

**Attention Deficit (Hyperactivity) Disorder-Is the current process of  
identifying, testing and treatment for students accurate?**

**By**

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**A Master's Research Project submitted in partial fulfillment**

**of the requirements for the degree**

**Master of Arts**

**Ottawa University**

**August, 2002**

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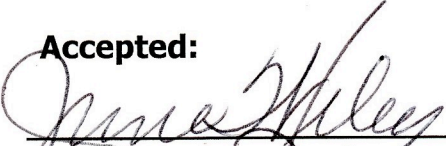
**June, 2002**

**APPROVED:**

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## **Abstract**

This study addresses the issue that college students may be misdiagnosed as ADD/ADHD by primary care physicians. This has the potential for students to not receive the proper treatment and accommodations. In addition, DeVry University may be spending money on accommodations that are not effective in increasing student learning. The research found that 17 of the 34 students receiving accommodations under Section 504 of the Americans with Disabilities Act. Of these 17 students, nine were diagnosed by their primary care physician. The study recommends further investigation by a licensed mental health professional to determine how many of these nine students are ADD/ADHD. Studies at other DeVry campuses and other universities are recommended.

## **DEDICATION**

I would like to dedicate this thesis to my wife Stacy and my wonderful children

Kirstin, Courtney and Kyle.

Without their love and support this thesis would not have been possible.

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# **CHAPTER ONE**

## **THE PROBLEM**

### **Introduction**

Attention Deficit Disorder / Attention Deficit Hyperactivity Disorder (ADD/ADHD), once called hyperkinesis or minimal brain dysfunction, is one of the most common mental disorders among children. Two to three times more boys are affected. On the average, at least one child in every classroom in the United States needs help from disorder (Hammer, 1997). Diagnosis over the last several decades has increased significantly as health professionals and researchers have been able to gain a better understanding of the disorder. However, non-mental health professionals are permitted to diagnose this disability. In many cases primary care physicians are left to diagnose this disorder based on recommendations from parents and educators (Stagg-Elliott, 1999). A primary treatment is to medicate the patient with stimulant drugs such as Ritalin.

### **Development of the Problem**

The basis for concern with ADD/ADHD is that the testing used for diagnosing the problem is more subjective than scientific and many individuals, mainly children, may be diagnosed with and medicated for ADD/ADHD when that may

not be the issue (Bailey, 1999). As an educational institution DeVry University - Phoenix Campus is required to comply with the Americans with Disabilities Act (A.D.A.) / Section 504. This act stipulates that students with a diagnosed disability will receive reasonable special accommodations. The accommodations are designed to reduce the effect of the student's disability on their education. When reviewing the special accommodation documentation at DeVry, it became apparent that the number of individuals diagnosed with ADD/ADHD is considerably disproportionate to other disabilities. In several instances, students have been diagnosed with a description of their "limitations" by primary care physicians as opposed to a full mental health assessment. In other words, primary care physicians are left to diagnose this disorder based on recommendations from parents and educators (Stagg-Elliott, 1999). More alarming is that patients are typically treated by primary care physicians the inexpensive way (Ritalin) rather than therapy with specialists.

### **Need for the Study**

There is no physical test currently available to diagnose ADD/ADHD. Kissinger (1998) states that accommodations under the A.D.A/Section 504 for ADD/ADHD has increased 21% each year over the last ten years. He believes that the subjective nature of the assessments may be responsible for this trend. DeVry University – Phoenix Campus has the goal of optimizing student learning at minimum cost. Students misdiagnosed with ADD/ADHD impact the university in two ways. First, the accommodation and treatments may not address the

underlying medical or mental issues. Second is that money is being spent on Section 504 of the Americans with Disabilities Act that are not helpful to the student.

## **Purpose**

The purpose of this study was to assess the accuracy of the methods utilized in the testing and diagnosing of ADD/ADHD students at DeVry University – Phoenix Campus.

## **Research Question**

Is the current process for identifying, testing and treatment of students attending DeVry University – Phoenix Campus diagnosed with ADD/ADHD accurate?

