significant importance (U.S. Government Accountability Office [GAO], 2007). The snowball effect of disability, educational experiences and lack of social skills have an effect on the daily life of students as they strive for an education, seek to graduate with a degree and gain and maintain employment for their lifetime. If having ADHD has a direct impact on
learning academic material, it would stand to reason that learning the nuanced skills of social interaction and functioning would suffer as well (Meaux et al., 2009). It may stand out even more since those skills are taught by observance and inference more so than direct instruction. It is understandable how moving away from high school into postsecondary options could be daunting for a student with ADHD. Difficulty with academic material and social learning can create a perfect storm of doubt, low self-esteem and repeated failure.

“My professor/advisor/mom/dad said I should come and see you”. One of the measures of self-advocacy was the referral source in accessing the Disability Services Office on campus. There was not a significant difference in how the student came to know that these services existed on campus whether by their own report, family urging or faculty reference. The Palmer & Roessler (2000) and Torkelson Lynch & Gussell (1996) studies claimed that those students who received special education services in secondary school requested assistance at higher rates than non-disabled students because of their exposure to those supports in previous educational environments. The results here seem to contradict these conclusions. It seems those students who had previously received services would be better at self-advocating and reporting their disability. Under this assumption, it is expected that there would be a significant result for students self-reporting.

“I don’t even know what accommodations are offered or how you can help me”. Accommodations requested are another measure of self-advocacy. Oftentimes in secondary settings, students are not responsible for making decisions about what accommodations are available and most effective for them. Effective transition services,
as encouraged in the 2004 reauthorization of IDEA, was a measure implemented to help alleviate this problem for special education students and their families. There was no significant difference in choice of accommodations in the study. This closely reflects what was discovered in the study by Lancaster, Mellard, & Hoffman (2001), when they found that 40% of the students with disabilities reported difficulty asking questions, talking with teachers and other verbal skills. The difficulty begins in secondary school if the students do not have a voice during the IEP process in choosing accommodations that work for them and making an evaluation about their efficacy for the future. As these students move to the postsecondary environment, they lose the structure in which their services are delivered under IDEA, the support of secondary staff, and the involvement of family in their educational services. Students with ADHD who enroll in college begin to act as their own advocate for services. They can choose not to report their disability and refuse accommodations and the services provided by the campus office.

“I think the best option is to drop all my classes and finish my degree later”.

Persistence to completion of a college degree is vital to the success of any student that enrolls in postsecondary education, but especially to those students with disabilities. While more than 70% of students who graduate from high school will enroll in postsecondary education, only about half of those students will graduate from a four year institution with a degree within six years, and only 20% of those who enroll in community college will graduate with an associate’s degree within three years (Jones, 2011). When comparing persistence rates of students with disabilities to those of students without disabilities, studies have shown varied results, but with a substantially larger number of the studies finding that students with disabilities have significant difficulties
completing their college degree. The study by Wessel et al. (2009) showed consistent graduation rates for students with disabilities, as did our results for ADHD students. However, the deFur, Getzel, & Trossi (1996), Mamiseishvili & Koch (2012), Berkner et al. (1996), and Cowles & Keim (1995) studies all showed diminished degree completion rates for students with disabilities.

Mamiseishvili and Koch’s research found that 25% of the students did not continue during their first year and 51% left before the completion of their third year. Delayed enrollment after high school also had an effect on the level of student persistence. The study by Berkner et al. (1996) also showed similar results. They found that 53% of students with disabilities had persisted as compared with 64% of those without disabilities, and 41% of students with disabilities had graduated compared with 51% of those without disabilities. The Cowles & Keim (1995) study found similar results of 24% of students with disabilities graduating in six years compared to 43% of those students without a diagnosis. Most of those students with disabilities that did graduate did so with special services provided to them. Statistics on persistence are bleak whether one is a non-disabled college student or one with disabilities. Lack of persistence and the subsequent consequences are a multi-faceted problem for any college student, but one that requires particular attention for students with disabilities.

Self—Advocacy and Transitioning

Self-advocacy is a thread that runs through all three research questions. The ability of a student with disabilities to self-advocate directly relates to that student’s ability to access services on campus, request accommodations, and communicate with instructors about individual accommodations (Carney et al., 2007; Durlak, Rose,
Bursuck, 1994; Torkelson Lynch & Gussel, 1996). Initial access examines the ability of the student to find information about the office of disability services on their own. Accommodation choice is a reflection of a student’s knowledge of their own disability and the success of previously provided accommodations. Rate of continuous enrollment is an all-encompassing reflection of the ability to self-advocate. To persist in postsecondary education basic self-advocacy skills must expand further to continuous self-evaluation in combination of course requirements and environmental settings.