## **Definition of Terms**

Attention Deficit (Hyperactivity) Disorder (ADD/ADHD)- Attention Deficit (Hyperactivity) Disorder is a persistent pattern of inattention and/or hyperactivity that is more frequently displayed and is more severe than is typical for other individuals of the same developmental level (DSM IV, (2000) p.85).

Neurologist-the branch of medicine dealing with the nervous system and its diseases. (Webster p.395, 1990)

Psychiatrist-the branch of medicine dealing with disorders of the mind, including psychoses and neurosis. (Webster p. 475, 1990)

Psychologist-the science dealing with the mind and with mental and emotional process. (Webster p. 475, 1990)

Subjective-of or resulting from the feelings of the person thinking. (Webster p. 579, 1990)

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter presents information concerning the current methods of diagnosing Attention Deficit (Hyperactivity) Disorder, or commonly known as ADD/ADHD, and the potential for the over diagnosis of this disability. ADD/ADHD diagnosis has increased 21% per year for each of the last ten years. Ritalin production has increased over 700% during that same time period. (Johnson October 1999). Although some of this increase can be attributed to a greater understanding of the condition, many professionals have raised concerns that the testing is too subjective and the treatment (Ritalin) too severe. Also of concern is the lack of physical evidence when diagnosing ADD/ADHD.

#### **ADD/ADHD Defined**

ADD/ADHD is defined as the following:

Attention deficit hyperactivity disorder (ADHD) is the most commonly diagnosed behavioral disorder of childhood, estimated to affect 3 to 5 percent of school-aged children. ADHD includes by definition ADD. Its core symptoms include developmentally inappropriate levels of;

- attention
- concentration
- activity
- distractibility
- impulsivity

Children with ADHD usually have functional impairment across multiple settings including home, school, and peer relationships. ADHD has also been shown to have long-term adverse effects on academic performance, vocational success, and social-emotional development.

Children with ADHD experience an inability to sit still and pay attention in class and the negative consequences of such behavior. They experience peer rejection and engage in a broad array of disruptive behaviors. Their academic and social difficulties have far-reaching and long-term consequences. These children have higher injury rates. As they grow older, children with untreated ADHD in combination with conduct disorders experience drug abuse and anti-social behavior. For many individuals, the impact of ADHD continues in to adulthood.

Reuters (2000). Sub committee told of over diagnosis of ADHD in schools. <http://www.brain.com/cgi.bin>

Attention Deficit (Hyperactivity) Disorder is a persistent pattern of inattention and/or hyperactivity that is more frequently displayed and is more severe than is typical for other individuals of the same developmental level (DSM IV, (2000) p.85).

### **Prevalence of Individuals Diagnosed with ADD/ADHD**

The popularity of the drug Ritalin has encouraged some teachers to pressure physicians into prescribing this medication in children who are simply aggressive or have poor grades. In one study of fifth graders in two different cities, there was an average of 19% of the male students being treated with medication for ADHD. After careful re-testing at a medical center only 11% of those individuals

diagnosed actually had ADHD and 18% had no disability at all. The remainder were simply poor learners (Bailey, 2000).

Also to be noted, the symptoms for school age children suffering from ADD/ADHD are nearly identical to the signs of a gifted student. The following table indicates the criteria used in diagnosing each.

**Table 2. 1 Gifted Child Behaviors vs. ADD/ADHD Behaviors**

<b>Gifted Child</b>	<b>ADD/ADHD</b>
Poor attention, boredom, daydreaming in specific situations.	Poorly sustained attention in almost all situations
Low tolerance for persistence on tasks that seem irrelevant.	Diminished persistence on tasks not having immediate consequences.
Judgment lags behind development of intellect.	Impulsivity, poor delay of gratification.
Intensity may lead to power struggles with authorities.	Impaired adherence to commands to regulate or inhibit behavior in social contexts.
High activity level; may need less sleep.	More active, restless than most children.
Questions rules customs and traditions.	Difficulty adhering to rules and regulations.

ADHD, Myth or Reality? (America's Endangered Species, Mental Health, 1998)

### **Diagnosis Method for ADD/ADHD**

Currently, as listed by the American Academy of Pediatrics (2000), the diagnosing of ADHD is based on the following criteria:

**Table 2. 2 Diagnostic Criteria for Attention Deficit (Hyperactivity) Disorder**

<b>A. Either 1 or 2</b>
<b>1. Six or more of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:</b>
<b><i>Inattention</i></b>
a) Often fails to give close attention to details or makes careless mistakes in schoolwork, work or other activities.
b) Often has difficulty sustaining attention in tasks or play activities.
c) Often does not seem to listen when spoken to directly.
d) Often does not follow through on instructions and fails to finish schoolwork, chores, or other duties in the workplace (not due to oppositional behavior or failure to understand instructions).
e) Often has difficulty organizing tasks and activities.
f) Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework).
g) Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools).
h) Is often easily distracted by extraneous stimuli.
i) Is often forgetful in daily activities.
<b>2. Six or more of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:</b>
<b><i>Hyperactivity</i></b>
a) Often fidgets with hands or feet or squirms in seat.
b) Often leaves seat in classroom or in other situations in which remaining seated is expected.
c) Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents and adults, may be limited to subjective feelings of restlessness).
d) Often has difficulty playing or engaging in leisure activities quietly.

e) Is often "on the go" or often acts as if "driven by a motor".
f) Often talks excessively.
<b><i>Impulsivity</i></b>
g) Often blurts out answers before questions have been completed.
h) Often has difficulty awaiting turn.
i) Often interrupts or intrudes on others (e.g., butts in to conversations, or games).
B. Some hyperactivity–impulsive or inattentive symptoms that caused impairment were present before age 7.
C. Some impairment from the symptoms is present in 2 or more settings (e.g., at school, work, or at home).
D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.
E. The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, or personality disorder).
<b>Code based on type (from DSM IV)</b>
<b>314.01 Attention Deficit/Hyperactivity Disorder, Combined Type:</b> if both criteria A1 and A2 are met for the past 6 months.
<b>314.00 Attention Deficit/Hyperactivity Disorder, Predominantly Inattentive Type:</b> if criterion A1 is met but A2 is not met for the past 6 months.
<b>314.01 Attention Deficit/Hyperactivity Disorder, Predominantly Hyperactive Impulsive Type:</b> if criterion A2 is met but criterion A1 is not met for the past 6 months.
<b>314.9 Attention Deficit/Hyperactivity Disorder Not Otherwise Specified.</b>

This criteria is subjective and currently there are no approved physical tests available to diagnose Attention Deficit (Hyperactivity) Disorder. Because there is no physical testing available, results from tests are subject to the interpretations of the individual administering the assessment. If an individual were to approach

a primary care physician and describe symptoms from table 2.2, they may be diagnosed as ADD/ADHD when these symptoms could be caused also by underlying physical or mental disorders.

### **Potential for Over Diagnosis of ADD/ADHD**

Due to the subjective nature of the assessment of Attention Deficit (Hyperactivity) Disorder, many health professionals are concerned that this condition may be over diagnosed. According to Cynthia Hammer, MSW (1997) "There is no test for ADD. The diagnosis of ADD is made based on your history with, when possible, corroboration from others who knew you as a child or who know you now. Testing may be helpful to learn more about your mental strengths and weaknesses, but not to learn if you have ADD." As there are no scientific or physical tests available to assess ADD/ADHD, diagnosis by a mental health professional specializing in this disorder is necessary. The fact is, many physical and mental conditions can produce the behaviors identified in the current assessment of ADD/ADHD. The following are scenarios that could lead to the false diagnosis of this condition:

Tyrone and Mimi are two example of how classroom conditions can elicit behaviors that look like ADHD. For months, Tyrone shouted answers out in class, then became disruptive when the teacher ignored him. He certainly seemed hyperactive and impulsive. Finally after observing Tyrone in other situations, his teacher realized he just wanted approval for knowing the right answer. She began to seek opportunities to call on him and praise him. Gradually, Tyrone became calmer and more cooperative.

Mimi, a fourth grader, made loud noises during reading group that constantly disrupted the class. One day the teacher realized that the book was too hard for Mimi. Mimi's disruptions stopped when she was placed in a reading group where the books were easier and she could successfully participate in the lesson.