When discussing transition skills for postsecondary education, the accepted definition is quite limited considering all the skills that are needed for success at the college level. When teaching self-advocacy skills most secondary special education faculty are teaching students to be able to tell someone what their disability is, how it affects their daily activities, and be able to ask for accommodations (Webb et al., 2008). These skills barely scratch the surface of what is needed to be a proper self-advocate and complete college successfully. And with many more students with disabilities receiving their education in general education classrooms, all teachers need to be aware of transition goals and how to teach the necessary skills to move on to postsecondary education (Denney & Daviso, 2012). Secondary teachers in all disciplines, not just special education teachers, need to understand what students with disabilities need to be successful in their postsecondary ventures.

Typically, when secondary teachers are setting transition goals on IEPs and they focus on the skill of self-advocacy, that definition is very limited. True self-advocacy, which is needed to become successful in any postsecondary program, goes beyond seeking the services office, stating their disability, and explaining what type of
accommodations they would like to receive. The skills necessary involve initiating a conversation, explaining their needs, identifying resources, making and affirming agreement, and closing a conversation. Other necessary skills include those important to conflict resolution: identifying the issue, reflecting, collaborating, selecting a solution together, and summarizing what was decided (Palmer & Roessler, 2000).

In Palmer & Roessler’s (2000) study, students were taught self-advocacy skills in an eight hour training using the Self-Advocacy Conflict Resolution Training (SACR). Although results were based on role play scenarios and not real classroom situations, results showed significant improvement in the subjects’ self-advocacy and conflict resolution skills and they were able to request accommodations in the classroom. This training seemed to give students with disabilities the competence and self-efficacy to be proactive with instructors when requesting accommodations or any other type of support in the classroom.

When secondary schools build relationships with the postsecondary service providers they can provide invaluable information about what services will be provided for students with disabilities (NJCLD, 2007). IEP transition goals are formulated by secondary faculty based upon assumed supports that are provided in the postsecondary setting without any communication from that school. Many times faculty in the secondary setting are unclear and misinformed about what services will be provided. Through outreach efforts between the two educational settings, faculty and staff can understand what accommodations will be provided at the postsecondary level and secondary transition goals can be determined accordingly to provide students with disabilities the best chance for success as they transition to that college’s campus. In an
effort to alleviate gaps in knowledge of self-advocacy skills, college campuses can provide a training or orientation in these skills much like that examined in the Palmer & Roessler (2000) study. However, these skills can be taught more effectively in the secondary setting where experiences can be scaffolded and consequences may be less severe than in the postsecondary setting. Teaching self-advocacy skills over years compared with an eight hour seminar in college is clearly more advantageous for a students continued success through postsecondary education and transition to adult living.

**Persistence and Retention of Students with Disabilities**

Data from the Bureau of Labor Statistics finds that in 2010, persons with disabilities had a low full-time employment rate of 17.8% compared with 63.6% for those without a disability. Stemming from the employment figures, it is not surprising that 28% of persons with disabilities aged 18-64 are living in poverty (Walt et al., 2011). A college degree is one of the best ways for an individual to reach and maintain steady employment for a lifetime. Encouraging entry into any type of postsecondary education and persistence to degree completion may begin to stem the tide of this cycle of low employment and poverty where persons with disabilities find themselves caught.

There has been a recent increase in the number of students with disabilities who are entering postsecondary education. 60% of secondary students with disabilities were reported to have attended postsecondary education within eight years of graduating high school (Newman et al., 2011). As that number continues to increase, it is important to realize what factors lead to a student persisting or not. Many connections can be made from studies about what keeps all students engaged in college, but special circumstances
must be realized and addressed when discussing students with disabilities. Students with disabilities encounter many barriers other students do not have to face including awareness of supports that are available, the ability to self-advocate, financial strain in paying for education and disability related expenses, daily effects of their disability, stigma associated with their disability, and faculty interactions and the student’s ability to handle them (GAO, 2009; Wessel et al., 2009).

Using the chi-square analysis, students with disabilities in our study did not show significant differences in continuous enrollment when comparing students who were diagnosed before age eighteen versus after age eighteen. Continuous enrollment can be the larger result of the effects of self-advocacy through the postsecondary system. These results may indicate that those students who received services in the K-12 setting may benefit from more directed goals that address specific skills necessary in the postsecondary setting. All students with disabilities who need support would benefit from the Disability Services Office maintaining a higher profile and educating students on campus about what services can be provided.