Attention Deficit Hyperactivity Disorder (2000). National Institute of Health.  
<http://www.kidsource.com>

Like Tyrone and Mimi, some children's attention and class participation improve when the class structure and lessons are adjusted a bit to meet their emotional needs, instructional level, or learning style. Although such children need a little help to get on track at school, they may not have ADHD.

The following are some additional conditions, which are commonly misidentified as ADD/ADHD;

- Underachievement at school due to a learning disability
- Attention lapses caused by petit mal seizures
- A middle ear infection that causes an intermittent hearing problem
- Disruptive or unresponsive behavior due to anxiety or depression.

Attention Deficit Hyperactivity Disorder (2000). National Institute of Health.  
<http://www.kidsource.com>

Some attribute the rise in diagnosis on the policies of the federal government. The Individuals with Disabilities Education Act (IDEA) directs money to school districts so they can treat disabled children. Patti Johnson, a

member of the Colorado State Board of Education, was quoted as saying "ADHD has become a way for financially strapped schools to make ends meet" (Resolution to ban Ritalin. (1999) [www.nfgcc.org/banritalin](http://www.nfgcc.org/banritalin)). Another concern with the assessment process is that many times, especially with managed health care, primary care physicians are left to diagnose this disorder based on parental or educator information and subjective testing. Specialists are now questioning whether physicians have sufficient interaction with their patients to diagnose ADHD. Daniel Kessler, MD, Director of Development and Behavioral Pediatrics at St. Josephs Hospital and Medical Center states "there's no way to make an adequate assessment in a seven minute visit, so what we have is a situation where teachers complain and physicians write a prescription". Dr. Marisela Dominquez, MD, Assistant Professor in family medicine at the University of Illinois in Chicago echoed this sentiment by stating that primary care doctors should not diagnose ADHD without input from other health professionals. "All we can do is screen, and then refer. Appropriate referral for appropriate testing is a must" (Doctors caught in the middle of ADHD treatment controversy. (1999) <http://www.ama.asn.org>).

The following table shows which professionals are able to diagnose ADD/ADHD.

**Table 2. 3 Limitations for treatment of AD(H)D by specialist**

<b>Specialty</b>	<b>Can diagnose ADHD</b>	<b>Can prescribe medications if needed</b>	<b>Provides counseling or training</b>
<b>Psychiatrist</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Psychologist</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>
<b>Pediatrician or family physician</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>
<b>Neurologist</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

(National Institute of Health, 2000)

Hope is around the corner however. Boston Life Sciences has utilized a radio imaging procedure which in tests, has been able to identify differences between patients previously diagnosed with ADHD and individuals who were determined "normal". The process had originally been tested for diagnosing Parkinson's Disease (Bailey, 2000).

## **Summary**

In summary, ADD/ADHD is a real disability that has the potential of preventing children from becoming productive, successful adults. Medications such as Ritalin have proven to be extremely effective in controlling the symptoms of ADD/ADHD and should continue to be used until safer more effective solutions are available. Before prescribing medication to control the child, a thorough assessment by a mental health professional should be given to the individual, as the symptoms of ADD/ADHD are similar to many different behavioral problems. The current process for diagnosis permits primary care physicians to assess individuals displaying symptoms of AD(H)D. If the student is not correctly diagnosed, the special accommodation granted under Section 504 of the

Americans with Disabilities Act may not be appropriate. Without the appropriate accommodation, the student's success may be at risk.

## **CHAPTER 3**

### **METHODOLOGY**

#### **Introduction**

The purpose of this study was to identify the methods utilized in the testing and diagnosing of Attention Deficit (Hyperactivity) Disorder or commonly referred to as ADD/ADHD, with students at DeVry University, Phoenix campus. These students are currently receiving a special accommodation as required by Section 504 of the Americans with Disabilities Act. By compiling this data, information will be presented demonstrating that diagnosis by primary care health professionals may lead to misdiagnosis.

#### **Research Design**

The research design for this study was a historical case study. According to Merriams and Simpson (2000), historical research is "a personal interpretation of the best, most relevant evidence available to the researcher. The writer exercises judgment at two points in this process—first, in deciding what is relevant evidence, and then in choosing how to present the evidence in narrative form" (p. 83).

Diagnostic reports from psychiatrists, psychologists, primary care physicians and neurologists will be utilized in assessing the diagnosis procedures of thirty-four students enrolled at DeVry University, Phoenix Campus that currently receive special accommodations under Section 504 of the Americans with

Disabilities Act. Within the thirty-four files, the disability and more importantly, the methods used to determine the disability and the specialty of the diagnosing professional was documented. The results were categorized according to mental health and non-mental health professionals. The study will identify the various assessment tools utilized to determine the existence of the disability and how to best accommodate the student. Of the students included in the study, the focus was to identify the assessment and diagnosing process of those listed with Attention Deficit (Hyperactivity) Disorder.

### **Population and Sample**

The data used in this study was obtained from thirty-four students currently attending DeVry University, Phoenix campus that receive special accommodations under Section 504 of the Americans with Disabilities Act. Students are enrolled in various bachelor degree programs and will attend the day or evening weekend programs. Programs offered include;

- Accounting
- Business Administration
- Computer Engineering Technology
- Computer Information Systems
- Electronics and Computer Technology
- Electronics Engineering Technology
- Information Technology

- Technical Management
- Telecommunications Management

As part of the research, the format in table 3.1 was used to show the number of students receiving a Special Accommodation Under the Americans with Disabilities Act/Section 504 at DeVry University – Phoenix campus by academic program.

**Table 3. 1 Breakdown of Accommodations Approved for students attending DeVry University - Phoenix Campus**

<b>Program</b>	<b>Number of Day Student</b>	<b>Number of Night Student</b>	<b>Number of Weekend Student</b>	<b>Number of students with Disabilities Listed as ADD/ADHD</b>	<b>Number of students with Disabilities Listed as other than ADD/ADHD</b>
Accounting	0	0	0	0	0
Business Administration	0	0	0	0	0
Computer Engineering Technology	0	0	0	0	0
Computer Information Systems	0	0	0	0	0
Electronics and Computer Technology	0	0	0	0	0
Electronics Engineering Technology	0	0	0	0	0
Information Technology	0	0	0	0	0
Technical Management	0	0	0	0	0

Telecommunications Management	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### **Assumptions and Limitations**

It was assumed that all thirty-four participants in the population studied understood the testing process for diagnosing ADD/ADHD and more importantly, understood the questions being asked of them during their assessment by a psychiatrist, psychologist, primary care physician or neurologist. It is also assumed that the assessment questions were answered honestly.

A limitation in this study is that the number of students used in this study may be only representative of DeVry University – Phoenix Campus. In addition, the study is limited to those students that have identified themselves as having ADD/ADHD through the Student Services Office. The research is also limited because the results are for this study only and may not be generalizable to the entire population of students diagnosed with ADD/ADHD.

### **Instrumentation**

The data was gathered by reviewing responses to intake assessments from those students that have requested Special Accommodations under Section 504/Americans with Disabilities Act, and have submitted the necessary supporting documentation. Supporting documentation is defined in the

reference manual authored by Salome Heyward and titled Disability and Higher Education: Guidance for Section 504 and ADA compliance as

1. The criteria/standards used to determine the sufficiency of documentation must not "screen out or tend to screen out an individual with a disability...unless such criteria can be shown as necessary."
  2. Review, analysis and assessment of the documentation submitted must be conducted by individuals who are knowledgeable and/or professional in the field.
  3. The evaluation process as a whole must reflect fundamental fairness.
  4. The decisions reached regarding the evaluation of the documentation submitted should be based upon rational professional judgment rather than bias and stereotyped beliefs or discriminatory animus.
- (p. 173)

Of the students diagnosed with Attention Deficit (Hyperactivity) Disorder, this study identified the method of assessment utilized and indicated the basis for the request the assessment initially.

## **Procedure**

The procedure for this study was to assess the files of students attending DeVry University – Phoenix campus by determining the type of professional initiating the assessment and diagnosis as well as compiling information gathered from those students during the Special Accommodation process. A licensed health care professional had tested all individuals utilized in this sample and the documentation included the information used to assess and diagnose the student.