Keeping students enrolled in college programs requires a multi-faceted approach to retention. It begins with students receiving the right type of transition services in secondary programs that teach the skills that are necessary to move forward to postsecondary education. These students need to become aware of what types of services are available on postsecondary campuses. This effort needs to combine the services of both secondary and postsecondary faculty and staff. Secondary staff needs to have relationships with postsecondary service providers to see what is available for students on the college campus. Then, college campuses need to be sure that their services are
accessible for students that need them. They need to be accessible both in visibility on
campus and ease of providing supports to students.

Research has shown that those students that persist beyond the first year and
enroll for a second year are more likely to persist to graduation (Horn & Carroll, 1998).
As shown in their study on first-to-second-year persistence of students with disabilities,
Mamiseishvili and Koch (2012), found academic as well as social integration had a
significant effect on a student’s persistence from the first to the second year. In fact,
social integration was shown to play a more significant effect in persisting through the
second year than academic integration. In their study 14.7% of students with disabilities
never had any contact with faculty outside of class and 57.6% had never participated in
any type of social activities on campus. The implications of this study do not apply
simply to the disability services office of campus. Including students with disabilities
becomes the task of any staff or faculty member that touches the daily campus life of a
student with disabilities. Even with disability services personnel, providing supports
away from academic accommodations is a new idea. Providing social direction and
supports moves away from concrete thinking that has applied to academic
accommodations into the more abstract realm of providing supports that involve getting
students involved in student groups, how to make friends and the nuances of social skills
that can be incredibly difficult to understand and teach to students. The stakes are
extremely high for students with disabilities. Teaching and reinforcing these life skills
can lead to the eventual completion of a college degree and become invaluable skills that
will lead to a job and increased life satisfaction, and hopefully begin to break the cycle of
poverty that plagues many people with disabilities.
**Implications for practice**

This study supports the finding that self-advocacy is the benchmark skill for success in education, secondary and postsecondary, as well as going forward in jobs and living a productive and successful life (Torkelson Lynch & Gussel, 1996). Instead of hoping that secondary schools are doing their part in teaching and reinforcing those skills that are necessary in postsecondary education, there needs to be a linkage between the two settings to offer support and guidance when formulating and discussing goals for a student’s transition plan on their IEP (Madaus & Shaw, 2006). Knowing the integral nature of these skills in continued success, colleges may not want to be out of the discussion when these skills are being taught in secondary school. First Years’ Experience (FYE) courses are becoming mandatory for freshman students on many campuses across the country to orient themselves to campus academic life (Hunter, 2006). Self-advocacy training may be a step further to maintain that students with disabilities have access to information about what it means to be proactive in all areas of their own education.

**Implications for policy**

A large number of students that would benefit from services on campus aren’t even aware that the services exist (Collins & Mowbray, 2005). For some students, services that are necessary for their success are not available on campuses because of the philosophical shift that is currently occurring regarding hidden disabilities. Currently, the standard services offered by campus disability services offices are more classic classroom accommodations such as extended testing time, notetakers, access to technology in the classroom, and reduced distraction space for testing (Sharpe et al., 2004). As more and
more students report hidden disabilities to campus Disability Services offices, the needs and the accompanying interventions must become more innovative. Accommodations for students with hidden disabilities will revolve more around behavioral, environmental, and social concerns (Rickerson et al., 2004).

To serve the campus community properly, campus staff managing the accommodations of students with hidden disabilities must have a command of legislation connected to serving these students: ADA, Section 504, FERPA, and HIPAA (NJCLD, 2007). In accordance with ADA, services for students with disabilities, especially those with hidden disabilities, will also involve accommodating student life outside the classroom, including housing concerns and extra-curricular activities. Implementing these accommodations requires more intervention and problem solving skills from those providing services to disabled students (Sharpe et al., 2004). Becoming a source of support and information for faculty dealing with these students daily is another function of the disability services office (Carney et al., 2007; Gobbo & Shmulsky, 2007). When faculty operates on stereotypes and assumptions about students with hidden disabilities the conflicts can compound quickly. Campus student service providers need a clear understanding that providing campus-wide service includes supporting students as well as faculty and staff interacting with those students.