## Method of Analysis

Information about the thirty-four students receiving a Special Accommodation under Section 504 of the Americans with Disabilities Act, will be presented in a table highlighting the methodology used to diagnose those students as having ADD/ADHD.

**Table 3. 2 Number of students attending DeVry University - Phoenix Campus Diagnosed with AD(H)D by specialist type**

Diagnosing Professional	<b>Psychiatrist</b> (mental health professional)	<b>Psychologist</b> (mental health professional)	<b>Family Physician</b>	<b>Neurologist</b>
Number of DeVry Phoenix Students Referred by each type of Diagnosing Professional	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## **CHAPTER 4**

### **PRESENTATION AND ANALYSIS OF THE DATA**

#### **Demographics**

The demographics for this study was limited to students attending DeVry University – Phoenix Campus during the Fall 2001 term and had qualified for Special Accommodations under Section 504 of the Americans With Disabilities Act. Students were enrolled in one of the following programs:

- Accounting
- Business Administration
- Computer Engineering Technology
- Computer Information Systems
- Electronics and Computer Technology
- Electronics Engineering Technology
- Information Technology
- Technical Management
- Telecommunications Management

Table 4.1 shows the number of students receiving a Special Accommodation under the Americans with Disabilities Act/Section 504 at DeVry University – Phoenix Campus by academic program.

Currently, there are no students in the Accounting program requesting a special accommodation. Six students in the day program for Business

Administration have requested special accommodations, each with a disability listed as ADD/ADHD. In the Computer Engineering Technology program, four students had requested a special accommodation, two of which were for ADD/ADHD and the remaining two were for disabilities other than ADD/ADHD. Twelve students in the Computer Information Systems program are receiving special accommodations. Eight are disabilities listed as ADD/ADHD and four receive accommodations for disabilities listed as other than ADD/ADHD. In the Electronics and Computer Technology program, six students have requested a special accommodation. Of those six, three have a listed disability of ADD/ADHD and three have a disability listed as other than ADD/ADHD. Each of the four students in the Electronics Engineering Technology program requesting a special accommodation had a disability listed as ADD/ADHD. No students in the Information Technology or Telecommunication Management had requested a special accommodation. The only two students attending classes in the Technical Management program that had requested a special accommodation were night students and had disabilities listed as other than ADD/ADHD. In total, thirty-two students had received a special accommodation. Two were night students, two were weekend students and the remainder attended day classes. One half of the approved accommodations under Section 504 of the Americans with Disabilities Act were for a disability listed as ADD/ADHD at DeVry University – Phoenix Campus.

**Table 4. 1 Breakdown of Accommodations Approved for students attending DeVry University - Phoenix Campus**

<b>Program</b>	<b>Number of Day Student</b>	<b>Number of Night Student</b>	<b>Number of Weekend Student</b>	<b>Number of students with Disabilities Listed as ADD/ADHD</b>	<b>Number of students with Disabilities Listed as other than ADD/ADHD</b>
Accounting	0	0	0	0	0
Business Administration	6	0	0	0	6
Computer Engineering Technology	4	0	0	2	2
Computer Information Systems	10	0	2	8	4
Electronics and Computer Technology	6	0	0	3	3
Electronics Engineering Technology	4	0	0	4	0
Information Technology	0	0	0	0	0
Technical Management	0	2	0	0	2
Telecommunications Management	0	0	0	0	0
<b>Total</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>17</b>	<b>17</b>

## Findings and Results

Table 4.2 shows the various professionals that are currently able to diagnose and treat ADD/ADHD. Psychiatrists and psychologists are able to diagnose individuals with ADD/ADHD and can offer several behavior modification techniques other than medication. More importantly, they are able to assess whether ADD/ADHD is the problem, or if it is the symptom of another mental disorder. Psychiatrists are qualified to diagnose ADD/ADHD. They are permitted to prescribe medications to control symptoms and are able to provide counseling in behavior modification. While psychologists are able to diagnose ADD/ADHD, they are not permitted to prescribe medications. They are however permitted to provide behavior modification counseling.

Pediatrician or primary care physicians and neurologists are both able to diagnose and prescribe medications for ADD/ADHD but cannot provide any counseling. Testing is subjective and in many cases primary care physicians are left to diagnose this disorder based on recommendations from parents and educators (Stagg-Elliot, 1999). Thus, the pediatrician or family physician may be left with only the option of prescribing medication for the symptoms that have been reported.

**Table 4. 2 Breakdown of professionals that are permitted to diagnose ADD/ADHD and their limitations in treatment**

<b>Specialty</b>	<b>Can diagnose ADHD</b>	<b>Can prescribe medications if needed</b>	<b>Provides counseling or training</b>
<b>Psychiatrist</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Psychologist</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>
<b>Pediatrician or family physician</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>
<b>Neurologist</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

Table 4.3 shows that 17 of the 34 students receiving a special accommodation under Section 504 of the Americans with Disabilities Act are diagnosed as ADD/ADHD. Table 4.3 also indicates the type of professional that had diagnosed and treated the students utilized in this study. As indicated in Table 4.3 over 50% of the students receiving Special Accommodations at DeVry University – Phoenix Campus were diagnosed with ADD/ADHD by their family physician. Family physicians do not specialize in identifying learning disorders and are not permitted to counsel patients. A family physician's treatment is limited to prescribing medication utilized to subdue the symptoms of individuals with ADD/ADHD.

**Table 4. 3 Number of students attending DeVry University - Phoenix Campus Diagnosed with AD(H)D by specialist type**

Diagnosing Professional	<b>Psychiatrist</b> (mental health professional)	<b>Psychologist</b> (mental health professional)	<b>Family Physician</b>	<b>Neurologist</b>
Number of DeVry Phoenix Students Referred by each type of Professional	<b>4</b>	<b>4</b>	<b>9</b>	<b>0</b>

## **CHAPTER 5**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **Summary**

The purpose of this study has been to identify the professional assessing and the method utilized in the testing and diagnosing of ADD/ADHD students attending DeVry University – Phoenix Campus. This has shown there is the potential for misdiagnosis. Professionals that may not be able to test or diagnose for this disorder are diagnosing testing for ADD/ADHD, i.e. primary care physicians.

Currently there is no scientific testing available to diagnose ADD/ADHD. Testing is subjective and in many cases primary care physicians are left to diagnose this disorder based on recommendations from parents and educators (Stagg-Elliott, 1999).

The research design utilized in this study is historical case study. Diagnostic reports from various professionals have been utilized in assessing the files of thirty-four students enrolled at DeVry University, Phoenix Campus that currently receive special accommodations under Section 504 of the Americans with Disabilities Act. The results are categorized to show the number of students diagnosed by mental health professionals compared to the number of students diagnosed by non-mental health professionals. Findings from the research

demonstrate that of the individuals utilized in this research, over 50% were diagnosed by a professional not specializing in learning disorders or mental disorders. Since the majority of students in this study were not diagnosed by professional able to identify and/or treat mental disorders and learning disorders, these students may not be getting an accurate diagnosis and therefore may not be receiving an appropriate special accommodation under Section 504 of the Americans with Disabilities Act. Without the proper accommodation being granted, DeVry University may be spending money on resources such as note takers for these students without benefit to the student or school.

## **Conclusions**

The data collected supported the hypothesis that the current process for identifying, testing and treatment for ADD/ADHD students attending DeVry Phoenix, may not be the most effective process for accurately assessing this disorder. As stated in Chapter Two, Dr. Marisela Dominquez, MD, Assistant Professor in family medicine at the University of Illinois in Chicago echoed this sentiment by stating that primary care doctors should not diagnose ADD/ADHD without input from other health professionals.

## **Recommendations**

Results from this research suggest that a similar study on a larger scale would be warranted. A study researching the testing process used for students receiving a special accommodation under Section 504 of the Americans with

Disabilities Act at all DeVry Universities would be beneficial in determining the generality of this study. If the results from that study provided consistent results, a study comprised of larger Universities would provide useful information.

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