**Implications for further research**

Educational outcomes for students with disabilities have been researched more extensively for students in the K-12 setting than for adult students in the postsecondary setting (Rath & Royer, 2002). Difficulties exist in knowing the true number of students with disabilities on college campuses, but of those that are receiving services in
postsecondary education, further research could explore the success of different accommodations for specific groups of disabilities, how specific accommodations affect the persistence and retention of students with disabilities. With self-determination being the most vital skill for success in postsecondary ventures (Carney et al., 2007), research into transition services provided in secondary school and their linkage to success in the postsecondary environment could be advantageous to creating true postsecondary goals that will meet the needs of the student who plans on attending college after high school graduation.

**Summary**

Students with disabilities are a population that continues to grow on college campuses across the country. As the types of disabilities that students come to campus with continue to expand and grow, our services need to continue to meet that constantly changing need. That need to grow and change does not lie simply with the Disability Services Office on campus, but with all staff and faculty that touch those students. A campus-wide effort is necessary to see that the students are receiving the necessary services they are entitled to. At the same time that services need to expand on college campuses, communication between secondary and postsecondary service providers is necessary to see that the desired end result – completion of a college degree - is within the grasp of the student with disabilities. Through these efforts they have the best possible chance of reaching their goals, accessing gainful employment and breaking the poverty cycle for their families and further generations.

As Carrie moved through her first year of college, she realized that her hidden disabilities of anxiety and depression were affecting her much more than her ADHD
diagnosis. The classroom accommodations provided were extended time for testing and being able to take the exam in a room with less students than the regular classroom. This helped her in her daily classroom activities, but as that got better she felt her anxiety increase with each new day. Carrie knew no one on campus would be able to alleviate the anxiety for her, but had no idea what to do. She didn’t even believe there were accommodations to help with this problem, so she didn’t ask for any help with that. She had been to the Disability Services Office so many times, she did not want to look like those students who have so many problems.

Carrie did not get help and her problems became worse. She was seeing a community counselor outside of campus services and felt they were getting somewhere with therapy, but it really wasn’t progressing quickly enough to make the differences she needed at school and in her daily life. Carrie, again, felt helpless. She started missing classes and important deadlines. It now looked like she was on the track to failing the semester.

Carrie’s biology instructor pulled her aside one day after class. “Carrie, I’m wondering how you are doing. I notice that you aren’t coming to class consistently and your grades are suffering. I know you are registered with the Disability Services Office, have you talked to them lately about your concerns?” Carrie answered, feeling she could not hide anymore. “I’m just feeling that there isn’t anything they can do to help me. Everything just seems like it’s a mess and I can’t fix it. Do you think there is anything they can do?” Carrie’s instructor was unsure about what could be done, but felt a conversation with the Disability Services Office could help. She told Carrie to call them in the morning and arrange a meeting.
Carrie had the meeting with the Disability Services Office and described the problems she was having in classes due to her anxiety. The office approved some extra accommodations to help Carrie. She was allowed extra time to hand in her assignments and given permission to take frequent breaks during class time. They also arranged times for Carrie to come in the office to talk about how things were going with the new accommodations and discuss any difficulties she was having in the classroom, no matter how small the problem seemed. As Carrie left the office, she felt relieved. For the first time she felt like she was truly getting all the supports she needed to be successful in college.

Carrie spent the next few weeks using the new accommodations and started to feel truly competent in her classes. Of course, she stumbled a few times, but it seemed like it was easier to get herself back up and push forward. She began attending all her classes, participating more, and finally getting the grades she always knew she could achieve. She still had the anxiety, but it seemed to become more manageable lately.

Her parents called to check on how she was doing. They had many phone calls during the semester when Carrie was feeling low and wanting to quit. They tried their best to reassure her that she could succeed, but they weren’t sure if they were making the right decision. But this phone call with Carrie let them know that they had definitely made the right decision in encouraging her to carry on with her courses. Carrie told them of the help she had gotten from both the faculty and the Disability Services Office and what a difference it had made. They could hear the difference in her voice and her conviction in persevering. She told them that she had just met with her advisor and
registered for classes to come back next year. Her parents could not recall the last time they had heard this optimism and determination in her voice.

Carrie admitted that things looked vastly different than they had at the beginning of the school year. Most importantly, Carrie realized she was the one who had done the work to be successful this year. The necessary supports were provided for her, but in the end it was her work and ability to persevere that made her successful that year. Carrie told her parents that she was looking forward to coming home for summer break, but was eagerly anticipating her return to school next year.
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